



# **Rai Technology University**

ENGINEERING MINDS

## **Managing Training & Development**



## **SYLLABUS**

### **Conceptual Framework of Training-I**

Introduction to Training Development and Education, Objectives of training, Areas of training, Drawbacks and problem of training, Significance of Training, Training Manual, Learning and Learning Styles, Learning process : A Few Good Learning Theories.

### **Conceptual Framework of Training-II**

Adult Learning, Learning styles elements and profiles, Principles of Effective Training and Learning, Effective Training, Collection of Articles.

### **Approaches to Training**

Approaches to Training, Training Procedure, Training Need, Assessment, Training for Performance, Training Room Design, Role and responsibilities of HRD and Training specialist.

### **Designing Training Plan**

Objectives of Designing Training Plan, Competency Based HRM/Training, Competency Psychology Designing & Conducting Specific T & D Programmes, New Employee Training.

### **Methods and Styles of Training I**

Introduction to Training Methods and Techniques, Sensitivity Training, On the Job Training, Basic Teaching and Presentation Skills.

### **Methods and Styles of Training II**

Training Methods, Criteria for Method Selection, Relationship between principles of teaching and learning methods, Computer Based Training (CBT)

### **Evaluation of Training**

Introduction, concept and principles, Evaluation of Training, Evaluating Training and Results

### **Methods of Evaluation & Training Assessment**

Program Evaluation, Planning the Program Evaluation, Levels of Evaluation Methods of Evaluation, Feedback and Assessment, Evaluating Training Staff, Assessing the ROI of Training, Tutorial.

### **Management Training & Development**

Management Development, Employee Training & Coaching, Mentoring and Coaching, ROI of Management Training, Training Practices, Train the Trainer, Training For Diversity.

### **Suggested Reading:**

1. Management of Human Resources, Dr A. K Saini and Sanjay Kumar Pathak, Publisher: Gullybaba Publishing
2. Human Resource Management by K. Ashwa Thapa, Publisher: Himalaya Publishing House
3. Human Resource Management by V. S. P Rao, Publisher: Excel Publishing House
4. Human Resource management by L. M Prasad, Publisher: Sultan Chand Publishing House.

5. Training, Needs, Analysis and Evaluation by Frances and Roland Bee, Publisher: IPD London
6. Art of Training and Development in Management by Leslie Rae, Publisher: Crest Publication.

## COURSE OVERVIEW

Human Resource Development practices plays crucial role in success of any organisation and for any Manager. Specially for HR practitioner it is mandatory to understand and practice principles of Management of Training and Development.

The aim of this subject is to develop students' understanding of the concepts of Training and Development. In particular the subject is designed to develop the underpinning knowledge and skills required to Manage, organize and conduct Training & Development. This subject introduces the student to the concepts in the Training and Development. It familiarizes the students with the various methods and techniques of training and Development.

The students on completion of the course shall develop the following skills and competencies:

- a. Concept of Training and Development.
- b. Practice Systematic Approach towards Training and Development.
- c. Knowledge of various methods and styles of training for their effectiveness
- d. Evaluation of methods and styles of training for their effectiveness

<b>MANAGING TRAINING &amp; DEVELOPMENT</b>			
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# MANAGING TRAINING & DEVELOPMENT

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# LESSON 1

## INTRODUCTION TO TRAINING DEVELOPMENT AND EDUCATION

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Dear Friends,

Management of Training and Development is an elective subject for HR specialist. This is your first lesson to the subject. After going through this lesson you will be able to :

1. Explain Training and Development
2. Differentiate between Training Development and Education
3. Explain significance of Training and Development Department in any organization.

### Introduction

Organisation and individual should develop and progress simultaneously for their survival and attainment of mutual goals. So every modern management has to develop the organisation through human resource development. Employee training is the important sub-system of human resource development. Employee training is a specialised function and is one of the fundamental operative functions for human resources management.

**Human Resources are the most important resources of any organization. Trained Employee is a price less stone.**

### Meaning

After an employee is selected, placed and introduced he or she must be provided with training facilities. Training is the act of increasing the knowledge and skill of an employee for doing a particular job. Training is a short-term educational process and utilising a systematic and organised procedure by which employees learn technical knowledge and skills for a definite purpose. Dale S. Beach define the training as "... the organised procedure by which people learn knowledge and/or skill for a definite purpose.

In other words training improves, changes, moulds the employee's knowledge, skill, -behaviour, aptitude, and attitude towards the requirements of the job and organisation. Training refers to the teaching and learning activities carried on for the primary purpose of helping members of an organisation, to acquire and apply the knowledge, skills, abilities and attitudes needed by a particular job and. organisation.

Training is the art of increasing knowledge & skills of an employee for doing a particular job.

(By Flippo)

Training is the intentional act of providing means for learning to take place.

(By Planty)

Training tries to improve skills or add to the existing level of knowledge so that the employees is better equipped to do his present job or to prepare him for a higher position with increased responsibility and are also able to cope with the pressures of a changing environment.

Training is a systematic process of changing the behaviour, knowledge and attitude to bridge gap between employee characteristics and organisation expectations.

Thus, training bridges the differences between job requirements and employee's present specifications

### Objectives of Training

Generally line managers ask the personnel manager to formulate the training policies. The personnel Manager formulates the following training objectives in keeping with the Company's goals and objectives:

- a. To prepare the employee both new and old to meet the present as well as the changing requirements of the job and the organisation.
- b. To prevent obsolescence.
- c. To impart the new entrants the basic knowledge and skill they need for an intelligent performance of definite job.
- d. To prepare employees for higher level tasks.
- e. To assist employees to function more effectively in their present positions by exposing them to the latest concepts, information and techniques and developing the skills they will need in their particular fields.
- f. To build up a second line of competent officers and prepare them to occupy more responsible positions.
- g. To broaden the minds of senior managers by providing them with opportunities for an interchange of experiences within and outside with a view to correcting the narrowness of outlook that may arise from .over specialisation.
- h. To develop the potentialities of people for the next level job.
- i. To ensure smooth and efficient working of a department.
- j. To ensure economical output of required quality.
- k. To promote individual and collective morale, a sense of responsibility, co-operative attitudes and good relationships.

### Areas of Training

Organisation provide training to their employees in the following areas:

- Company policies and procedures;
- Specific skills;
- Human relations;
- Problem solving;
- Managerial and supervisory skills; and
- Apprentice training.

1. **Company Policies and Procedures:** This area of training is to be provided with a view to acquainting the new employee with the Company Rules, Practices, Procedures, Tradition,

Management, Organisation Structure, Environment Product! Services offered by the company etc.

This acquaintance enables the new employee to adjust himself with the changing situations. Information regarding company rules and policies creates favourable attitudes of confidence in the minds of new employee about the company and its products/services, as well as it develops in him a sense of respect for the existing employees of the company and the like. The company also provides first hand information to the employee about the skills needed by the company, its development programmes, quality of products/services and the like. This enables the new employees . to know his share of contribution to the organisation's growth and development. .

2. **Training in Specific Skills:** This area of training is to enable the employee more effective on the job. The trainer trains the employee regarding various skills necessary to do the actual job. For example, the clerk in the bank should be trained in the skills of making entries correctly in the ledger, skills and arithmetical calculations, quick comparison of figures, entries and the like. Similarly, the technical officers are to be trained in the skills of project appraisal, supervision, follow-up and the like
3. **Human Relations Training:** Human relations training assumes greater significance in organisations as employees have to maintain human relations not only with other employees but also with their customers. Employees are to be trained in the areas of self-learning, interpersonal competence, group dynamics, perception, leadership styles, motivation, grievance redressal, disciplinary procedure, and the like. This training enables the employees for better team work, which leads to improved efficiency and productivity of the organisation.
4. **Problem Solving Training:** Most of the organisational problems are common to the employees dealing the same activity at different levels of the organisation. Further some of the problems of different managers may have the same root cause. Hence, management may call together all managerial personnel to discuss common problems so as to arrive at effective solutions across the table. This not only helps in solving the problems but also serves as a forum for the exchange of ideas and information that could be utilised. The trainer has to organise such meetings, train and encourage the trainees to participate actively in such meetings.
5. **Managerial and Supervisory Training:** Even the non-managers sometimes perform managerial and supervisory functions like planning, decision-making, organising, maintaining inter-personal relations, directing and controlling. Hence, management has to train the employee in managerial and supervisory skills also.
6. **Apprentice Training:** The Apprentice Act, 1961 requires industrial units of specified industries to provide training in basic skills and knowledge in specified trades to educated unemployed / apprentices with a view to improving their employment opportunities or to enable them to start their own industry. This type of training generally ranges between one year to four years. This training is generally used for

providing technical Knowledge in the areas like trades, crafts etc.

The importance of human resource management to a large extent depends on human resource development. Training is the most important technique of human resource development. As stated earlier, no organisation can get a candidate who exactly matches with the job and the organisational requirements. Hence, training is important to develop the employee and make him suitable to the job.

Job and organisational requirements are not static, they are changed from time to time in view of technological advancement and change in the awareness of the Total Quality and Productivity Management (TQPM). The objectives of the TQPM can be achieved only through training as training develops human skills and efficiency. Trained employees would be a valuable asset to an organisation. Organisational efficiency, productivity, progress and development to a greater extent depend on training. Organisational objectives like viability, stability and growth can also be achieved through training. Training is important as it constitutes significant part of management control.

Let us go through some benefits of training as below:

### Drawbacks of the Training

The training could be a failure due to the following factors:

- Unrealistic goals
- Input overloads
- Alienation of participants
- Linkage failures

One of the methods for helping the trainees in the posts training period, i.e. while they are on the job is to encourage trainees to refer back their problems, which however, could be done only in consultation with the authorities of the implementing- agency organisation.

### Problems of Training

The training exercises/effort may suffer due to the absence of:

1. fully qualified, experienced and oriented trainers
2. facilities for trainer's training
3. poor budgetary allocations for training
4. flexibility
5. action-research on training
6. field exposure and staff development
7. adequate incentives to the trainers
8. general apathy towards training
9. proper physical infrastructure.
10. proper arrangements for evaluation of the training programme.

### Training Risks

A training programme may suffer from the following risks:

**Design risk.** Among the several reasons leading to inappropriate design are the following:

- Training to deal with some symptoms and causes;
- Training content and targets influenced by prejudice;



- Internal and external trainers preferences;
- Limited search in the choice of materials and methodology.

**Conduct rise:** In the actual conduct of the training, even with a good design, the following may be some of the possible risks:

- cancellation of some or more of the planned training
- events;
- failure to get nominations;
- failure of the nominees attending the course;
- non-availability of faculty members or their substitutes;
- absence or inability of the Course director in integrating the inputs by different speakers towards the achievement of the goals; and
- administrative lapses.

**Learning risks:** The level of learning could be at risk from the following factors:

- lack of interest in learning;
- no perception of either awards for learning or
- punishment for not learning;
- negative attitudes arising from personal and work role experience.
- complacency and resistance to self-change;
- Sense of helplessness about self and others in the organisation in utilising training inputs.

**Transfer risks:** The stage of transfer may be found to suffer from the following difficulties:

- lack of interest of the individual trainees;
- lack of support from his superiors;
- partial or 'no implementation by group of joint commitments to action.
- turnover of the trainee;
- wrong posting of the trainee;
- lack of coordinated approach in strategy, organisation and systems; and
- other environmental crises.

A view-point is sometimes put forward that often the trainers have great difficulty in determining the kind of training needed for and what they expect it to accomplish. At the same time, it is extremely difficult to evaluate the results of such training.

The evaluation in respect of training as related, to trainers has been ignored more; than are other areas in training. Methods of training have not been always properly evaluated. The fact that this evaluation like any other evaluation is a complex effort should not be a deterrent for making all reasonable efforts in evaluating whether or not such training is worth the corresponding effort of the trainer. Evaluation of a training programme/course is very important not only from the point of improving training but also to help the participant trainees and trainers to function more effectively. Evaluation can be involving the total programme or it can be partial aiming at appraisal of some salient aspects.

## Training and Development

Employee training is distinct from management development or executive development. While the former refers to training given to employees in the areas of operations, technical and allied areas, the latter refers to developing an employee in the areas of principles and techniques of management, administration, organisation and allied areas. Following are the differences between training and development:

## Difference Between Training & Development

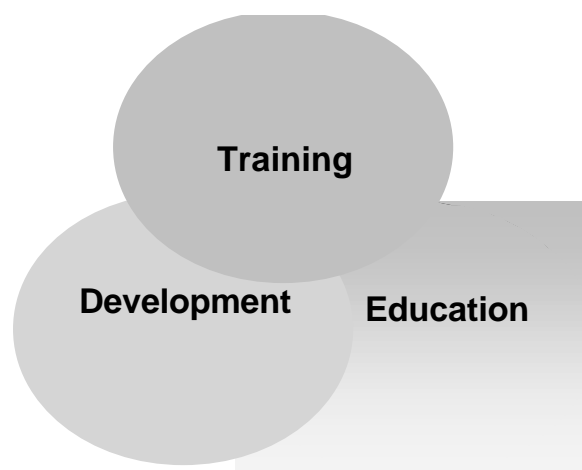
### Training

- It is a short term process
- It utilises systematic and organised Procedure
- Managerial personnel acquire skill of training subordinates
- Non-managerial personnel acquire technical skill & knowledge for a definite purpose.
- It is primarily related with the job technical skill learning

### Development

- It is a long term process
- It utilises systematic & organised procedures
- Managerial personnel get conceptual & theoretical knowledge & skill or managing. It is rarely used.
- Non managerial personnel acquire technical skill and knowledge for a long term purpose
- It is mainly useful for long term management development process.

## Relationship Between Training Development and Education



## Training and Education:

Purpose of training is to supplement education.

Training goes hand in hand with education.

Learning is modification behaviour through training.

In all training there is some education and in all education there is some training. These two processes cannot be separated from development.

Training is concerned with increasing the technical skills and knowledge and operative skills in doing a particular job. Hence, mostly employers train their employees for a particular job. But the scope of education is broader. It includes acquiring not only technical skills and knowledge, but also behavioural skills and knowledge, general knowledge, social knowledge and the like. Thus, the purpose of education is to develop individuals. It is concerned with the changing environmental, political and social developments. Education is not only through formal instruction in the educational institutes, but also through training, observation, awareness and so on and so forth. Training normally has a more immediate and specific utilitarian purpose whereas education has long-range and general utility. Though it is difficult to differentiate training from education as they are closely interrelated, it can be said that training is part of education. According to Dale Yoder, "The use of the terms training and development in today's employment setting is far more appropriate than training alone since human resource can exert their full potential only when the learning process goes far beyond simple routine."<sup>4</sup>

## Difference Between Training and Education

Areas	Training	Education
Areas	Training	Education
Orientation	Application	Theoretical conceptual
Emphasis	Technical	Technical general
Learning	On the job and off the	job Classroom
Scope	Specific Tasks	General Concepts
Payment	Trainee is paid to learn	Student pays to learn

### Also see functional classification between training and personnel Management

Personnel Management		Training & Development	
Set Goal	Process manpower	Apprise manpower	Appraise Competence
Decide strategies	Provide facilities	Identify trg.need	Arrange Mgt.Devplans
Development of culture	Staff the deptt	Plan/design T&D Prog.	Develop & maintain HR
		Evaluate	Evaluate System

ORGANISATIONAL EFFECTIVENESS

### Corporate Education

Corporate education has become a strategic function as we enter this century. In the best organizations, education is no longer the first to be cut back in a downturn. Rather, best-in-class corporate education is making a difference to the bottom line.

Good corporate education has an impact on:

- Retention
- By providing employees careers paths and on-going development, they are less likely to leave for another

employer. Many organizations are encouraging on-going academic development and paying for advanced degrees, both as a way to build capability and as a retention tool.

- Capability
- When organizations know they have a broadly educated employee base, they are more willing to enter new product areas and expand business to new geographies.
- Productivity
- Better educated employees with up-to-date skills are more likely to work efficiently and have good morale.

## Article

### Training vs. Education

### A Distinction That Makes

#### A Difference

It's tough to manage a bank these days. Restructuring has stretched our staffs incredibly thin. More and more of our employees are part-timers. Cut-throat competition has unleashed a torrent of new and complicated products. Our bankers must become extroverted sales professionals. Many of our people lack the skills to do their jobs effectively. In short, banks are facing a crisis of competence. And what are bank managers doing to prepare their staffs to meet these challenges? How are they managing the crisis? Not well, I fear. Last week the president of a major bank's investment subsidiary told me, "Our bank's platform staff have already been educated about mutual funds. They had attended a half-day sales seminar from our third-party provider four months ago, learning the features and benefits of their mutual funds. Not only that, the program was free."

Allow me to explain five places where I think he was going astray.

Training is not education

First of all, training is not education. Education is generally measured by tenure: you spent a day in the seminar or four years in college. Training, on the other hand, is measured by what you can do when you've completed it. Think of it this way. If your sixteen year-old daughter told you that she was going to take a sex education course at high school, you might be pleased. What if she announced she was going to take part in some sex

training at school? Would that elicit the same response?

Training is doing. Training improves performance. Seminars don't train

Second, while seminars are entertaining, they're generally not the best way to change behavior. Most of the content in a traditional seminar flows in one ear and out the other. Researchers report that people remember 90 percent of what they do, 75 percent of what they say, and 10 percent of what they hear. Three hundred thousand bankers have participated in Omega training. They have learned to sell and to make sound decisions. Not one has attended an Omega seminar. Platform bankers who attend BSA/Omega workshops do a lot more than warm chairs and listen. They "inherit" play money so they can identify with wealthy customers, they leave the workshop to shop the competition, they demonstrate their mastery of product

information in mock-Jeopardy games, and they practice probing and selling skills on one another. They're active. They learn by doing.

What do you want them to do?

Third, for training to work, you must be clear about what you want people to accomplish when it's over. After all, the only reason to train people is to help them meet specific objectives. You can't afford to leave those objectives unstated or to delegate deciding your people's objectives to others.

A good objective will be actionable, for example "increase the number of relationships with each customer." A bad objective often describes knowing something rather than doing something, for example, "gain more product knowledge." You must also decide whether a performance deficiency is really a training problem. The classic instructional

designer's test is to ask, "If he had a gun to his head, could he do it?" If the answer is yes, you're facing a problem of motivation, not a training problem. If you do have a training problem, you must explicitly describe the behaviors you expect after training.

To hammer the message home, you must tell the trainees how you expect them to perform at its conclusion. For example, participants in the BSA/Omega workshops are told that, "When you have completed this module and the corresponding classroom experience, you will be able to:

- Profile the full range of needs during customer interactions, paying particular attention to investment needs
- Explore customer investment needs upon noticing appropriate customer cues
- Determine appropriate referral destination
- Introduce your bank's investment alternatives to customers
- Convince customers that they should meet with Investment or Trust Representatives, arrange the actual meeting
- Handle obstacles to effective investment referrals
- Participate effectively in joint meetings with customers and Investment and Trust Representatives to facilitate close of sale and to gain increased product knowledge
- Follow up with customers to confirm referral and expand the relationship"

Beware of freebies

Fourth, in training as in life, there is no free lunch. "Free" training is often more expensive than no training at all. Putting aside trainee salaries, consider the opportunity cost of people who are not performing at their best. The cost of effective training pales in comparison to the bottom-line benefits it provides. Consider this: a platform person at one bank had never made an investment referral in her career. Interviewing a customer a few weeks after taking an Omega workshop, she asked, "How much money are we talking about?" She almost slid out of her chair when the customer responded, "\$1.1 million." She made the referral and the Trust Department has booked the business. Now they're working on her second referral of the month—for \$630,000 worth of business. Or consider this: within six months of conducting Omega

workshops, one bank was startled to find that the average platform banker had generated referrals that led to \$100,000 of new mutual fund business.

The moral of these examples is that effective training is not a cost at all. It is an investment that pays substantial returns. It never ends

Fifth, training is not a one-shot deal; it's a process. Positive behaviors must be reinforced if they are to be retained. Did you study a foreign language in college?

You pore over the books and log time in the language lab. Maybe even travel for a month in France. You become proficient, if not fluent. As the years go by, and you never have an opportunity to speak or write the language, your skills atrophy. You can't remember anything except how to ask where the toilet is and how to count to ten. Maybe you did practice that language. In that case, tell me, how much geometry do you remember from high school? Bank training is no different. It takes practice. It takes a pat on the back. It takes a mentor who encourages the good behavior and discourages the bad. It takes a manager who sets realistic goals and monitors performance. Individual training programs are not enough to create success over time. Success requires a sustained performance improvement system. Most things are easy to learn but hard to master. My advice to the senior banker that started me on this rant: Don't mistake action for results. In the course of helping bankers improve their performance over the past two decades, we've found that the only thing worse than learning from experience is not learning from experience.

If your staff is grappling with a crisis of competence, you're hardly alone. Be assured that your organization's performance will improve if your people are properly trained and coached. As Mark Twain once said, "There is nothing training cannot do. No thing is

above its reach."

## Article

### A Look to the Future of Training and Development

Peter Senge popularized the concept of learning organization in his book *The Fifth Discipline*. He described them as places "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together"

Learning organizations appear to be proficient in a number of activities: systematic problem solving, experimentation with new approaches, learning from their own experience and history, learning from the experiences and best practices of others, and transferring knowledge quickly and efficiently throughout the organization (Garvin 1993). Learning in firms such as General Electric, Pittsburgh Plate Glass (PPG), and Xerox has been traced using a learning perspective that involves three stages: (1) cognitive—members are exposed to new ideas, expand their knowledge, and begin to think differently; (2) behavioral—employees begin to alter their behavior; and (3) improvement of performance—changes in behavior lead to measurable improvement in results (Howard 1992).

In an organization dedicated to creating a learning environment, training is a top priority. Learning organizations do not simply appear. They are fostered by devoting time, energy, and resources on a continuous basis to the training and development of employees. Taking steps to encourage learning through training and development activities and forums is essential to improved understanding, performance, and effectiveness

### Humour in Training

A Personnel Officer had a head injury. The doctor operated and removed his brain and kept it aside while repairing his skull. A crow took away the brain. The doctor quietly repaired the skull and sent away the P.O asking him to come after one week for checkup. In the meanwhile, the doctor procured another brain for the P.O. but the P.O did not turn up. Doctor enquired of P.O. after one week why he did not turn up for brain replacement. The P.O. replied that he was working in HPCL and therefore it matters little whether he has brain or not. (You can use any company name for the joke)

A union leader thought that anybody can perform the duties of a Personnel Officer and therefore applied for the post of a P.O. The selection committee went through his bio-data and were very much impressed by it, particularly for his experience in dealing with the management. Therefore the Committee put a question:

“What do you understand by Collective Bargaining?”

“It means, management bargains and union collect” he replied

At a farewell party to a retired officer, the boss commented: “He has retired now, but he stopped working since” long.

In the Rashtrapati Bhavan, there was a presentation ceremony of the Parama Vir Chakra medals. Everyone was asked to narrate his story of bravery for receiving the PVC medal. One lean and thin soldier came forward, and said that he cut the leg of the enemy. When asked why he did not cut the head, the soldier replied that the enemy did not possess a head.

Four persons were travelling by train and their conversation went like this:

First: “I am a brigadier. I am married. I have three sons and they are all doctors.”

Second: “I am also a brigadier. I am also married. I have three sons and they are all engineers.”

Third: “How remarkable. I am also a brigadier. I am also married. I have three sons and they are all lawyers.”

The Fourth passenger was rather reticent. However, after much prompting, he started: “I am not a brigadier. I am not married. But I have three sons, and they are all brigadiers.”

A foreign consultant came across a clerk in an office doing no work. He asked him “Why do you work?”

“Why should I?” asked the clerk.

“So that you can get promoted and make more money” said the foreigner.

“What is the point of earning more money?” asked the clerk.

“So that you can retire early if you want and won’t have to work” replied the consultant.

“I am not working now” pointed out the clerk.

One day a teacher was teaching geography in a government aided school when the School Inspector came for a visit. The teacher said to the students that the river Ganga starts in the Himalayas and flows into the Arabian sea. When the School Inspector pointed out the mistake, the teacher replied that they were not getting their salaries since last six months and until they receive their salaries, the Ganga will continue to flow into the Arabian sea.

India’s most famous sitarist, Ravi Shankar, who once asked whether he practiced sitar daily. Shankar replied; “I believe in the saying that if you miss one day, you notice it. If you miss two days, the critics notice it. If you miss three days, the audience notice it.

A man had a one-rupee coin and wanted to know whether it is genuine. He met a lawyer on the road and asked him whether it was genuine or a counterfeit coin. The lawyer turned the coin one way and the other, tossed it in air, and caught it spinning down, looked hard at it and ultimately declared that it was a good coin. So saying, the lawyer pocketed the coin and said. “you asked for my opinion and I have given you that. This rupee is the fee for my legal opinion.”

There was once a famous musician who sang before a Nawab and got land gift from the Nawab. The Court Officer was not happy with the Nawab’s generosity. But he could not go against the orders of the Nawab. So he wrote out a deed and handed it over to the musician. The document mentioned one hectare in Kashmir, once hectare near Ujjain, one hectare in Assam and so on to make up his hundred hectares. The musician found it impossible to cultivate the land so scattered. He therefore complained to the Nawab against the Court Officer that the officer had written the title deed of lands far off. The Officer explained to the Nawab: “Sir, he is wrong, see how closely I have written. If I write still closer, no one can read this document.” The Nawab looked at the document and agreed with it. He called the musician and said: “you have misled me and the one hundred hectares of land which I gave you as gift is cancelled.”

A man helped a Minister and requested something in return. “What do you want?” asked the Minister. “I want to be a postmaster” replied the man. “But you can neither read nor write.. How can you work in a post office?” enquired the Minister. “Who is talking of work? I do not want to be an Assistant Postmaster. I want to be a Postmaster” insisted the man.

A counterfeit note manufacturer took a 15 rupee note to a remote village where he thought he could exchange it with ease. He asked a Pan Shop Wallah whether he has change for the Rs 15. The Pan Wallah readily exchanged it with two Rs 7.50 notes. St. Peter went to Heaven and found that in the dining hall a long table was spread with good food. On either side were rows of persons but their hands were tied with long wooden ladles. They were unable to feed for themselves. St. Peter then went to Hell. He saw there a similar scene in the dining hall, but here each person was feeding the one opposite to him thus helping each other for mutual benefit.

Zuben Mehta was garlanded with roses at one concert. With the garland round his neck, Zuben started conducting the orchestra but the rose petals were falling down. In the audience a person whispered: "By the time the concert is finished he will be Left with' the thread". His wife, silting by his side, said "But he will stand on rose petals after his' successful concert."

Now try to think and write about this:

### Points to Ponder



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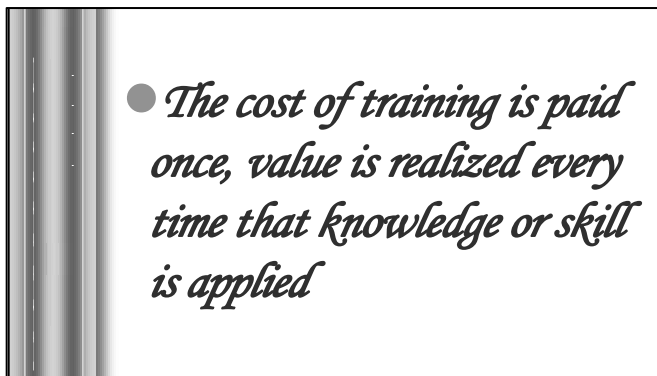
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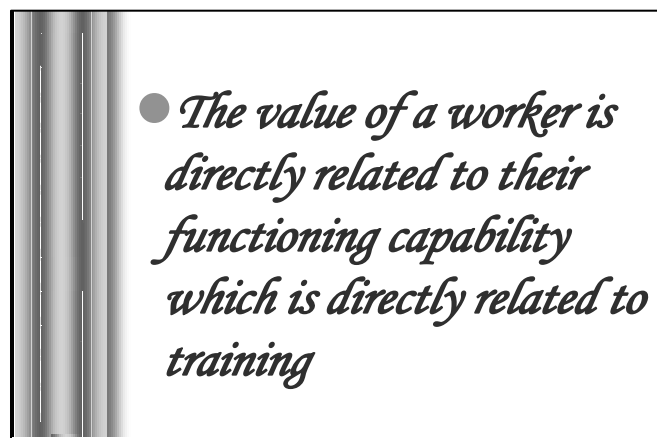
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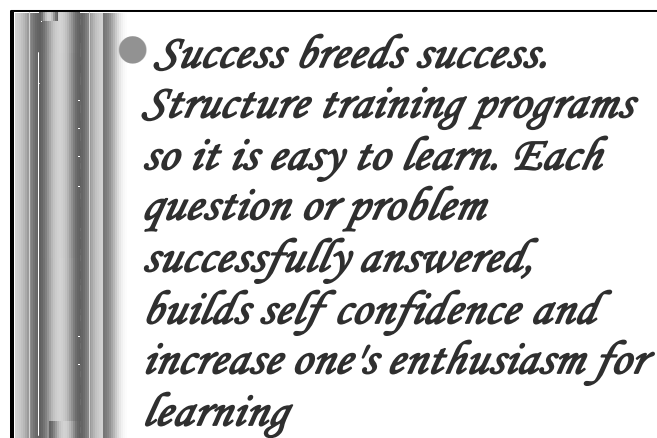
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- *Success breeds success. Structure training programs so it is easy to learn. Each question or problem successfully answered, builds self confidence and increase one's enthusiasm for learning*

- *The use of Self-study training materials on fundamentals prior to on site classes or outside seminars is a low cost way to help insure a successful outcome*

- *The value of a worker is directly related to their functioning capability which is directly related to training*

- *Utilize purchased training programs to teach fundamentals so resources can be conserved for the development of plant specific equipment and procedure training*

- *Training should be part of a risk management strategy for reducing the probability of personal injury, property loss and environmental incidents. A single incident can result in costs thousand of times the combined cost of a good training program, proper equipment selection and safe work practices.*

- *More new employees with no practical exposure to basic tools are joining the work force, An understanding of basic tools is an essential part of mastering basic mechanical tasks*

- *Training in maintenance fundamentals is essential to competing in a worldwide economy*

- *Training is an investment, not a cost. Benefits include, improved productivity, higher yields, improves safety, reduced chance of environmental incidents, more process up time and improved employee moral*

- *"There is nothing training cannot do. Nothing is above its reach. It can turn bad morals to good; it can destroy bad principles and recreate good ones; it can lift men to angelship."*

1. Distinguish between training and education?

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2. Are you trained or educated in your college.

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3. What purposes does training serve?

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- *The Value of Training The duration of an athletic contest is only a few minutes, while the training for it may take many weeks of arduous work and continuous exercise of self effort. The real value of sports is not the actual game played in the limelight of applause, but the hours of dogged determination and self discipline by the exacting conscience.*
- *The applause soon dies away, the prize is left behind, but the character you build is yours forever.*

4. Explain the ingredients of a good training programme for the employees at various levels.

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5. What are the objectives of training?

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6. Identify those organisational problems which cannot be solved by training?

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7. What are the training inputs? Identify the areas of training.

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## Basic Terms in Training

### Information

At its most basic form, a piece of information about something is a “unit of awareness” about that thing. (A field of philosophy, epistemology, includes analysis of what is really information and what isn’t. This field might visit the question: “If a tree falls in the forest, does it make a sound?”) Some people think that this awareness occurs only in the brain and, therefore, usually comes from some form of thought. Other people also accept information as a form of realization from other forms of inquiry, e.g., intuition.

### Knowledge

Knowledge is gleaned by organizing information. Typically, information evolves to knowledge by the learner’s gaining context, perspective and scope about the information.

### Skills

Skills are applying knowledge in an effective and efficient manner to get something done. One notices skills in an employee by their behaviors.

### Task

A task is a typically defined as a unit of work, that is, a set of activities needed to produce some result, e.g., vacuuming a carpet, writing a memo, sorting the mail, etc. Complex positions in the organization may include a large number of tasks, which are sometimes referred to as functions.

### Job

A job is a collection of tasks and responsibilities that an employee is responsible to conduct. Jobs have titles.

### Role

A role is the set of responsibilities or expected results associated with a job. A job usually includes several roles.

### Learning

Typically, learning is viewed as enhancing one’s knowledge, understanding or skills. Some people see learning as enhancement to one’s knowledge, awareness and skills. Some professionals view learning as enhancing one’s capacity to perform. Some view learning as a way of being that includes strong value on receiving feedback and increasing understanding. It’s important to note that learning is more than collecting information — more than collecting unreferenced books on a shelf. Depending on the needs of the learner, knowledge is converted to skills, that is, the learner knows how to apply the knowledge to get something done. Ideally, the skills are applied to the most appropriate tasks and practices in the organization, thereby producing performance — results needed by the organization.

### Continuous Learning

Simply put, continuous learning is the ability to learn to learn. Learning need not be a linear event where a learner goes to a formal learning program, gains areas of knowledge and skills about a process, and then the learning ceases. If the learner can view life (including work) as a “learning program”, then the learner can continue to learn from almost everything in life. As a result, the learner continues to expand his or her capacity for living, including working.

### Training

This term is often interpreted as the activity when an expert and learner work together to effectively transfer information from the expert to the learner (to enhance a learner’s knowledge, attitudes or skills) so the learner can better perform a current task or job.

### Education

This term seems to be the most general of the key terms in employee training. Some professionals view education as accomplishing a personal context and understanding of the world, so that one’s life and work are substantially enhanced, e.g., “Go get an education.” Others view the term as the learning required to accomplish a new task or job.

### Development

This term is often viewed as a broad, ongoing multi-faceted set of activities (training activities among them) to bring someone or an organization up to another threshold of performance. This development often includes a wide variety of methods, e.g., orienting about a role, training in a wide variety of areas, ongoing training on the job, coaching, mentoring and forms of self-development. Some view development as a life-long goal and experience.

## LESSON 2

### SIGNIFICANCE OF TRAINING

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#### Significance of Training

Dear Friends,

After understanding the concept of training, development and education. In this lesson you will be exposed about the need and significance of training in industry .

#### Benefits of Training

##### How Training Benefits the Organisation

- Leads to improved profitability and/or more positive attitudes toward profits orientation
- Improves the job knowledge and skills at all levels of the organisation
- Improves the morale of the workforce .
- Helps people identify with organisational goals
- Helps create a better corporate image
- Fasters authenticity, openness and trust
- Improves the relationship between boss and subordinate
- Aids in organisational development
- Learns from the trainee
- Helps prepare guidelines for work
- Aids in understanding and carrying out organisational policies
- Provides information for future needs in all areas of the organisation
- Organisation gets more effective decision-making and problem solving
- Aids in development for promotion from within
- Aids in developing leadership skill, motivation, loyalty, better attitudes, and other aspects that successful workers and managers usually display
- Aids in increasing productivity and/or quality of work.
- Helps keep costs down in many areas, e.g., production, personnel, administration, etc.
- Develops a sense of responsibility to the organisation for being competent and knowledgeable.
- Improves labour-management relations
- Reduces outside consulting costs by utilising competent internal consulting . Stimulates preventive management as opposed to putting out fires.
- Eliminates sub-optimal behaviour (such as hiding tools)
- Creates an appropriate climate for growth, communication
- Aids in improving organisational communication
- Helps employees adjust to change
- Aids in handling conflict, thereby helping to prevent stress and tension.

##### Benefits to the Individual Which in Turn Ultimately Should Benefit the Organisation

- Helps the individual in making better decisions and effective problem solving
- Through training and development, motivational variables of recognition, achievement, growth, responsibility and advancement are internalised and operationalised
- Aids in encouraging and achieving self-development and self-confidence. Helps a person handle stress, tension, frustration and conflict
- Provides information for improving leadership knowledge, communication skills and attitudes
- Increases job satisfaction and recognition
- Moves a person toward personal goals while improving interactive skills . Satisfies, personal needs of the trainer (and trainee)
- Provides the trainee an avenue for growth and a say in his/ her own future . Develops a sense of growth in learning
- Helps a person develop speaking and listening skills; also writing skills when exercises are required.

Helps eliminate fear in attempting new tasks.

##### Benefits in Personnel and Human Relations, Intra and Intergroup Relations and Policy Implementation

- Improves communication between groups and individuals
- Aids in orientation for new employees and those taking new jobs through transfer or promotion
- Provides information on equal opportunity and affirmative action
- Provides information on other government laws and administrative policies . Improves interpersonal skills
- Makes organization policies, rules and regulations viable
- Improves morale
- Builds cohesiveness in groups
- Provides a good climate for learning, growth, and co-ordination
- Makes the organisation a better place to work and live.

The increasing competition, among other things increases the significance of training. Training matches the employee with the job from time to time. Further, the trained employees invite organisational change and ready to take up any type of assignment. The success of any organisation, to a greater extent depends on the amount, qualitative and timely training provided by an organisation.

Further the importance of training can also be viewed from the need for training and the advantages of training.

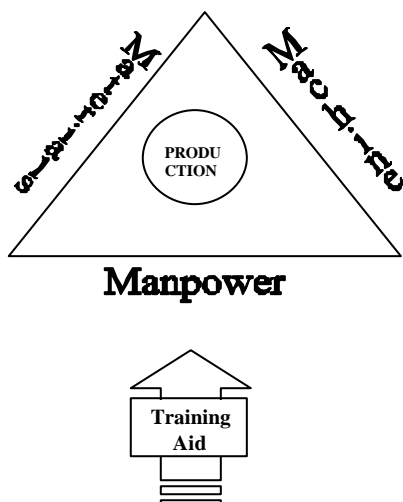
## Advantages of Training'

The contributions of imparting training to a Company should be readily apparent. The major values are:

- i. **Increased Productivity:** An increase in skill usually results in an increment in both quality and quantity of output. However, the increasingly technical nature of modern jobs demands systematic training to make possible even minimum levels of accomplishment.
- ii. **Hightened Morale:** Possession of needed skills help to meet such basic human needs as security and ego satisfaction. Collaborate personnel and human relations programmes can make a contribution toward morale, but they are hollow shells if there is no solid core of meaningful work down with knowledge, skill and pride.
- iii. **Reduced Supervision:** The trained employee is one who can perform with limited supervision. Both employee and supervisor want less supervision but greater independence is not possible unless the employee is adequately trained.
- iv. **Reduced Accidents:** More accidents are caused by deficiencies in people than by deficiencies in equipment and working conditions. Proper training in both job skills and safety attitudes should contribute toward a reduction in the accident rate.
- v. **Increased Organisational Stability:** The ability of an organisation to sustain its effectiveness despite the loss of key personnel, can be developed only through creation of a reservoir of employees. Rexibility, the ability to adjust to short-run variations in the volume 'of work requires personnel with multiple skills to permit their transfer to jobs where the demand is highest.



## Training is Service to Management



## Need for Training

Every organisation big or small, productive or non-productive, economic or social, old or newly established should provide training to all employees irrespective of their qualification, skill, suitability for the job etc. Thus, no organisation can choose whether or not to train employees.

Training is not something that is done once to new employees; it is used continuously in every well run establishment. Further, technological changes, automation, require up-dating the skills and knowledge. As such an organisation has to retrain the old employees.

Specifically, the need for training arises due to the following reasons:

### i. To Match the Employee Specifications with the Job Requirements and Organisational Needs

An employee's specification may not exactly suit to the requirements of the job and the organisation irrespective of his past experience, qualifications, skills, knowledge etc. Thus, every management finds deviations between employee's present specifications and the job requirements and organisational needs. Training is needed to fill these gaps by developing and moulding the employee's skill, knowledge, attitude, behaviour etc. to the tune of the job requirements and organisational needs.

### ii. Organisational Viability and the Transformation Process

The primary goal of most of the organisations is their viability is continuously influenced by environmental pressure. If the organisation does not adapt itself to the changing factors in the environment, it will lose its market share. If the organisation desires to adapt these changes, first it has to train the employees to impart specific skills and knowledge in order to enable them to contribute to the organisational efficiency and to cope with the changing environment. In addition, it provides continuity to the organisation process and development. The productivity of the organisation can be improved by developing the efficiency of transformation process which in turn depends on enhancement of the existing level of skills and knowledge of the employees. The achievement of these objectives mostly depends on the effectiveness of the human resources that the organisation possess. Employee effectiveness can be secured by proper training.

### iii. Technological Advances

Every organisation in order to survive and to be effective should adopt the latest technology, i.e., mechanisation, computerisation and automation. Adoption of latest technological means and methods, will not be complete until they are manned by employees possessing skill to operate them. So, organisation should train the employees to enrich them in the areas of changing technical skills and knowledge from time to time.<sup>3</sup>

### iv. Organisational Complexity

With the emergence of increased mechanisation and automation, manufacturing of multiple products and by-

products or dealing in services of diversified lines, extension of operations to various regions of the country or in overseas countries, organisation of most of the companies has become complex. This leads to growth in number and kind of employees and layers in organisation hierarchy. This creates the complex problems of co-ordination and integration of activities adaptable for and adaptable to the expanding and diversifying situations. This situation calls for training in the skills of co-ordination, integration and adaptability to the requirements of growth, diversification and expansion. Companies constantly search for opportunities to improve organizational effectiveness. Training is responsible for much of the planned change and effectiveness in an organisation as it prepares the people to be the change agents and to implement the programmes of effectiveness. Thus, training solves the problems of organisational complexity.



v. **Human Relations:** Trends in approach towards personnel management has changed from the commodity approach to partnership approach, crossing the human relations approach. So today, managements of most of the organisations has to maintain human relations besides maintaining sound industrial relations although hitherto the managers are not accustomed to deal with the workers accordingly. So training in human relations is necessary to deal with human problems (including alienation, inter-personal and inter-group conflicts etc.) and to maintain human relations. .

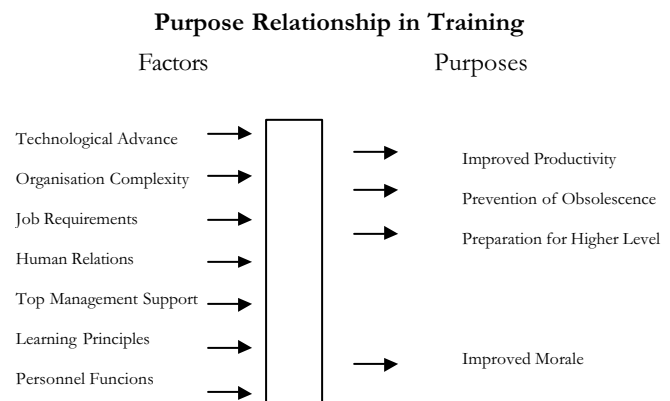
vi. **Change in the Job Assignment:** Training is also necessary when the existing employee is promoted to the higher level in the organisation and when there is some new job or occupation due to transfer. Training is also necessary to equip the old employees with the advanced disciplines, techniques or technology.

The need for training also- arises to:

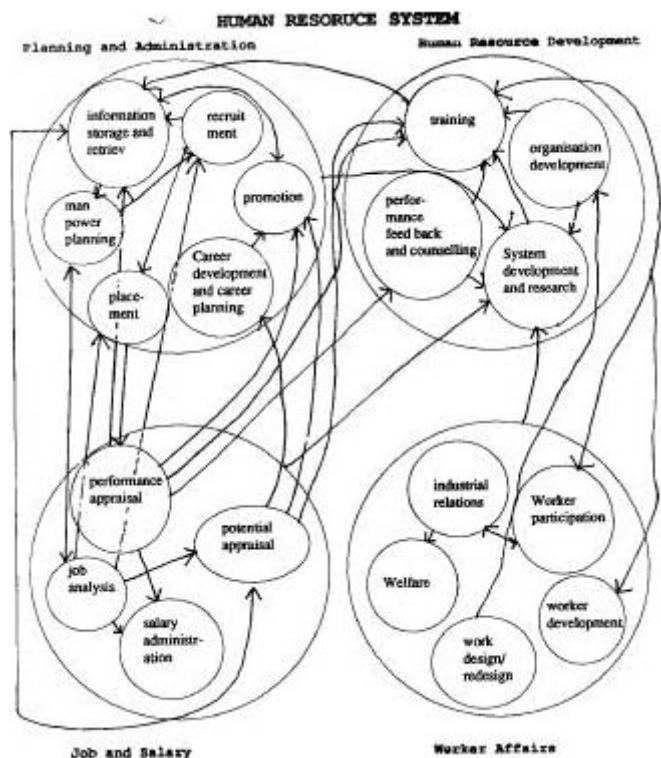
- Increase productivity.
- Improve quality of the product/service.

- Help a company to fulfil its future personnel needs.
- Improve organisational climate.
- Improve health and safety.
- Prevent obsolescence.
- Effect the personal growth.
- Minimise the resistance to change.

The factors discussed above are mostly external factors and they are beyond the personnel manager's control. These factors often determine the success of training objectives as shown in following figure:



## Integration of Various HRD Functions



## Roles Of HRD

### For Individual Development

- To help him/her know himself/herself
- To help him/her develop himself/herself.
- To help to cure him/her from disfunctions

- To encourage innovation and creativity
- To inspire him/her to contribute more to his/ her organization

### For Organisational Development

- To help to learn self management.
- To help to learn the art of managing others.
- To help individual to understand organisation
- To help to build inter-personnel relationship
- To help to build social and brotherly atmosphere
- To encourage to solve groups problem

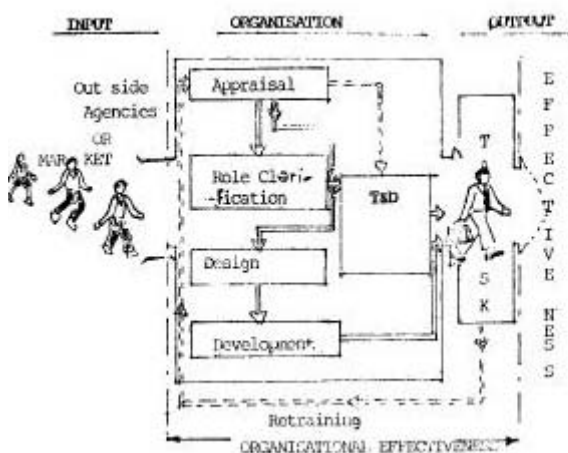
#### ACTIVITIES OF HRD

To perform the above roles the department normally plans designs and implements the following activities :

- |                            |  |
|----------------------------|--|
| 1. Analysing the HRD needs | i. Studying the organisational objectives and their strategic plan<br>ii. Analysing the present and future plan, demands and resources<br>iii. Appraising the Individuals potential  |
| 2. Designing strategies    | i. Designing the specification for human resources.<br>ii. Organising research for potential resources.  |
| 3. Working out viability   | i. Computing the cost/investment on human resources.<br>ii. Comparing present and existing human resources.<br>iii. Identifying training needs and assessing the needs.<br>iv. Computing the cost of training and development. |

#### HUMAN RESOURCES PLANNING

It is the analytical role of HRD to study the organisational policies & climate before forecasting most suitable human resources. The planning of HRD is different than the man-



### Words Worth In Training

#### Telling is not Teaching'

The best written and most important book fails to communicate if it is never opened.

However dark may be the night, sure there will be a morn.  
Nature gave people two ears but only one tongue-to listen more and talk less.

Listening requires two ears-one for meaning and the other for feeling.

Every employee is a diamond in the rough Training makes him priceless stuff.

Coming together is Beginning

Staying together is Progress

Living together is Success.

- Winners always make it happen

Losers always let it happen.

We plan today we get encouraging results

We don't plan, we get discouraging consequences.

Those who want to achieve will find a way

Those who do not will find an excuse.

People who stay in the middle of the road get run over.

You can take a horse to a pond, but you cannot make it drink.

We cannot teach anyone anything. We can only help them to learn.

We define genius as the capacity for productive reaction against

**-Bernard Berenson**

Teach a person how to catch a fish, rather than give him a fish.

**-Chinese proverb**

Ask not what your country can do for you

Ask what you can do for your country.

**-John F. Kennedy**

How do I know what I think, until I see what I say.

**-E P Foster**

What we hear, we forget, What we see, we remember, What we do, we know.

**-Confucius**

Theory without practice is sterile, Practice without theory is blind.

**-Lenin**

I keep Six honest serving men, They taught me all I know

Their names are What and Why and Where And How and When and Who.

**-R Kipling**

Everyone is a potential winner, Some people are disguised as losers, Don't let appearances fool you.

**-Kenneth Blanchard**

I can live two months on a good complement.

**-Mark Twain**

Never tell people how to do things. Tell them what to do and they, Will surprise you with their integrity

**-Gen Patton**

### Conclusion

This lesson has given exposure towards the Need and Significance of training and development in Industry and Trade.

Training is a tool which solve many problems.

Coming lesson will give exposure towards training.

Now think, discuss and write your conclusion about following:

1. What is employee training?

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**Notes -**

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2. Explain the important techniques of training.

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3. Discuss how the group discussion can be treated to be a helpful method of employee training.

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4. What are the various tangible benefits of training in Indian organizations.

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## LESSON 3

### TRAINING MANUAL

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Friends,

After reading this lesson you will be able to

1. Know what training manual is.
2. Explain Crucial contents of Training manual
3. Design Training Manual
4. Prepare training budget

**Training manual** of any organization consists of following information about training.

#### Training Policy

Policy is a written Statement expressing company's vision mission regarding training.

Policy is guideline for action.

A Training policy includes training needs identification process, Training budget, people to be trained and areas of training, types of training, responsibility for training.

Training policy should be in align with Business strategies in past few years.

#### Training Budget

A financial and/or quantitative statement prepared prior to a defined period of time of policy to be pursued during that period for the purpose of attaining a give objective.

Estimated prepared in financial terms regarding:

WHO

WHAT

WHEN

WHERE

WHAT

HOW

### Budgeting & Controlling

#### The T & D Functions

#### Management Policies

The top management always looks at the loss and profit for any activity. The objectives of the strategies are only divided on the basis of cost justifications or viability aspect of the activities in terms of resources. Though the return on investment of Human Resources Development is still controversial in view of time variable in achieving desired change and effectiveness in the employees, management does want some portion of the cost format and its return pattern to decide how much to be invested and what will be the benefits to the organisation in terms of rupees or increase in profitability or reduction in wastage etc. Otherwise it may jeopardize the entire organisation.

No doubt, HRD is the key area in bringing out excellence in organisation and in fact this has been observed in sixth and seventh five year plans also as this costs to the organisation, it

should be viewed carefully in relation to the organisation's size, turn over, total budget and the percentage or part of budget used for HRD.

#### General Considerations On Hrd Budget

General 1.5 to 25% of the total employees salary (with few exceptions) could be allotted for HRD activities as per the various studies and researches done in this context. However the new establishment do need much higher allocation for few months & for which the justification or viability report can be put up to the management with expected benefits (in terms of rupees) in coming years like R01 plan for new establishment.

Unusual circumstances, when office or entire plants may be shut down for T & D to implement, new technology etc. cannot be overruled. In such cases the costs may vary as high as 100% during this period.

#### Budget Allocation

Basically there are two methods of allocating the budget on HRD, T & D activities

All cost on HRD, T & D activities observed by HRD department are recorded at one place in corporate office.

All the cost is assigned to HRD department who has to record and control it.

Though both the methods may have the same results; the method used may greatly influence the decisions making process. There may be Pros & Cons of both the methods but within the frame work of the organisational policies and philosophy, the methods are decided for acceptable input.

**The HRD budget normally covers the following:**

- Cost of staffing
- Cost of planning
- Cost of TNI & TNA
- Cost of appraisal
- Cost of recruitment or selection
- Cost of feed back system
- Cost of updating competence
- Cost of testing progress
- Cost of trials
- Cost of running programme
- Cost of valediction
- Cost of trainig materials & training aids Cost of revising and re-testing
- Cost of publishing or awarding

#### budgeting process

Business is and always, has been the number game, the game of data statements etc. With the advancement of the technology and management information system, the executive/

manager has an easy access to these data on-sales, productions, material and facilities planning, cost control, loss and profit etc. Further the computer has made it more easy to coordinate one function to another and easily compute the performance or the comparison etc.

- The cost of running HRD organisation
- The cost of T & D activities
- The cost of change achieved
- The cost of conflicts avoided
- The cost of material, man hour & machine hour saved

Sample Budget Tracking Report (Numbers in Thousands)

Budget category	Month			Quarter			Year to date			Year		
	Plan	Act.	Var.	Plan	Act.	Var.	Plan	Act.	Var.	Plan	Fore.	Var.
Salaries and benefits	7.5	7.5	0	22.5	22.5	0	22.5	22.5	0	90	90	0
Consultants	2.5	2.0	(0.5)	7.5	6.5	1.0	7.5	6.5	1.0	30	30	0
Training facilities	1.0	0.8	(0.2)	3.0	2.4	0.6	3.0	2.4	0.6	12	12	0
Travel and entertainment	0.4	0.5	0.1	1.2	1.0	0.2	1.2	1.0	0.2	05	05	0
Training	1.0	0.7	(0.3)	3.0	2.5	0.5	3.0	2.5	0.5	12	11	(1)
Computer	0.4	0.5	0.1	1.2	1.5	0.3	1.2	1.5	0.3	05	05	0
Material and supplies	0.4	1.0	0.6	1.2	3.0	2.8	1.2	3.0	2.8	05	05	0
Other operating expenses	0.4	0.4	0	1.2	1.2	0	1.2	1.2	0	05	05	0
Total expenses	13.6	13.4	(0.2)	40.8	40.5	(0.2)	40.8	40.6	(0.2)	164	165	1
(Recoveries)	3.9	3.0	(0.9)	11.7	9.0	(2.7)	11.7	9.0	(2.7)	47	50	3
Net expenses	9.7	10.4	0.7	29.1	31.5	2.5	29.1	31.6	2.5	117	115	(2)

(Source: Carol McCoy, Managing a Small HRD Department)

## Types of Training

The companies training policy should also have the types of training company will offer after the deification of training needs.

The types of training can be categorized in following ways as per the prevailing practice in industry:

- Based on Technology
  - Technical training
  - Non technical (soft skills training)
- Based on type of employee
  - For Skilled staff
  - For Semi Skilled staff
  - For Unskilled employees staff
- Based on employee life cycle
  - Induction Training
  - In process Training
  - Value Added Training

All these types of training will be discussed with you in detail in the next lesson.

## Role of T & D in HRD

Training contributes to all attributes of HRD AND HR Management T & D accelerates the acquisition of desired competence as it is one of the sub system of HRD system.

ORGANISATIONAL VALUES	RESULT BEHAVIOUR		
	MANAGERS	SUPERVISORS	OTHERS/EVERY ONE
a) Optimistic and Constructive Approach	Delegate and support most of their subordinates	Give careful thought to task	Refrain from open Criticism of other's mistakes
c) Mutual trust & Support	Set levels of performance and get bet out of it	Take initiative and work hard	Speak well of
d) Allowance for Risk and mistakes			
e) High Standards			
f) Personal growth/career Plans	Train & Development their Subordinates for succession plans	Self challenges personal goals	Respect others and the job
h) A growth Vs Maintenance Perspective	Get ready to take more and more challenges	Put corporate efforts to achieve goals	Develop belongingness
j) Personal pride & respect to others			
j) Loyalty Awards		Learn to delegate	

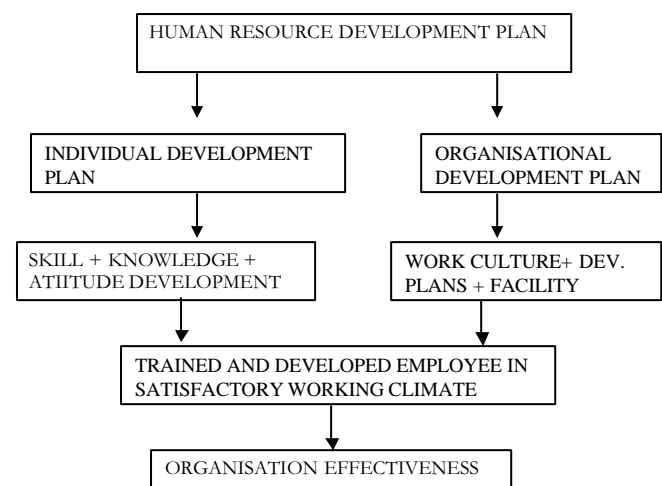
## Role of HRD In Organisational Development

INPUT	PROCESS	OUTPUT
Human Resource	Role clarification	Perception
Role Description	Widenning Perception	Moral improvement
Organisational Structure	T & D process	Rise in self-esteem
Cost input	Group dyanamism	Improved productivity
		Harmonious work

## Organisational Climate Development

HRD functions also take care of modifying the organisational culture to create hygenic & motivated work environment, look after the welfare of employees and help the organisation to design and conduct organisational development plans Cleanliness, adequate illumination and relevant help to individual to concentrate and so the organisational health to its employee

## HRD Model



## Training Planning

To plan training that links to organizational performance improvement you must first identify the organizational performance needs, gaps, and priorities. These are examples of



typical training drivers which give rise to training needs. It is rare to use all of these aspects in determining training needs - select the ones which are most appropriate to your own situation, the drivers which will produce the most productive and cost-effective results, in terms of business performance and people-development:

### Examples of Training Drivers

- Customer satisfaction surveys
- Business performance statistics and reports.
- Financial reports and ratios.
- Competitor analysis and comparison, eg SWOT analysis.
- Management feedback on employee needs, including from appraisals.
- Training audits, staff assessment centres.
- Staff feedback on training needs.
- Director-driven policy and strategic priorities.
- Legislative pressures.
- Relevant qualification and certification programmes.

Use the results and indicators from the chosen driver(s) to produce prioritised training needs per staff type, which will logically enable staff and management to achieve improvements required by the organization.

## Policy

**Definition:** Policies provide the framework within which the decision-makers are expected to operate while making decisions relating to the organisation. They are a guide to the thinking and action of sub-ordinates for the purpose of achieving the objectives of the business successfully.

According to George R Terry- "Policy is a verbal, written or implied overall guide setting up boundaries that supply the general limits and directions in which managerial actions will take place."

Further, according to Koontz and O'Donnell "Policies were identified as guides to thinking in decision-making. They assume that when decisions are made, these will fall within certain boundaries."

From these two definitions it is clear that policies are a guide to thinking and action of those who have to make decisions. They also lay down the limits within which decisions have to be made for accomplishing the enterprise objectives. They are the basis for executive operation and provide ready answers to all questions faced in running the enterprise. Some of the examples of policies are an enterprise may follow a policy of selling its products only on cash basis or may adopt a policy of employing only local people or may have a policy not to employ any person over sixty years of age.

### Characteristics of a Good Policy

The characteristics of a good policy are:

- a. Policy should help in achieving the enterprises objectives. (b) It should provide only a broad outline and leave scope to subordinates for interpretation so that their initiative is not hampered.

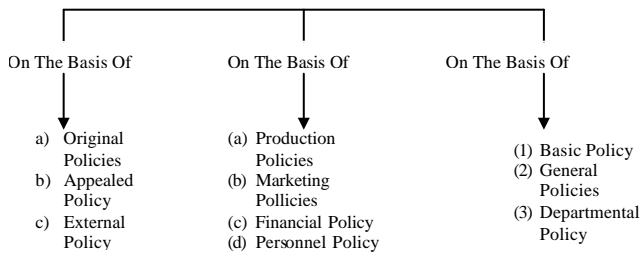
- b. It should provide only a broad outline and leaves scope to subordinates for interpretation so that their initiatives is not hampered.
- c. Policy should not be mutually contradictory and there should not be inconsistency between any two policies, which may result in confusion and delay in action.
- d. They should be sound, logical, flexible and should provide guide for thinking in future planning and action. Further, they should provide limits within which decisions have to be made.
- e. Policies should reflect internal and external business environment.
- f. Policies should be in writing and the language of the policies should be intelligent to the persons who are supposed to implement them and to those who are to be affected by them.
- g. Policy may originate at any level such as division level, department level, section level, etc. A manager may formulate policies within the limits of his authority and also within the limits of the policy laid down by his superiors.
- h. Policy starts with description of subject matter it covers, so that there may be common understanding of the policy among those who are to implement it.
- i. Policy must be reviewed periodically and modified according to the changed circumstances. It may be replaced by a new policy. Periodical review of the policy makes it more adaptable and acceptable.

## Nature of Policy

1. It Serves as Broad Guides to Decision-making in a Firm-The first step in planning is setting objectives. The next step is formulation of policies and strategies. Policies prescribe the most desirable ways and demand for the accomplishment of a given objective. They may be described as plans to serve as broad guides to decision-making in a firm.
2. It is a Continuing Decision-A policy is a continuing decision. It remains in force and provides the answer to problems of recurring nature till it is changed. For Example-If it is the policy to management to fill vacancies in the organisation from within, departmental heads need not consult or take approval of the top executive again and again.
3. It is a Dynamic Plan-There may be so many ways to reach the end point and the management chooses only one along which the managers and sub-ordinates are expected to move to reach the goals of the enterprise. Policy is not rigid like role. It has room for discretion on the part of those who are to be guided by them. It may be changed at anytime and replaced by a new policy at the particular level in the organisation at which it was originally framed.

### Kinds or Types or Classification of Policies

Policies may be of different types. They can be classified on the following basis:



1. **Originated Policies**-These policies are formulated by top managers. They tell subordinates how to act in a given situation and these policies have the support of organisational authorities and the subordinates can be asked to follow them strictly. Thus, they are basic policies.
2. **Appealed Policy**-If on any matter, the sub-ordinate is not clear and has a doubt about his authority to handle a situation and if that subject-matter is not already covered by the existing policies, he may refer the matter for his superior's verdict. Superior's verdict generates appealed policy and thus becomes a guide for future action of the subordinates.
3. **External or Imposed Policy**-Sometimes outside agencies like Government, trade associations, trade union etc., may also be instrumental in the formulation of the policy by the enterprise. For Example-If the government imposes a condition on the enterprises to reserve a certain percentage of jobs for the backward sections of society or for the persons within the state.
4. **Functional Policies**-Policies which are formulated for various functional areas of management are known as functional policies.  
They are-
  - i. Financial Policies;
  - ii. Production Policy;
  - iii. Marketing Policy;
  - iv. Personnel Policy.
5. **Policies on the Basis of Levels**-Policies formulated on this basis may be basic policies meant to be used by top managers, general policies meant to be used normally by middle managers and departmental policies meant to be used by the departmental managers or group leaders etc.

### Formulation of Policies

The formulation of policies takes place at various organisational levels. Some basic and important policies are developed by the top management while some are developed at middle level, management level. Following are some important considerations which should be taken into consideration while formulating the various policies:

1. Policies should be based on facts and not on guess work or intuition
2. To ensure successful implementation of policy, joint participation in policy-making should be encouraged. It means before formulating policies top manager in the organisation must consult the persons who are likely to be affected by them and are supposed to implement them.

3. It should be broad, general and basic not specific because they are guide to thinking and action. They should not lay down the detailed procedure of doing activities.
4. It must reflect the internal and external business environment. There must be an element of stability in them. It does not however, mean that they must not be changed. If there is a change in conditions on which these policies were based. Rigidities should be avoided to make policies realistic.
5. Policies should be in writing and the language of the policies should be intelligible to those who are supposed to implement them.
6. Different policies in the organisation should support one another. They must be in conformity with and not conflict with one another.
7. Policies should have general social objectives. They must not be detrimental to the interest of society, otherwise their implementation would be difficult.
8. Policies should be taught. Organisation members must understand them. Policies become meaningless if they are not endorsed by the person who are to be affected by them

### Factors Influencing Policy Determination

There are internal and external factors which influence the policy determination and they are as follows:

#### A. The Internal Factors

1. **The Organisational Goals and Strategies:** policies must be consistent with and contribute to organisational goals and strategies. Infact, policies are meant to operationalise and implement organisational goals and strategies.
2. **Managerial Values:** organisational policies are influenced to a great extent by the way in which managers perceive realities as also managerial beliefs of what is good and what is not. Managers, are considered as prime movers of organisations half their own systems of personal values (for example honesty and truth in advertising) perceptions and preferences.
3. **Organisational Resources:** these resources, like finance, manpower, physical equipment and so on determine the capabilities and constraints of the organisation and they provide a basis for determination of policies. For Example- A competent managerial team is able to formulate a bold and dynamic set of policies and cut through obstacles in their implementation.
4. **Organisational Structure:** it provides the basis 'for all managerial process including policy determination, by delimiting activities and authority roles and relationships and by providing needed staff support for exploration and development of policy options.
5. **Organisational Politics:** it has been seen that human organisation cannot escape from being affected to some extent from internal power, dynamics and politics, rivalry for authority, status, influence, scarce resources, as also personality clashes, vested interests, jealousies and so on. Policy determination in organisation is also a political process

of sub-optimisation, compromises tight-rope walking and so on.

## B. External Factors

1. **Socio-Political Factors:** several groups in society are directly and indirectly interested in and affected by the functioning of organisations. They tend to exert some influence directly and through their representatives in government on organisations in their policy determination. For Example—Groups which advocate environmental safety, may pressurize manufacturing enterprises to go in for an antipollution policy. Government may bring in legislation to ensure product, safety and quality.
2. **Product Market Factors:** every organisation, whether business or non-business, has something to offer to society and has its own clientele group of users. The policies determined by the individual organisation have to reflect the needs and expectations of its clientele group as also the conditions and behaviour of the product-market environment. For example—In the case of a business enterprise, the characteristics of its product market nature of demand and competition, type of customers, structure of industry and so on; influence its marketing policies in particular and other policies in general.
3. **Resource Market Factors:** organisations draw their input requirements from society and the external environment. Therefore, the nature and behaviour of markets for the organisations resources tend to behave an unmistakable influence on policy determination, for example, personnel policy, financial policy, purchase policy and so on.

## Case Regarding Policies

### Functional Policies Relating to East India Hotels Limited.

The case relates to a hotel namely East India Hotels Limited which own the Oberoi group of Hotels in the country. Within a very short period of time this hotel became number one hotel company in the private sector, because he followed and adopted the growth strategy and following policies.

1. **Locational policies:** the locational policy suggests that hotels should be located in the busy area of the city. But the hotel located in the busy part of the city may involve higher limited costs and will be beneficial from long-term point of view. Further its policy should be to construct or acquire hotels of having rooms within the range of 300 to 550.
2. **Foods and Beverages:** it should be the policy of the hotel company to serve foods and beverages of high quality with right blending. Its basic policy should be to keep or to attach at least one foreign cook or chef to each hotel to cater needs of foreign tourists. .
3. **Servicing:** as we are aware that hotel is a service industry therefore, the company should adopt the service of personalised service. Every person who comes to the hotel be treated as the guest of the hotel. It is essential that an attempt be made to develop sense of belongingness among the customer by emphasising the concept of “Our Hotel” instead of “my hotel”

4. **Policy regarding room charges:** it should be the policy of the company to keep the room rent high in which 70 to 80 percent rooms should be let out at lower price and the remaining to individuals be at higher prices.
5. **Financing:** it should be the policy of the company to do business without involving financial institutions. The right thing will be to work first with its own money and then to get public money in the form of deposits and debentures. In order to avoid interest burden the policy should be to collect dues if any at a faster rate and paying the outstanding if any.
6. **Personnel:** selection of Personnel: The company should form a policy of selecting the best available personnel and training and developing them into the best suitable way. Therefore, the selection procedure of the company should be rigorous and in training, the person must be taught tricks of the trade; and the right type of attitude may be inculcated in the person towards the business to make it popular and profitable.  
Employee will have to go through 2 weeks of Induction program after joining.  
Appraisals will be done 6 monthly and Head of department will be responsible for appraisees’ performance and Identification of training needs
7. **The company must adopt the policy of decentralisation and delegation:** as the hotel is headed by a general manager who enjoys various authorities including the financial authority, each Hotel is considered as an independent unit and the general manager can make any decision within the overall framework of the hotel management and hotel rules and laws. Each hotel manager is delegated with the authority to spend 5 to 7 percent of revenue from his hotel over the essential expenditure of the hotel. To keep hotel neat, clean, tidy and attractive.

### Potential Conflict Between HR/Training Function And Business Management

Typically conflict needs managing between HR or training departments and performance management functions within the business. This is caused simply by the different aims of the departments, and needs understanding and cooperation on both sides in order to achieve successful training needs assessment, training design, planning, delivery and optimal take-up and implementation.

- most relevantly- management resisting release of staff for training due to day-to-day work demands
- culturally - short-term needs of performance management vs long-term outlook of HR
- HR have no line authority over trainees therefore cannot control training take-up
- Training is rarely well followed-through once delegates are back in jobs, despite HR efforts to achieve this via managers
- HR budgets are often cut if profits come under pressure

## Points to Ponder

### Design Learner-Friendly Training Manuals



#### 1. Reproduce visuals, and provide space to take notes

- Difficult to copy a visual and absorb key messages.
- Reproduce visual image on paper
- Trainees can have more time to listen and to take notes

#### Intro...

- Everyone knows a presenter has to dress to conduct a class. And why?
- The appearance of presentation materials is important as well
- Computers, color monitors, high-quality laser printers
- Documents that were considered acceptable several years ago....
- Here are some ways (10) training professionals can enhance the look of their handouts and their own image at the same time....

#### 2. Use charts and graphs to reinforce key messages

- Graphics improve the comprehension of underlying principles and maintain a viewer's interest.
- Modern word-processing programs support most common business graphics.
  - Bar charts
  - Pie charts
- More detailed line drawings and photos images can be imported
- Example: Service and operations manuals



### 3. Design training materials to be convenient reference tools

- Important that the manual's organization and indexing method are easy to look up specific subjects.
- Most training materials will be used for subsequent reference beside during the course



### 5. Customize content as much as possible

- Each training manual should contain materials specific to the topic or employees' responsibilities.
- Modern network printing options make it possible to generate high-quality materials in extremely small quantities
- With today's desktop PC make it fast and easy to cut and paste content electronically
- Remember in the case of training materials, bigger is not better!

### 4. Use color to accelerate learning

- Color is the ideal companion to all training materials.
- Market research: color can increase learning and retention by up to 78%
- It also increases readership by 40%
- Color can be costly
- It does not mean to produce full-color images on every page of the document.
- Intelligent way of using color can achieve all benefits at an affordable, incremental cost.

Example: printing chapter headings in a color.  
Or highlight key sentences in a single color so viewers can easily find the key points.



### 6. Put the recipient's name on the cover

- Put Attendee's name on the cover of a manual or booklet
  - Make attendee value and use the manual more.
- Send messages that the company views each participant as an individual.
  - Personalized approach is especially important for middle and upper level managers.

## 7. Develop a guide for presenters

- A separate guide for facilitators provides helpful prompts and ensures that all presenters use a consistent approach.
- Facilitator guide should occupy two-thirds of the page with visuals.
- Remaining third lists prompts and key messages to accompany each visual
- Participant workbook is created from the facilitator guide by eliminating the prompts to allow space for notes.

## 9. Choose a binding method that's durable and convenient

- Companies are switching from three-ring binders to spiral binding for smaller booklets.
- Participants say.. Spiral-bound books are lighter and easier to use.
- Large manuals... binders are still the favorite choice because they last longer.



## 8. Make manual covers distinctive

- Many employees have several manuals on their desk.
- The cover and spine marking should quickly distinguish the content of each manual



Example: Home depot, cover designs and color-coded spine markings distinguish one type of manual from another.

## 10. Make sure your supplier can accommodate last-minute changes

- Digital printing systems let presenters make changes to materials up to a day or hours before a class is held
- Allowing a week for production is no longer necessary.
- In general, suppliers should be able to support one or two-day turnaround on routine jobs

## Conclusion

Successful trainers use modern technology like the digital printing systems to improve the content and appearance of training materials. By putting in a few more dollars, a company can earn respect of internal and external customers by having a professional manuals and handouts.

## Activity and Assignments

1. Explain various types of training.
2. What is Training Manual.
3. You are HRD Manager employed in BPO. The Company undergoing expansion plans. And going to employ about 1500 employees in near future. Your CEO had Design Training Manual.

## LESSON 4

### LEARNING AND LEARNING STYLES

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Dear Friends,

This following lesson is going to explain you

What is Learning?

What are various styles of learning

What is the process of learning.

What are various theories of learning.

What are principles of learning.

**And how learning can be made more effective.**

And hence you will be able to apply the above for live training session.

#### Introduction

Before we discuss about learning and learning styles let us first understand how does knowledge of learning going to effect the training.

Now we already know the TRAINING IS LEARNING PROCESS so understanding learning in detail will let us know how training can be more effective. By the end of this session you will be able to apply the concept of learning for training.

#### What is Learning?

Learning has been defined as a relatively permanent change in behavioral potentiality that occurs as a result of reinforced practice. The following elaborates on this basic definition:

- Learning is indexed by a change in behavior, which must be translated into observable behavior. After learning, learners are capable of performing something that they could not do before the learning experience.
- This change is relatively permanent, it is neither transitory nor fixed.
- The change in behavior need not occur immediately following the learning experience. Although there may be a potential to act differently, this potential may not be translated into a new behavior immediately.
- The change in behavior results from experience or practice.
- The experience or practice must be reinforced.  
Learning a subject seems to involve three almost simultaneous processes:
- First, there is acquisition of new information - often information that runs counter to or is a replacement for what the person has previously known.
- A second aspect of learning may be called transformation - the process of manipulating knowledge to make it fit new tasks. Transformation comprises the ways we deal with information in order to go beyond it.
- A third aspect of learning is evaluation - checking whether the way we have manipulated information is adequate to the task.

Also, there is more than one type of learning. A committee of colleges and universities studied learning behaviors and broke learning into three main domains or Taxonomies. Knowing the type of knowledge, skill, or attitude that is discussed in the taxonomy will assist you in determining the instructional strategy.

#### Learning Styles

Just as every person is unique, so is every learner. But how much this uniqueness matters has been a great debate among educators, trainers, and psychologists. A learning style is a student's consistent way of responding to and using stimuli in the context of learning. Some say that each student learns best using a learning strategy or method that best matches his or her need. While others say that what matters the most is the learning process, not the style. The research tends to favor the latter group. Achieving a solid learning environment that meets the student's need, rather than their styles seems to be the most important key for effective learning.

#### The Learning Process

While learning styles show that we are all different, the learning process shows how and why we learn something. This, perhaps, is even more important than addressing the various learning styles. Although people have a preferred style, they can still learn under almost any style. While various learning styles can make it easier or harder for a person to master a subject, if the learning process is not in place, it makes that subject almost unachievable.

#### Choose Delivery System

The instructional and support material that will provide the most effective learning stimulus are specified in this step. Care should be taken not to select materials just because they are available. For example, there are probably several hundred VCR instructional tapes floating around that were developed, not because it was the best media for the instruction to be presented, but because a camera and VCR were readily available. The purpose in this step is not to show your mastery of the latest whiz-bang technology, but to select media that will best magnify the learning process. When determining the media best suited to train the objective consider:

- **The instructional setting:** What type of setting is required? Is it up to date or does it have to be modified? If the instructors and learners have to travel to the sight, what materials must they bring?
- **Media characteristics:** What is the best media for this type of instruction? How must the media be obtained? Must we produce it? If so, do we have the technical expertise?
- **Instructional material:** Can it be developed within the proposed budget? What are the constraining factors for producing this material? Will the technology likely change before the proposed training material can be produced?



- **Time:** What are the critical time factors involved? When and how many learners must be trained by a given time? Is there more than one group to be trained and how closely will each group follow?
- **Instructors:** Are they qualified for this type of instruction? Must a Train The Trainer class be given to bring the instructors up to par? How long will it take to bring them up to par? How many instructors are available for this instruction?  
  
Each type of instructional material has certain points to consider:
- **Job Performance Aid:** Do people just need simple reminders or a list of steps for performing a task?
- **Technical manual:** Is the manual already available? If so, must additional material be developed to enhance the manual for instructional purposes?
- **Decals:** How big? What color? Where exactly must they be placed? Must briefings be given about the decal?
- **Flowcharts and schematics:** Should these be decals? Where must they be placed so that people will use them?
- **Self Teaching Package:** Are books and manuals available? Are they geared to the students educational level? Are the workers motivated to learn on their own?
- **Programmed text:** At what level must it be? Is additional instruction needed?
- **Multimedia computer programs:** This type of instruction takes a great deal of time and resources to develop. What must be done to complete it in time and within budget? After it is developed, for how long of a time period will it be valid?
- **Computer Aided Instruction:** Do we have the authoring tools available? Do we have training specialist who can develop the instruction with the authoring tools or must they be instructed in the new media?
- **Personalized Instruction:** Are coaches readily available to aid the learners. What goals need to be established and how will the learners obtain them?
- **On-The-Job Training:** Are the supervisors ready to take on the task of providing training and coaching? Must they be instructed in On-The-Job learning packages? Do they have the time? Are trainers needed for this type of training? If so, what will be their role?
- **Resident Instruction: in-house:** Do we have instructors who can perform this type of training? Contract Training: Will it be given at our location or a separate location? What sort of time frame is involved?

Lockstep or self pace: Self pace is generally considered better in most cases because it allows each learner to proceed at her or his own pace, but it is more difficult to manage than lockstep and usually requires more instructors because of the wide range of variables that take place within the learning environment.

## Develop Instruction

Only after all the preplanning has been accomplished, is it time to start developing the instructional material. Developing different forms of courseware requires a certain amount of skill and art.

## Synthesize

When developing the training material and media, ensure that it is synthesized into an integrated program. It should flow as naturally as possible, with each lesson block building the foundation for the next one. Provide variety that is conducive to learning. Break practice periods up with instructional periods, rather than having all the instruction in the beginning followed by nothing but practice.

Time will have to be considered when synthesizing the complete learning program. For example, if you have five, 3 hour blocks of instruction, how do you break them down to run smoothly in two days? Which one gets chopped to two hours one day and one hour the next day. Will it have an effect on learning? Must the blocks run in order or can you switch them so the least difficult block gets broken apart. Will it be better to break the most difficult one apart so the learners get a respite from the toils of hard learning? Since most workdays are eight hours and your program totals 15 hours, what should be done with the one additional hour that will best benefit the organization?

In the U.S. Army Artillery there is a firing method known as the bracketing process. Fire and adjust! Fire and adjust! This process is continued until there is fire for effect, and then adjusted again until the target is hit!

Developing effective courseware is the same. Train and adjust! Train and adjust! Continue with the SAT process until the training is no longer needed or until the training courseware is the best piece of training material produced and then some!

## Validate Instruction

The last step is to validate the material by using representative samples of the target population and then revising the program as needed. The heart of the systems approach to training is revising and validating the instructional material until the learners meet the planned learning objectives. Also, it should not be thought of as a single shot affair. Success or failure is not measured at a single point.

The initial validation will depend upon the complexity of the training material and your resources. Listed below is a procedure that provides an effective validation of a large training program. Adjust it as needed to fit the size and complexity of your program, but keep in mind that the closer your validation follows this one, the less problems you will encounter during your training.

Select the participants that will be in the trials. The participants should be randomly selected, but they must represent all strata of the target population, bright, average, and slow learners. They should be clearly told what their roles are in the validation process are. Let them know that they are helping to develop and improve the lessons and that they should feel free to tell you what they think about it. The participants should be pretested to ensure that the students learn from the instructional material and not from past experience.

Conduct individual trials. This trial is performed on one learner at a time. The instruction is presented to the learner. The separate pieces of instructions, tests, practice periods, etc., should be timed to ensure they match the estimated times. Do not tutor unless the learner cannot understand the directions. Whenever you help or observe the learner having difficulty with the material, document it.

Revise instruction. Using the documents from the individual trials, revise the material as needed. Closely go over any evaluations that were administered. A large number of wrong answers for an item indicates a trouble area. Conversely, a large number of correct answers for an item could indicate the learners already knew the material, the test items were too easy, or the lessons over taught the material.

Repeat individual trials until the lesson does what it is supposed to do. There is no magical number for individual trials. From three to five times seems to be the usual number. Also, if you are trialing a large course, you might only need to trial specific troublesome areas of the course, rather than the whole course itself.

Conduct group trial. After you are satisfied with the results of the individual tryouts, move on to the group tryouts. These can be of any size. It may consist of several small groups, one large group, or a combination of both. The procedure is the same as the individual tryouts except for one difference. At some point in the trials you must determine if the program needs to be accepted or if it needs major revision. Usually a minimum of two successful tryouts are conducted to ensure the program teaches. Minor problems should not hold up implementing the program. As was stated earlier in this section, revisions do not stop upon the first implementation of the program, but are performed throughout the life of the program

## Learning Styles

### Or, How We Go From the Unknown to the Known

A learning style is a student's consistent way of responding to and using stimuli in the context of learning. There are various instruments used to determine a student's learning style. The first style to be discussed is VAK (Visual, Auditory, Kinesthetic), which is derived from the accelerated learning world, and seems to be about the most popular model nowadays. Its main strength is that it is quite simple, which appeals to a lot of people. Its main weakness, is that the research does not really support it.

Kolb's learning inventory describes a learning process and a style, which makes it quite interesting. It can be thought of as a simpler version of the MBTI which is based upon determining the personality type. Kolb's version uses two dimensions, while the MBTI uses two similar dimensions, plus two additional ones.

Howard Gardner's Multiple Intelligences seems to provide the most promising outlook for diversifying learning.

**Warning:** These various learning styles or intelligences are points along a scale that help us to discover the different forms of mental representation; they are not good characterizations of what people are (or are not) like. We should not divide the population into a set category (e.g. visual person, extrovert).

What these various instruments are doing is allocating the person along some point on a continuum (similar to measuring height or weight). In other words, do not pigeon-hole people as we are all capable of learning under any style or intelligence no matter what our preference is.

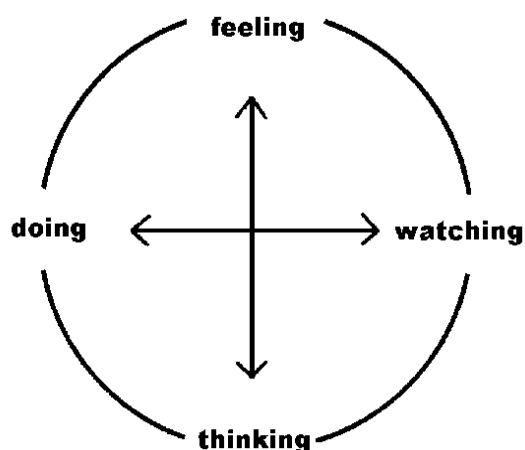
## Kolb Learning Styles

### David Kolb's Learning Styles model

David Kolb developed this learning styles model in 1984. Kolb's learning styles model is based on two lines of axis (continuums): our approach to a **task** - (preferring to do or watch), and our **emotional** response (preferring to think or feel). The theory sets out these four preferences, which are also possible different learning methods:

- doing (active experimentation)
- watching (reflective observation)
- feeling (concrete experience)
- thinking (abstract conceptualisation)

These learning styles characteristics are normally shown as two lines of axis. The east-west axis is called the Processing Continuum (how we approach a task), and the north-south axis is called the Perception Continuum (our emotional response, or how we think or feel). This also describes four different learning styles (and also methods):



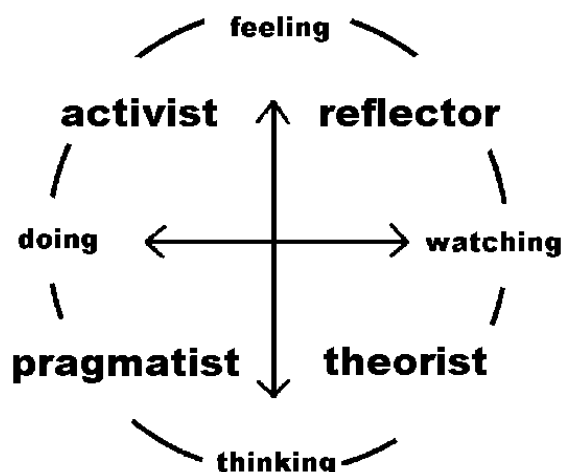
The combination of where our preference lies on each axis produces four possible learning style types:

- **activist** (doing and feeling preferences, or concrete-active)
- **reflector** (watching and doing, or concrete-reflective)
- **theorist** (watching and thinking, or abstract-reflective)
- **pragmatist** (thinking and doing, or abstract-active)

Knowing a person's (and your own) learning style enables learning to be orientated according to the preferred method. That said, everyone responds to and needs the stimulus of all types of learning style - it's a matter of using emphasis that fits best with a person's learning style preferences:

- **activist** - hands-on, relies on intuition rather than logic, uses other people's analysis, and likes practical, experiential approach.

- **reflector** (watching and doing, or concrete-reflective) - able to look at things from different perspectives, sensitive, prefers to watch rather than do it, gathers information and uses imagination to solve problems.
- **theorist** (watching and thinking, or abstract-reflective) - concise, logical approach, ideas and concepts are more important than people, requires good clear explanation rather than practical opportunity.
- **pragmatist** (thinking and doing, or abstract-active) - can solve problems and will use learning to apply to finding solutions to practical issues, prefers technical tasks, less concerned with people and interpersonal aspects.



For instance - don't expect theorists to be comfortable being thrown in at the deep end without notes and instructions. Conversely, activists may become frustrated if unable to get hands on experience as soon as possible.

As with any other model, this is a guide, not an absolute set of rules.

### VAK Learning Styles

The VAK learning Style uses the three main sensory receivers - Vision, Auditory, and Kinesthetic (movement) to determine the dominate learning style.



Learners use all three to receive information. However, one or more of these receiving styles is normally dominant. This dominant style defines the best way for a person to learn new information by filtering what is to be learned. This style may not always be the same for some tasks. The learner may prefer one style of learning for one task, and a combination of others for another task.

Classically, our learning style is forced upon us through life like this: In grades kindergarten to third, new information is presented to us kinesthetically; grades 4 to 8 are visually presented; while grades 9 to college and on into the business learning environment, information is presented to us auditory by lectures.

As trainers, we need to present information using all three styles. This allows all learners, no matter what their preferred style is, the opportunity to become involved. It also allows a learner to be presented with the other two methods of reinforcement. Just because we prefer one style, does not mean that the other two do us no good. On the contrary, they help us to learn even faster by reinforcing the material. Some hints for recognizing and implementing the three styles are:

Auditory learners often talk to themselves. They also may move their lips and read out loud. They may have difficulty with reading and writing tasks. They often do better talking to a colleague or a tape recorder and hearing what was said. To integrate this style into the learning environment:

- Begin new material with a brief explanation of what is coming. Conclude with a summary of what has been covered. This is the old adage of "tell them what they are going to learn, teach them, and tell them what they have learned."
- Use the Socratic method of lecturing by questioning learners to draw as much information from them as possible and then fill in the gaps with your own expertise.
- Include auditory activities, such as brainstorming, buzz groups, or Jeopardy.
- Leave plenty of time to debrief activities. This allows them to make connections of what they learned and how it applies to their situation.
- Have the learners verbalize the questions.
- Develop an internal dialogue between yourself and the learners.
- Visual learners have two subchannels - linguistic and spatial. Learners who are visual-linguistic like to learn through written language, such as reading and writing tasks. They remember what has been written down, even if they do not read it more than once. They like to write down directions and pay better attention to lectures if they watch them. Learners who are visual-spatial usually have difficulty with written language and do better with charts, demonstrations, videos, and other visual materials. They easily visualize faces and places by using their imagination and seldom get lost in new surroundings. To integrate this style into the learning environment:
- Use graphs, charts, illustrations, or other visual aids.

- Include outlines, agendas, handouts, etc. for reading and taking notes.
- Include plenty of content in handouts to reread after the learning session.
- Leave white space in handouts for note taking.
- Invite questions to help them stay alert in auditory environments.
- Post flip charts to show what will come and what has been presented.
- Emphasize key points to cue when to take notes.
- Eliminate potential distractions.
- Supplement textual information with illustrations whenever possible.
- Have them draw pictures in the margins.
- Show diagrams and then explain them.

Have the learners envision the topic or have them act out the subject matter.

Kinesthetic learners do best while touching and moving. It also has two subchannels - kinesthetic (movement) and tactile (touch). They tend to lose concentration if there is little or no external stimulation or movement. When listening to lectures they may want to take notes. When reading, they like to scan the material first, and then focus in on the details (get the big picture first). They typically use color highlighters and take notes by drawing pictures, diagrams, or doodling. To integrate this style into the learning environment:

- Use activities that get the learners up and moving.
- Play music, when appropriate, during activities.
- Use colored markers to emphasize key points on flipcharts or white boards.
- Give frequent stretch breaks (brain breaks).
- Provide toys such as Koosh balls and Play-Dough to give them something to do with their hands.
- To highlight a point, provide gum, candy, scents, etc. which provides a cross link of scent (aroma) to the topic at hand (scent can be a powerful cue).
- Provide highlighters, colored pens and/or pencils.
- Guide learners through a visualization of complex tasks.

Have them transfer information from the text to another medium such as a keyboard or a tablet.

## **Carl Jung and Myers Briggs Type Indicator (MBTI)**

During the early 1900s, Carl Jung established a field identifying distinct personality patterns. Many theorists have since broken these patterns into categories attempting to make them easier to understand. Carl Jung was a contemporary of Sigmund Freud and a leading exponent of Gestalt personality theory. Jung developed a ground-breaking personality theory that introduced two attitudes - extraversion and introversion (1933a). Later he described human behavior as a combination of four psychic functions - thinking/feeling and intuition/sensation (1933b). Thinking and feeling are said to be rational functions because they both require acts of judgments. Sensation and intuition

involve immediate experiences. The MBTI, Kolb's Learning Style Inventory, Managerial Grid, and a number of other instruments all use a form of extraversion/introversion. His four other functions are also closely tied with these instruments.

The most widely used personality survey instrument is the Myers Briggs Type Indicator (MBTI), followed closely by the DiSC assessment (Carlson Learning). The MBTI can be an aid in understanding the individual differences. This is why it is more complicated than the other models discussed here, since they are strictly learning models why the MBTI is a personality model. However, our personality does play an important part in determining our learning style. And it does tie in within the other models so we will discuss its part in the the learning process.

Scores obtained from the MBTI indicate a person's preference on each of four dichotomous dimensions:

- Extroversion (E) versus Introversion (I) [similar to two dimensional behavioral models and Kolb's Learning Style Inventory]
- Sensing (S) versus iNtuition (N)
- Thinking (T) versus Feeling (F) [similar to two dimensional behavioral models and Kolb's Learning Style Inventory]
- Judging (J) versus Perceptive (P)

### **1. Extroversion (E) versus Introversion (I)**

This indicates whether a learner prefers to direct attention towards the external world of people and things or toward the internal world of concepts and ideas. This preference tells us from where people get their energy.

Introverts find energy in the inner world of ideas, concepts, and abstractions. They can be sociable but need tranquility to regain their energy. They want to understand the world; they concentrate and tend to be reflective thinkers. They think more than talk. Introverted learners want to develop frameworks that integrate or connect the information that they learn, this becomes knowledge is the interconnection of the material and to see a global view.

Extroverts find energy in things and people. They prefer interaction with others, and tend to be action-oriented. They also tend to think on their feet. They talk more than listen. Extroverted learners learn by teaching others. They do not normally understand the subject until they try to explain it to themselves or others (working in groups). Problem Based Learning and Collaborative Learning are good teaching techniques for this group.

### **2. Sensing (S) versus iNtuition (N)**

This indicates whether a learner prefers to perceive the world by directly observing the surrounding reality or through impressions and imagining possibilities.

Sensing people choose to rely on their five senses. They are detail-oriented, they want facts, and they trust them. Sensing learners prefer organized, linear, and structured lectures (systematic instruction or step-by-step learning).

Intuitive people seek out patterns and relationships among the facts they have gathered. They trust hunches ("sixth" sense) and their intuition and look for the "big picture." They also value

imagination and innovation. Intuitive learners prefer various forms of discovery learning and must have the big picture (metaphors and analogies), or an integrating framework in order to understand a subject. They like concept maps or and often compare and contrast tables.

### 3. Thinking (T) versus Feeling (F)

This indicates how the learner makes decisions, either through logic or by using fairness and human values.

Thinkers decide things impersonally based on analysis, logic, and principle. They value fairness - focusing on the situation's logic, and placing great weight on objective criteria in making a decision. They naturally see flaws and tend to be critical.

Thinking learners prefer clear goal and objectives. They want to see precise, action-oriented cognitive, affective and psychomotor objective. They also want to know what they have to do to learn the material.

Feelers value harmony by focusing on human values. They focus on human values and needs as they make decisions or arrive at judgments. They tend to be good at persuasion and facilitating differences among group members. They value empathy and harmony. Feeling learners enjoy the small group exercises, especially harmonious groups.

### 4. Judging (J) versus Perceptive (P)

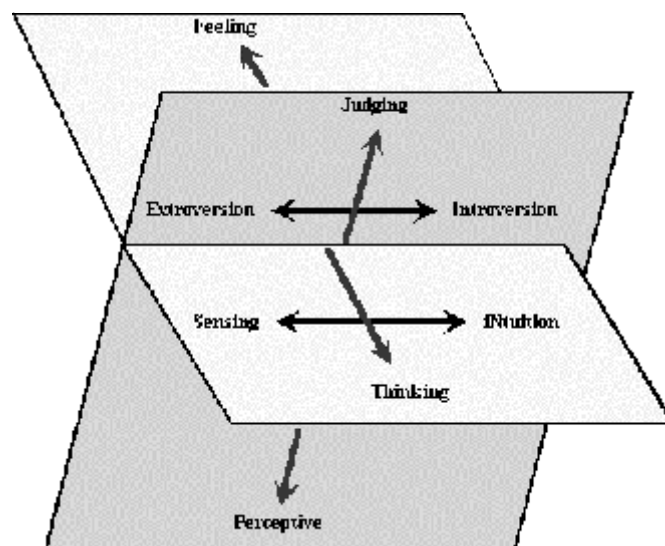
This indicates how the learner views the world, either as a structured and planned environment or as a spontaneous environment.

Judging people are decisive, self-starters and self-regimented. They also focus on completing the task, knowing the essentials, and they take action quickly. They plan their work and work their plan. Deadlines are sacred as they see time as a finite resource. Judging learners need tools that help them to plan their work and work their plan. They want guides that give quick tips. They can be encouraged by offering self-improvement.

Perceptive learners are curious, adaptable, and spontaneous. They start many tasks, want to know everything about each task, and often find it difficult to complete a task. Deadlines are meant to be stretched while more information is gathered as they see time as a renewable resource. They like to leave their options open. Perceptive learners often postpone doing an assignment until the last minute. They are not lazy, they are merely seeking information up to the very last minute. Breaking down a complex project into a series of sub-assignments and providing deadlines will keep perceptive learners on target. Also they are often process oriented (emphasis is on how the task is completed) and will easily adapt as long as they know the how.

### MBTI Model

The MBTI model would have two dimensions - height and width, similar to Kolb's and other models, but it would also a third dimension - depth. Extroversion/Introversion would be on the horizontal axis, while Feeling/Thinking would be on the vertical axis. This is represented by the model below.



### MBTI Model

The depth (third dimension) of Extroversion/Introversion (EI) would be Judging/Perceptive (JP). This might be thought of as how much time (JP) we are willing to stick to a task (EI) rather it be actively engaging in it or reflecting on it.

The depth (third dimension) of Feeling/Thinking (FT) would be Sensing/iNtuition (SN). This might be thought of as using our various senses, to include our "sixth sense" (SN) when thinking or feeling (FT) about a subject.

"although they are not necessarily dependent on each other, these intelligences seldom operate in isolation. Every normal individual possesses varying degrees of each of these intelligences, but the ways in which intelligences combine and blend are as varied as the faces and the personalities of individuals."

- Howard Gardner

### Multiple Intelligences

Howard Gardner theorized that there are multiple intelligences, and that we all use one or two for the most effective learning. Our culture teach, test, reinforce and reward primarily two kinds of intelligence: verbal/linguistic and logical/mathematical. His theory proposes that there are at least eight other kinds of intelligence that are equally important. They are "languages" that most people speak, and that cut through cultural, educational, and ability differences.

The mind is not comprised of a single representation or a single language of representations. Rather, we harbor numerous internal representations in our minds. Some scholars speak of "modules of mind," some of a "society of mind," in this case it is "multiple intelligences." They include

- **Verbal Linguistic** intelligence (sensitive to the meaning and order of words as in a poet). Use activities that involve hearing, listening, impromptu or formal speaking, tongue twisters, humor, oral or silent reading, documentation, creative writing, spelling, journal, poetry.

- **Logical-mathematical** intelligence (able to handle chains of reasoning and recognize patterns and orders as in a scientist). Use activities that involve abstract symbols/formulas, outlining, graphic organizers, numeric sequences, calculation, deciphering codes, problem solving.
- **Musical** intelligence (sensitive to pitch, melody, rhythm, and tone as in a composer). Use activities that involve audio tape, music recitals, singing on key, whistling, humming, environmental sounds, percussion vibrations, rhythmic patterns, music composition, tonal patterns.
- **Spatial** intelligence (perceive the world accurately and try to re-create or transform aspects of that world as in a sculptor or airplane pilot). Use activities that involve art, pictures, sculpture, drawings, doodling, mind mapping, patterns/designs, color schemes, active imagination, imagery, block building.
- **Bodily Kinesthetic** intelligence (able to use the body skillfully and handle objects adroitly, as in an athlete or dancer). Use activities that involve role playing, physical gestures, drama, inventing, ball passing, sports games, physical exercise, body language, dancing.
- **Interpersonal** intelligence (understand people and relationship as in a salesman or teacher). learners think by bouncing ideas off of each other (socializers who are people smart). Use activities that involve group projects, division of labor, sensing others' motives, receiving/giving feedback, collaboration skills.
- **Intrapersonal** intelligence (possess access to one's emotional life as a means to understand oneself and others exhibited by individuals with accurate views of themselves). Use activities that involve emotional processing, silent reflection methods, thinking strategies, concentration skills, higher order reasoning, "centering" practices, meta-cognitive techniques.
- **Naturalist** (connected to the intricacies and subtleties in nature such as Charles Darwin and Meriwether Lewis of Lewis and Clark fame). Use activities that involve bringing the outdoors into the class, relating to the natural world, charting, mapping changes, observing wildlife, keeping journals or logs.

According to multiple intelligences theory, not only do all individuals possess numerous mental representations and intellectual languages, but individuals also differ from one another in the forms of these representations, their relative strengths, and the ways in which (and ease with which) these representations can be changed.

### Putting the Styles Together

First, it should be noted that no single measurement of style ensures that a learner's needs will be met. It is perhaps more important to build an adaptable learning environment that presents the material in a variety of methods than try to determine each learner's personal style. Likewise, recognizing your own style will help to ensure you do not unintentionally force one learning style upon the learners. The more styles you address, the easier the instruction will be received by the learners. This is because you will be striving to reach their needs, not

yours. Also, material presented in a variety of methods keeps the learners interested and reinforces itself.

Learning styles come from three schools of thought: Perceptual Modality, Information Processing, and Personality Patterns (Conner & Hodgins, 2000).

**Perceptual Modality** are biologically-based reactions to the physical environment. It refers to the primary way our bodies take in information, such as auditory, visual, smell, kinesthetic, and tactile. Learning style:

- VAK - Notice that this style does not really worry about the why of learning styles.

**Information Processing** distinguishes between the way we think, solve problems, and remember information. This may be thought of as the way our brain processes information. Learning style:

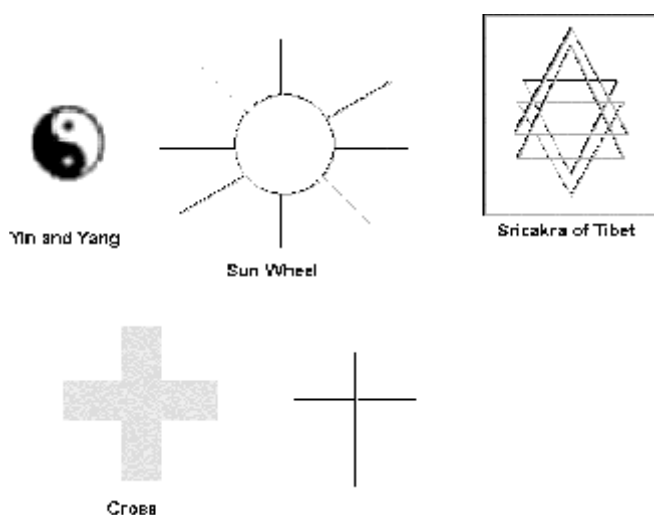
- The first part of Kolb's Learning Style Inventory in which he describes the process of learning.

**Personality Models** are the way we interact with our surroundings. Each of us has a preferred, consistent, distinct way of perceiving, organizing, and retaining information. This is due to the way we were brought up (environment or nurture) and the genes (DNA or nature) within us. This may be thought of as the ego within us, or what makes us what we are. Learning styles:

- The second part of Kolb's Learning Style Inventory in which he describes individual learning styles.
- MBTI.

### Howard Gardner's Multiple Intelligences.

All of these models can be thought of as a Mandala - a Sanskrit word for "magical circle." It is one of the oldest religious symbols and is found throughout the world. Although it is normally circular in appearance, it can take on a variety of forms.



Jung found the mandala symbol occurring spontaneously in the dreams and images of his patients. He thought of it as a symbol of wholeness that can aid us in integrating our personality. While several of the styles presented here are

represented by various forms of crosses and circles, all the styles and models have one thing in common, they are an attempt to minimize the complexity of an extremely multifaceted subject. It is only by slicing through behaviors one step at a time, such as how we learn through these simple models, will we ever have a chance of understanding our whole learning styles.

This is why these models do not fully explain how we learn and at the same time are both right and wrong. Learning is an extremely complex process. These models tend to simplify the process (which is a starting point in understanding a complex process). Also, each one tends to tackle something different in the learning environment by taking a small slice out of it. It is only by looking at these various slices and others will we ever begin to understand the whole learning process.

### Activity and Assignments:

1. Write what do you understand by learning.

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2. Which learning styles as per you is the best.

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3. Define learning? Explain the principles of learning.

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4. List down in what styles do people learn.

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## Collection of Articles

### Aspects of Learning

### Modern Learning Methods

### E Learning

#### Reflections On e-Learning

The day is coming when the work done by correspondence will be greater in amount than that done in the classrooms of our academies and colleges.

William Rainey Harper, distance-education pioneer and president of the University of Chicago.

The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make email usage look like a rounding error. - John Chambers, president and CEO of Cisco Systems.

The first quote was predicted by William Harper in 1885. The second was delivered by Cisco's

John Chambers in 2000 (of course, Cisco is not the company it once was). It seems as if every new media winds up as training's new darling. Trainers blame their present tools and readily embrace a new technology.

But in reality, these same trainers do not define performance problems and solutions in the required detail, hence, they go in quest of a magical silver bullet...unfortunately, there is no silver bullet at the end of the trail.

I do believe in the validity of e-learning, otherwise, why would I post this document on the internet? Secondly, I'm sure you, the reader, also believes in the validity of e-learning, otherwise, why would you be reading this document?

But, there is great deal of hype, both on and off the internet, of e-learning being the next great savior of training, development, and education. This paper will look at both the hype and the validity of e-learning.

### The Three Views of e-Learning

#### Electronic

e-Learning (electronic learning), as defined by ASTD, covers a wide set of applications and processes such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), audio- and videotape, satellite broadcast, interactive TV, and CD-ROM.

#### Internet

But like the term training, different organizations and different people have their own definitions. Some of the sources listed in this report believe it is learning through the internet only. For



example, Cisco defines it as the "online delivery of information, communication, education, and training.

In *BEYOND THE PODIUM: Delivering Training and Performance to a Digital World*, by Allison Rossett and Kendra Sheldon (2001), they define it as: Web-based training (WBT), also known as e-learning and on-line learning, is training that resides on a server or host computer that is connected to the World Wide Web (WWW) (p. 274).

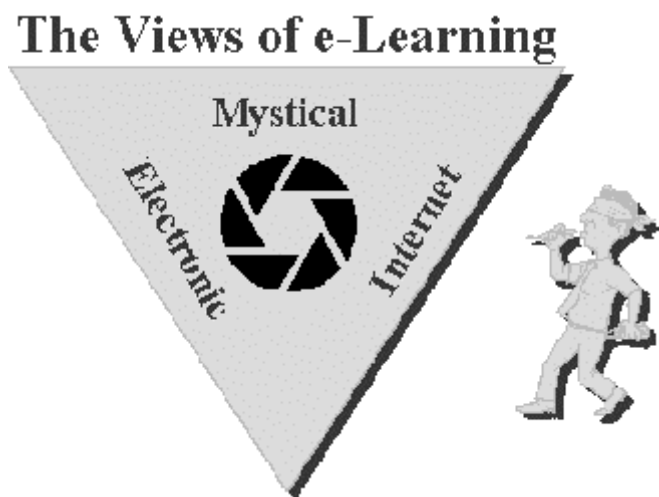
They considers WBT or e-learning as falling under Technology-Based Training: any training that is delivered partially or entirely through electronic hardware, software, or both (p. 161).

And all of the above falls under training: what the organization provides to help its people to become more effective and satisfied individuals and employees (p. 9).

### **Mystical**

Others have entirely different definitions. The Delphi Group's white paper, *Need to Know: Integrating e-Learning with High Velocity Value Chains* (12/14/2000), defines e-learning as "just in time education integrated with high velocity value chains. Whew! That that is some mouthful!

Elliott Masie defines the e in e-learning as "the EXPERIENCE dimension of e-learning, which includes such factors as: engagement, curiosity, simulation, and practice.



### **Which View is Right?**

Since a definition for the term training has never been universally accepted, I doubt that we will ever have a universally accepted term for e-learning. However, I believe that it probably falls between the version of electronic and internet. The third view, which I labeled mystical, tends to view e-learning as a magical savior of learning. This is false. e-Learning is a method for the delivery of a learning package. The designers, developers, and implementers make or break the courseware. Whatever you can do right or wrong with conventional courseware, you can also do with e-learning courseware. There is nothing built into e-learning that guarantees a perfectly designed piece of courseware. e-Learning is simply a medium for delivering learning and like any other medium, it has its advantages and disadvantages.

## **Learning Domains or Bloom's Taxonomy**

### **The Three Types of Learning**

There is more than one type of learning. A committee of colleges, led by Benjamin Bloom, identified three domains of educational activities. The three domains are cognitive, affective, and psychomotor. Since the work was produced by higher education, the words tend to be a little bigger than we are normally used to. Domains can be thought of as categories. Cognitive is for mental skills (Knowledge), affective is for growth in feelings or emotional areas (Attitude), while psychomotor is for manual or physical skills (Skills). Trainers often refer to these as KAS, SKA, or KSA (Knowledge, Attitude, and Skills). This taxonomy of learning behaviors can be thought of as "the goals of the training process." That is, after the training session, the learner should have acquired these new skills, knowledge, or attitudes.

The committee then produced an elaborate compilation for the cognitive and affective domains, but none for the psychomotor domain. Their explanation for this oversight was that they have little experience in teaching manual skills within the college level (I guess they never thought to check with their sports or drama department).

This compilation divides the three domains into subdivisions, starting from the simplest behavior to the most complex. The divisions outlined are not absolutes and there are other systems or hierarchies that have been devised in the educational and training world. However, Bloom's taxonomy is easily understood and is probably the most widely applied one in use today.

### **Cognitive 1**

The cognitive domain involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. There are six major categories, which are listed in order below, starting from the simplest behavior to the most complex. The categories can be thought of as degrees of difficulties. That is, the first one must be mastered before the next one can take place.

#### **Knowledge: Recall of data**

Examples: Recite a policy. Quote prices from memory to a customer. Knows the safety rules.

**Key Words:** defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states.

**Comprehension:** Understand the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words.

**Examples:** Rewrites the principles of test writing. Explain in one's own words the steps for performing a complex task. Translates an equation into a computer spreadsheet.

**Key words:** comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives examples, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates.



**Application:** Use a concept in a new situation or unprompted use of an abstraction. Applies what was learned in the classroom into novel situations in the workplace.

**Examples:** Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test.

**Key Words:** applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses.

**Analysis:** Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences.

**Examples:** Troubleshoot a piece of equipment by using logical deduction. Recognize logical fallacies in reasoning. Gathers information from a department and selects the required tasks for training.

**Keywords:** analyzes, breaks down, compares, contrasts, diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates.

**Synthesis:** Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure.

**Examples:** Write a company operations or process manual. Design a machine to perform a specific task. Integrates training from several sources to solve a problem. Revises and process to improve the outcome.

**Keywords:** categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes.

**Evaluation:** Make judgments about the value of ideas or materials.

**Examples:** Select the most effective solution. Hire the most qualified candidate. Explain and justify a new budget.

**Keywords:** appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports.

## Affective

This domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The five major categories listed in order are:

**Receiving phenomena:** Awareness, willingness to hear, selected attention.

**Examples:** Listen to others with respect. Listen for and remember the name of newly introduced people.

**Keywords:** asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, uses.

**Responding to phenomena:** Active participation on the part of the learners. Attends and reacts to a particular phenomenon. Learning outcomes may emphasize compliance in responding,

willingness to respond, or satisfaction in responding (motivation).

**Examples:** Participates in class discussions. Gives a presentation. Questions new ideals, concepts, models, etc. in order to fully understand them. Know the safety rules and practices them.

**Keywords:** answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes.

**Valuing:** The worth or value a person attaches to a particular object, phenomenon, or behavior. This ranges from simple acceptance to the more complex state of commitment. Valuing is based on the internalization of a set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable.

**Examples:** Demonstrates belief in the democratic process. Is sensitive towards individual and cultural differences (value diversity). Shows the ability to solve problems. Proposes a plan to social improvement and follows through with commitment. Informs management on matters that one feels strongly about.

**Keywords:** completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works.

**Organization:** Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating an unique value system. The emphasis is on comparing, relating, and synthesizing values.

**Examples:** Recognizes the need for balance between freedom and responsible behavior. Accepts responsibility for one's behavior. Explains the role of systematic planning in solving problems. Accepts professional ethical standards. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet the needs of the organization, family, and self.

**Keywords:** adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes.

**Internalizing values (characterization):** Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner. Instructional objectives are concerned with the student's general patterns of adjustment (personal, social, emotional).

**Examples:** Shows self-reliance when working independently. Cooperates in group activities (displays teamwork). Uses an objective approach in problem solving. Displays a professional commitment to ethical practice on a daily basis. Revises judgments and changes behavior in light of new evidence. Values people for what they are, not how they look.

**Keywords:** acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, verifies.

## Psychomotor 3

The psychomotor domain includes physical movement, coordination, and use of the motor-skill areas. Development

of these skills requires practice and is measured in terms of speed, precision, distance, procedures, or techniques in execution. The seven major categories listed in order are:

**Perception:** The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation.

**Examples:** Detects non-verbal communication cues. Estimate where a ball will land after it is thrown and then moving to the correct location to catch the ball. Adjusts heat of stove to correct temperature by smell and taste of food. Adjusts the height of the forks on a forklift by comparing where the forks are in relation to the pallet.

**Keywords:** chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects.

**Set:** Readiness to act. It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person's response to different situations (sometimes called mindsets).

**Examples:** Knows and acts upon a sequence of steps in a manufacturing process. Recognize one's abilities and limitations. Shows desire to learn a new process (motivation). NOTE: This subdivision of Psychomotor is closely related with the "Responding to phenomena" subdivision of the Affective domain.

**Keywords:** begins, displays, explains, moves, proceeds, reacts, shows, states, volunteers.

**Guided response:** The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing.

**Examples:** Performs a mathematical equation as demonstrated. Follows instructions to build a model. Responds hand-signals of instructor while learning to operate a forklift.

**Keywords:** copies, traces, follows, react, reproduce, responds

**Mechanism:** This is the intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency.

**Examples:** Use a personal computer. Repair a leaking faucet. Drive a car.

**Keywords:** assembles, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches.

**Complex Overt Response:** The skillful performance of motor acts that involve complex movement patterns. Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy. This category includes performing without hesitation, and automatic performance. For example, players are often utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a football, because they can tell by the feel of the act what the result will produce.

**Examples:** Maneuvers a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano.

**Keywords:** assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. NOTE: The key words are the same as Mechanism, but will have adverbs or adjectives that indicate that the performance is quicker, better, more accurate, etc.

**Adaptation:** Skills are well developed and the individual can modify movement patterns to fit special requirements.

**Examples:** Responds effectively to unexpected experiences. Modifies instruction to meet the needs of the learners. Perform a task with a machine that it was not originally intended to do (machine is not damaged and there is no danger in performing the new task).

**Keywords:** adapts, alters, changes, rearranges, reorganizes, revises, varies.

**Origination:** Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills.

**Examples:** Constructs a new theory. Develops a new and comprehensive training programming. Creates a new gymnastic routine.

**Keywords:** arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates.

As mentioned earlier, the committee did not produce a compilation for the psychomotor domain model, but others have. The one discussed above is by Simpson (1972). There are two other popular versions:

#### **R.H. Dave's (1970):**

- **Imitation:** Observing and patterning behavior after someone else. Performance may be of low quality. Example: Copying a work of art.
- **Manipulation:** Being able to perform certain actions by following instructions and practicing. Example: Creating work on one's own, after taking lessons, or reading about it.
- **Precision:** Refining, becoming more exact. Few errors are apparent. Example: Working and reworking something, so it will be "just right."
- **Articulation:** Coordinating a series of actions, achieving harmony and internal consistency. Example: Producing a video that involves music, drama, color, sound, etc.
- **Naturalization:** Having high level performance become natural, without needing to think much about it. Examples: Michael Jordan playing basketball, Nancy Lopez hitting a golf ball, etc.

#### **Harrow's:**

- Involuntary movement - reaction
- Fundamental movements - basic movements
- Perception - response to stimuli
- Physical abilities - stamina that must be developed for further development
- Skilled movements - advanced learned movements
- No discursive communication - effective body language

## Growth of e-Learning

According to International Data Corporation (Training choices and e-learning, November 25, 2000), the total corporate-training market is \$66 billion, and this will continue to increase at a steady rate of 5 percent per year for the foreseeable future. The market for Web-based corporate training will increase from \$2 billion today to \$11.5 billion in 2003.

CIO magazine (Alison Bass, 12/01/00, Trendlines - Learning Creativity) reports that e-learning is the fastest

growing segment of the corporate IT education market. It captured \$3 billion in revenues last year (I believe they only report e-learning as internet training).

grok magazine (September 13, 2000) reports that most of today's corporate training takes place in instructor led classes. For the year 2000, internet-based training will reach \$2.2 billion (3% of a total training market of \$66 billion). By 2003, the online training market is expected to grow to more than \$11 billion. (Note - grok was part of "The Standard" magazine which folded in late 2001)

BusinessWeek's chart, U.S. Corporate E-Learning Market, reports e-learning to grow to about \$11 billion by 2003.

The October issue of TRAINING Magazine has their annual Industry Report. Some of their latest findings for the year 2000, include:

- 80 percent of all training is delivered by live instructors, but sometimes the instructor isn't in the room with the students (e.g. teleconference, videoconference - which would be considered e-learning).
- 40 percent of all employer-sponsored training in the United States today is devoted to teaching computer skills.
- 13 percent of all courses are delivered via computer-based training with no instructor in the picture.
- Of computer based training, 19 percent is delivered by the internet.

Training Magazine's Latest Report is at Industry Report 2001.

### Learning Technologies and Learning Soft Skills

Presently, the bulk of e-learning is used to instruct workers about new technologies, particularly computers. For example, The Department of Veterans Affairs has turned to online courses for its employees. The e-learning company that it signed, Learn2.com Inc., will provide online courses to the agency's 5,000 employees in IT certification, Internet training, as well as instruction on Lotus Notes, Microsoft Office, and other



office software (The VA Turns To Online Courses For Employees).

But is this really e-learning or is it just using the correct medium for instructing the learners? Shouldn't we expect computer courses to be delivered via computer technology?

As noted earlier, by the year 2003, the growth in e-learning is expected to surge. This will mostly be due to employees becoming more tech-savvy. According to the GartnerGroup, corporate training falls into two major categories - 1) IT training and 2) soft skills, each with roughly 50 percent of the total market (Training Choices and e-learning, December 2000). As workers begin to master computer technology skills, they will then be able to use it for learning other skills. This means organizations will refocus their budgets from training computer skills to training soft skills such as management, communications, and professional development. For a related story, see (Trend Watch: E-Learning Goes Soft).

## The Three Sectors of e-Learning

There are three main sectors in the e-learning business ("The Standard" Learning Potential 09/12/00):

- **Portals:** These companies pool educational resources, products, and services targeting their audience. They attracted \$458 million in private funds in 1999, nearly half that year's e-learning investments.
- **Edu-commerce companies:** These peddle items such as institutional procurement services, books, clothing, and merchandise. They attracted nearly 27 percent of total e-learning venture capital in the six quarters beginning Jan 1, 1999.
- **Network platforms:** These provide everything from Web-based applications to full-service intranets. These accounted for nearly half of private investment in the first half of 2000.

### What We can Be Sure of

As shown, e-learning is definitely a growing field in the educational and training market (The Evolution of Corporate e-Learning). But exactly how much of the market share it will eventually grab is anyone's guess. Proponents say those who arrive first on the e-learning scene will profit the most, e.g., Yahoo, Amazon, etc. However, this was not always the case for a lot of "dot com" companies, which have been failing in record numbers. Brick and Motor companies may initially lack the technology, but they have the resources and experience to capture the market.

### Education

The \$96 billion for-profit education industry, is getting in on e-learning. Last year's e-learning revenues were reported to be about \$500 million for this group, as reported by Eduventures.com. And it is not just the for-profit educational institutions that want a piece of the e-learning market. The online entrepreneurs who first tapped the for-profit institutions are now entering agreements with the not-for-profit institutions. Note that U.S. education spending for not-for-profit organizations is a huge market:

- \$340 billion for K-12

- \$250 billion for higher education
- \$63 billion for corporate training

Roughly two-thirds of this money pays for teacher salaries and benefits. A growing number of universities and internet entrepreneurs are betting that the virtual campus will do away with costly annoyances like professors and classrooms. They view the entire education field as a huge, and relatively untapped market. Eduventures.com expects the e-learning revenues to grow 10 to 15 times faster than overall education-industry revenues in 2000. Such schools as Duke University's J.B. Fuqua School of Business and Cornell University's are now selling online courses (Duke's B-School Goes into Business and Dartmouth College's Amos Tuck School of Business).

When academic institutions grow to closely involved in commercial activities, "they appear less and less as charitable institutions seeking truths and serving students, and more and more as huge commercial operations that differ from corporations only because there are no shareholders and no dividends." - Derek Bok, former Harvard president

However, some schools are taking a harder look at distance learning. The University of Illinois believes that many other campuses have taken a "baldly commercial motivation" in their implementation of e-learning (Faculty Report at U. of Illinois Casts Skeptical Eye on Distance Education).

Finally, it is not just educational e-learning that is on the rise. The educational market as a whole is doing well due to the job market being hungry for employees with technical and business skills as reported in Business Week's Education Stocks Are Getting A's Again.

### Schools in Crisis?

Critics warn that our schools are in desperate need of repair. They always seem to be declaring some sort of crisis in the schools...but rarely bother to spell out what cataclysm is imminent. For example, Jason Roberts, CEO of Panmedia Corp. (the developer of Learn2.com) stated, "Classrooms kill most learning before it can happen" (Go to the Head of the Class!).

Roger Schank (The Shank Tank) also sees education in a crises and his silver bullet is having most, if not all learning performed via the computer.

However, in Scientific American's report, The False Crisis in Science Education, the authors argue that we ought to be more skeptical of claims of crisis and other educational experts agree with them. There are three reasons to doubt that the educational system is in crises:

- Past crises have led to lots of spending and legislation -- nearly 1,000 laws passed since the 1970s to force reforms on schools, but have made little change in what students learn.
- A close look at the statistical evidence reveals no sudden decline in the science and math knowledge of those leaving high school. In fact, scores on national tests have been inching upward for more than a decade.
- From 1980 to 1995 college enrollments swelled by 29 percent, despite a steady drop in the population of college-age kids.

Clifford Stoll's High Tech Heretic, Why Computers Don't Belong in the Classroom and Other Reflections (book excerpt) lays a convincing argument against computers in the classroom. He believes we need to spend more time on the human elements that provide social interactions, rather than wasting huge sums of money on technology. He says that for years we have been claiming that "information is power." Yet who has the most information in the average neighborhood? The librarians -- and they are famous for having no power at all.



Two more perspectives on computers in the classroom can be read at The Impact of Computers on Schools: Two Authors, Two Perspectives.

### Diploma Mills

Internet degrees can often be obtained quickly and easily. For example, Columbia State University offered a degree for \$2,000 and the summation of a \$25 textbook. The American State University gave a degree for \$1,890 and a 2,000-word thesis (Is the Internet Becoming a Bonanza for Diploma Mills? and Schools for Scandal).

"Students will be able to shop around, taking a course from any institution that offers a good one. Degree-granting institutions will have to accommodate this," said Roger Schank (The Virtual Classroom Vs. The Real One). He continues with, "They will resist at first, but eventually society will realize that anyone is entitled to the best courses, and barriers will fall. Quality education will be available to all. Students will learn what they want to learn rather than what some faculty committee decided was the best political compromise."

However, some leaders in the educational field fear that higher education will be splint into two sections (Mother Jones, January & February 2001. Digital Diplomas, p.36):

- Brick Universities for those that can afford them.
- Click Universities that offer glorified education for everyone else.

Professor Carole Fungaroli, a professor of English at Georgetown University and the author of Traditional Degrees for Nontraditional Students, says, "I see this as a class issue. Who is going to end up in these distance-learning courses? Single moms, working parents -- the very people who most

## Watered Down Degrees?

In addition, distance education professionals at universities don't recognize the legitimacy of online discourse. If an article has not appeared in print, it might as well not exist. To be considered sufficiently academic, an article on distance education must cite primarily, if not exclusively, print publications (Distance Educators Before the River Styx) -- interesting, e-learning about e-learning (such as this document) does not exist... Even using the word "available" in citations suggests that online presentation is an alternative and secondary mode of access. In the article, Stephen Downes wrote that there are, "major works about online learning do not cite a single online source."

## Distance Education does Multimedia



### Distance Education - Various movies



e-Learning is closely related to knowledge management. While knowledge management attempts to ensure that the survival of the organization is guaranteed by capturing the knowledge of its workers, e-learning attempts to ensure that the workers can quickly retrieve the knowledge that they require and to help them grow as individuals. Organizations and its workers are synergic in nature, for when one grows, the others grows. On the other hand, if one or the other fails to grow, then it most certainly means failure for both in today's competitive environment.

knowledge and skills to be found in most organizations. So much, that even the best knowledge management systems will fail to capture even half of it. And the knowledge and skills that they do go after and capture is a guessing game -- "will it help us to grow or will a new paradigm emerge that changes the knowledge structure?" Knowledge management is not just about capturing the knowledge within its ranks, its about capturing the correct knowledge and skills that will grow the organization during present and future paradigm shifts.

e-Learning faces similar consequences. A lot of e-learning is just conventional training delivered through electronic means. In fact, it could be taught through e-learning with very little consequences. But the type of learning that will help the individual grow the most, and in turn, the organization, is developmental in nature as discussed in Communities of Practice.

Although e-Learning is Not Knowledge Management, they are both going to grow into very similar concepts (E-Learning's Straight Shooter). A lot of what knowledge represents involves oral and dynamic experiences, so it never written down. This has dire consequences. For example, people leave organizations, and with them they take years of knowledge and skills. The day a person says she is leaving the organization, her job should immediately change from performing duties and tasks to capturing what she knows so that the organization and her successor knows what she is doing and how do do it. Even better yet, the organization should capture the skills and knowledge before a person even considers leaving. This would be the convergence of e-learning and knowledge management

### Notes -

[illegible]

## LESSON 5

### LEARNING PROCESS : A FEW GOOD LEARNING THEORIES

Friends,

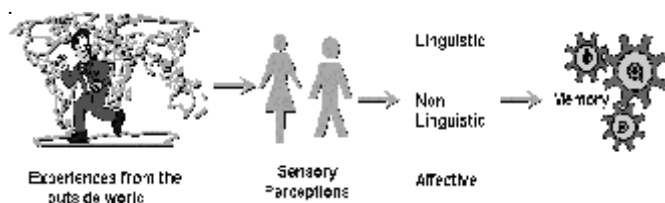
In previous lesson you have studied about learning styles. In this lesson is going to give you exposure in following topic.

Objective:

1. To understand about Learning process
2. To be able to execute training in successful training process
3. To know about various learning theories

### Introduction

Friends, In your previous semesters you have already been introduced to learning and learning theories in Organisation Behaviour. Few theories you have studied were cognitive theory, Classical conditioning, and social learning. Here are some interesting recent theories of learning.



### The Three Representational Modes (TRiM)

All information that is perceived via the senses passes through three processors that encode it as linguistic, nonlinguistic, or affective representations. This is how we learn.

**Note:** This work only goes in to the major part of TRiM. For a more detailed work, see Marzano (1998) (note that he does not use this acronym).

For example, if you go to a football game for the first time you encode information linguistically such as rules; retain mental images nonlinguistically, such as mental images of the players positioning themselves and then getting set (pose); and finally, you have various sensations which are encoded affectively, such as the excitement during a touchdown. Each representation can be thought of as a record that is encoded and then filed away.

### The Linguistic Mode

In the educational and training world, knowledge is most commonly presented linguistically (the study of language), so perhaps this mode receives the most attention from a learning standpoint (Chomsky, 1988). The linguistic mode includes verbal communication, reading, watching (e.g. learn the rule of chess through observation), etc.

Discussions and theories around the linguistic mode can get quite complex so I am keeping this fairly simple. Basically, the linguistic processor encodes our experiences as abstract propositions.

Propositions are thought to perform a number of other functions in addition to being the primary bearers of truth and falsity and the things expressed by collections of declarative

sentences in virtue of which all members of the collection “say the same thing”. Propositions represent the things we doubt and know. They are the bearers of modal properties, such as being necessary and possible. Some of them are the things that ought to be true.

These propositions are organized into two networks:

1. The declarative network contains information about specific events and the information generalized from them. These are the “what” of human knowledge.
2. The procedural network contains information about how to perform specific mental or physical processes. Often thought of as IF and THEN statements.

These two networks are the main channels for interacting with each other (communication). Communication is the main functions of language. Language symbols are used to represent things in the world. Indeed, we can even represent things that do not even exist. Communication does not imply a language, such as using hand signals. But a language does imply communication, that is, when we use language, we normally use it to communicate.

### A few linguistic definitions

The forming of language is done by “syntax” - putting sounds together to form words, and the words, in turn, form sentences. For example, English words require at least one vowel sound. However, in Czech there are words that are all consonants - no vowels. These sounds we put together are morphemes - the smallest units of language that have meaning. A word is morpheme, as is a prefix or suffix, also the “s” we add onto the end of a word is a morpheme.

Semantics is the study of meaning. With semantic knowledge we can often understand what people mean when they say things that are syntactically unusual or even incorrect.

In transformational grammar, the meaning of a sentence is its deep structure, and that meaning is transformed into the surface structure, which is the actual sentence itself. The deep structure of language is the meaning, and the surface structure is the means by which that meaning is expressed. The rules that translate the meaning into the deep structure are the phrase rules, and the rules that translate the deep structure into the surface structure are the transformational rules.

### The Nonlinguistic Mode

This includes mental pictures, smell, kinesthetic, tactile, auditory, and taste. At first, we might believe that they are entirely different structures, however these representations are quite similar to each other in that these nonlinguistic sensations function in a similar fashion in permanent memory (Richardson, 1983). That is, although we sense things differently, such as smell and touch, they are stored in mental representations that are quite similar. They also lose a lot of

their robustness once the experience is over and transferred to memory. For example, picturing the smell of a rose from memory is not as vivid as actually smelling a real rose.

Although we can realistically study linguistics, taste, hearing, etc.; mental images are another matter...how do you study a picture in someone's mind? Hence, there are several models for the nonlinguistic mode in the psychology world. However, there are a few things we know for certain:

- Mental images can be generated from two sources – the eyes (e.g., the after image of a light bulb) and from permanent memory (picturing a tiger that has squares instead of dots).
- Mental images are an essential aspect of nonlinguistic thought and play an important part in creativity.
- Due to the fragmented and constructed nature of mental images, they are not always accurate pictures of whole thought as compared to prepositionally-based linguistic information. However, they can have a powerful effect on our thoughts due to their intensive and vivid nature, e.g. the power of storytelling, the images we create in our mind when reading a powerful novel, metaphors, imagination, creativity, etc.

### The Affective Mode

This is our feeling, emotions, and mood (Stuss & Benson, 1983).

- Feeling is one's internal physiological state at any given point in time.
- Emotion is the coming together of feelings and thoughts (prepositionally-based linguistic data) that are associated with the feeling.
- Mood is the long-term emotion or the most representative emotion over a period of time.

The affective mode can be thought of as a continuum of feelings, emotions, and ultimately moods. The end points of the continuum are pleasure and pain and we normally strive to stay on the pleasure end of it.

The limbic system (pituitary gland, amygdala, thalamus, hippocampus, etc.) is the physiological system that ties the affective mode together. Since the limbic affects virtually every part of our brain, it also has a very powerful affect on learning.

Plutchik theorized that each basic emotion occupies a location on a circle. Blends of two basic emotions are called dyads. Blends involving adjacent emotions in the circle are first-order dyads, blends involving emotions that are separated by one other emotion are second-order dyads, and so on. For example, love is a first-order dyad resulting from the blending of adjacent basic emotions joy and acceptance, while guilt is a second-order dyad involving joy and fear, which are separated by acceptance. The further away two basic emotions are, the less likely they are to mix. And if two distant emotions mix, conflict is likely. Fear and surprise are adjacent and readily blend to give rise to alarm, but joy and fear are separated by acceptance and their fusion is imperfect & the conflict that results is the source of the emotion guilt.

## TRiM Learning Theories

So what learning activities do we use if we follow the TRiM model?

### Linguistic Mode

The linguistic mode provides the way to the most accurate method of learning, hence the reason for its impact upon the education and training world. There are a number of ways for increasing linguistic retention.

### Note Taking

Note taking has a positive impact on this mode since it involves the learners in the subject matter that is transpiring in class, it cause us to reflect on the subject and then record our thoughts, it helps us in interpreting the subject matter, and it provides an additional linguistic reinforcer. You can help them with the note taking by providing rough outlines and fill-in-the-blanks. But do not just rely on one method. For example, fill-in-the-blanks can also be concept or semantic maps (mapping) – you provide the lines and circles, while the learners fill them in.

Also, note that while mapping might seem “graphic”, we can learn linguistically from visual representations (e.g. learning rules and various strategies by watching a game, the procedures for picking up a load with a forklift). Use visual outlines to fit the subject, for example, give them an outline of a pyramid when discussing Maslow's hierarchy of needs.

Vary the methods to fit the subject – e.g. give them a rough draft, then a fill-in-the-blank, then a mapping outline.

Pascarella & Terenzini (1991, p.98) reported that the greater the learner's involvement or engagement (which includes note-taking) is in the learning process, the greater the knowledge acquisition.

### Charting

While the above mostly refers to the declarative network, the procedural network can be reinforced with such tools as flowcharts, diagrams, and maps. Providing tools that directly support procedures or processes helps in explaining the task. Again, you can give them the skeletons of the flowchart, and then having them flesh it together in order to use the learning transfer effectiveness of note taking.

### Cueing

Use “cueing” to provide the “abstract propositions”, which is then expounded on to turn it into a complete, long-term memory network. Cues can be thought of as a brief preview or skill that is to be presented. It can be as simple as saying, “I wonder what will happen if I push this button,” to using slides to cue. Most of us have heard of the 6-6 (or 7-7) rule of slides – no more than six lines and each line should have no more than six words. If you have ever sat through a presentation where the presenter read the slides, you know how ineffective and annoying that method is. This is partially because our reading speed does not match our listening speed; hence, they confuse instead of reinforcing each other. So, the better method is to use the slides as cues. The slide should give a brief outline to “cue” the students on what they are about to learn.

Also, do NOT cover each line and then show it when you are about to speak about it – this defeats the whole purpose of

cueing by taking away the skeleton outline that the learners need in order to build upon.

**Teachers will recognize this concept as a miniature scaffold (building upon a framework)**

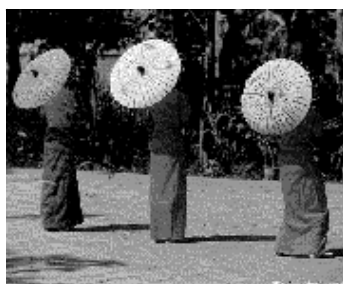


***Note that when we learn, we build upon what we previously know***

Marzano (1998, p.89) reported an effect size of 1.13 (which indicates that achievement can be raised by 37 percentile points) when cueing is used.

### **Models**

Models (as in people, drawings, and three-dimensional) will also help to reinforce both the declarative and procedural network by giving them a visual source.



The combined use of drawings, flowcharts, mappings, instructions, etc. can be combined to produce knowledge maps, rather than linear readings.

Marzano (1998, p.91) reported an effect size of 1.48 (which indicates that achievement can be raised by 43 percentile points) when graphic representations are used.

### **Active Learning**

Use activities (manipulatives) to engage the learners. While we can learn the basics of football, chess, leading, \_\_\_\_\_(name your task), etc.; we do not really understand it until we actually do it.

Placing the learners in small groups allows them to not only receive and express linguistic information, but to also manipulate it in various forms to gain a full understanding of it.

Cooperative learning is very effective due to give and take of various linguistic forms. It involves cooperation, in that learners work in small groups on an assigned project or problem under the guidance of the trainer who monitors the groups. On the other side is “collaborative learning” that is a more radical departure in that it involves learners working together in small

groups to develop their own answer through interaction and reaching consensus, not necessarily a known answer.

Also, the use of good questioning techniques, fishbowls, case studies, etc., gives the same benefits as groups.

Again, Pascarella & Terenzini (1991, page 98) reported that the greater the learner’s involvement or engagement is in the learning process, the greater the knowledge acquisition.

Marzano (1998, p.91) reported an effect size of 0.89 (which indicates that achievement can be raised by 31 percentile points) when manipulates (engaging the learners) are used.

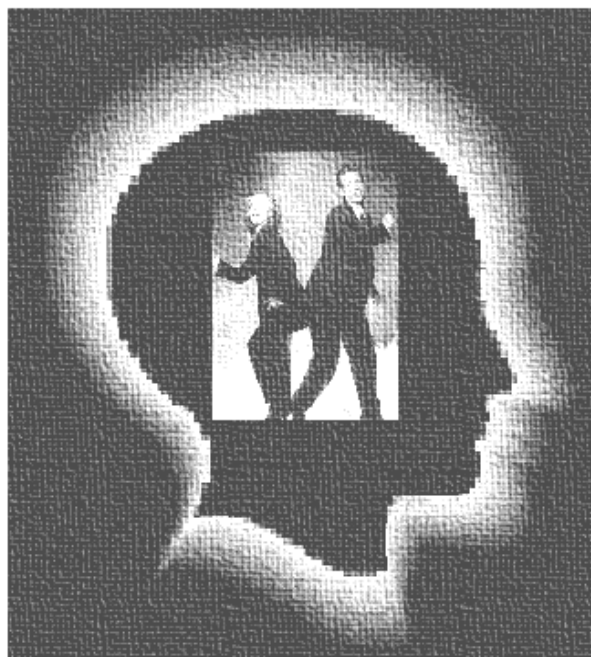
Marzano (1998, p.93) reported an effect size of 1.14 (which indicates that achievement can be raised by 37 percentile points) when experimental learning is used and an effect size of .54 (a percentile gain of 21 points) by using problem solving processes.

### **Nonlinguistic Mode**

While various linguistic methods are used in many classrooms, the nonlinguistic and affective modes are often omitted, as trainers do not realize their importance. Remember, we have three processors, when you deny or do not reinforce anyone one of them, you actually lengthen the learning process instead of shortening it.

### **Mental Images**

Use the power of mental images to increase nonlinguistic retention. Provide metaphors, reflection time and activities, short videos of powerful images, storytelling, etc. To truly understand a subject matter we need to be creative with it on order to adapt it to our workplace. It is through the power of mental images that we are able to change our mental representations of how things work to how we can make them work for us.



***Have the learners practice the task in their minds (visualization)***



Marzano (1998, p.102) reported an effect size of 1.13 (which indicates that achievement can be raised by 37 percentile points) by using techniques that enhance visual memory.

### The Other Senses

Also, do not forget the other senses. Although VAK would tell us to let the learners play with a koosh ball, I believe this has more to do with personal satisfaction than actual learning. What really needs to happen is to allow them to touch, move, listen and/or smell the subject matter if at all possible...sort of what Zen is built upon — become one with the subject matter).

### Affective Mode

Use the power of feelings and emotions to reinforce the affective mode.

### Nonlinguistic Mode

While various linguistic methods are used in many classrooms, the nonlinguistic and affective modes are often omitted, as trainers do not realize their importance. Remember, we have three processors, when you deny or do not reinforce anyone one of them, you actually lengthen the learning process instead of shortening it.

### Feedback and Praise

Provide them with explicit feedback on how well the goals or objectives were met. You want to keep the feedback positive as the goal is to reinforce their drive to perform better, not to beat them down in utter defeat.

Also, it is important not only to provide feedback that improves performance, but also give praise or positive reinforcement that is focused and accurate.

Marzano (1998, p.95) reported an effect size of 0.74 (which indicates that achievement can be raised by 27 percentile points) when praise is used. While providing feedback (p.108) on the type of strategy to use and how well the learner uses it had a effect size of 0.61 (percentile gain of 37 points).

### Learning Objectives

Most of us know that providing the learning objectives increases the chance for learning to occur, but if you then allow the learners to adapt the objectives to meet their personal goals, you further increase the chance as they now start to own the objectives.

Marzano (1998, p.94) reported an effect size of 0.97 (which indicates that achievement can be raised by 34 percentile points) when goal specification is used. When students have some control over the learning outcomes, there is an effect size of 1.21 (39 percentile points).

Note that providing a learning objective is similar to cues or scaffolding in that it provides a framework for the learners to build their skills and knowledge upon.

### Arousal

Use “arousal” (emotions) to increase learning. A certain amount of arousal can be a motivator toward change (with change being learning). But too much or too little will have a negative affect. You want a mid-level point of arousal to provide the motivation to change (learn). Too little arousal has an inert affect on the learner, while too much has a hyperactive affect. Each type of learning has its own optimal level of arousal. The more

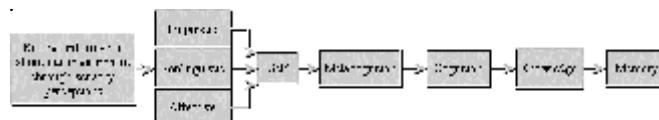
intellectually or cognitive a task is, then the more lower the level of arousal should be so that you do not “overload” the learners. On the opposite end of the scale are tasks that require less mental activities or tasks requiring endurance and persistence. They require higher levels of arousal to fully engage the learners in the learning process. Some learning should be fun, some should be dry, some learning requires an emotional charged classroom, and some require an emotionless state.

### Self, Metacognition, Cognition, Knowledge (SMCK)

While TRiM (Three Representational Modalities) describes the components that show how we take in information, SMCK (Marzano, describes the domains of knowledge. One of the first and best known knowledge domains is Blooms Taxonomy. However, since then we have learned quite a bit more about how we learn.

**Note:** Again, this work only goes in to the major part of TRiM. For a more detailed work and set of references on TRiM and SMCK, see Marzano (1998) (note that he does not use the two acronyms).

The chart below shows how TRiM fits in with SMCK



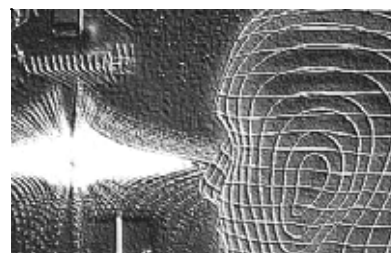
We receive information linguistically, nonlinguistically, and affectively through our senses. This information or “**presenting task**” then passes through four human thought operating systems:

Self-System: What value do we place upon the presenting task (we will do it or not)?

- Metacognitive System - Designs strategies for accomplishing the presenting task. How do we go about solving a complicated task?
- Cognitive System - Process the presenting task so that we may learn it.
- Knowledge Domain - The cognitive domain draws upon our knowledge domain for information that helps us to solve the presenting task.

### Self-System

The first domain the presenting task passes through is our self-system. If we consider the presenting task or information of high value, then we will put some effort into learning it. Otherwise, we will steer our efforts to other interests (Harter, 1980 & Markus & Ruvulo, 1990). This self-system is an interconnected network of beliefs that helps one makes sense of the world and decides what goals to pursue.



If the presenting goal or task is judged as important and doable, then the learner is motivated to engage in the presenting goal or task. However, if the task is presented as low-relevance or a low probability of success, then a negative effect is generated and motivation for task engagement is low.

For example, a student in a leadership class might be thinking about the upcoming weekend. The instructor might say something similar to, “it is important to pay attention to this part of the lesson, as the rest of the material is closely based upon it.” The learner can either pay attention to the instructor, or continue with her thought about the upcoming weekend. In either case the learner makes a choice through her self-system which then determines how her metacognitive system, cognitive system knowledge domain will be utilized.

Our self system guides us in what we need to learn

“Most of us, beginning in childhood, have an intrinsic ability to judge our own progress. This is a natural aspect of our ability to learn. But schools and workplaces subjugate that natural assessment to the judgment and ranking of teachers, supervisors, and other “experts,” whose appraisals can determine our tracking, promotion, opportunity, wealth, status, and ultimately even self-esteem. Business assessment systems such as Management by Objectives (MBO) tend to institutionalize a destructive process where bosses propagate the same measures and assessments of which they are also victims. Thus, assessment is not emotionally neutral territory. Inherent fear and resentment diminishes the quality of any assessment effort — particularly those involved with assessing organizational learning.” - Roth and Kleiner (1995):

### Metacognitive System

Next, the presenting task goes through the metacognitive system. This system helps us to plan, set time lines, allocate resources (Schank & Abelson, 1977). It also designs strategies for accomplishing goals once they have been set. Its main categories are:

- **Goal Specification:** Note that it does not decide to “engage” in a goal, that is the function of the self-system, its job is to help to determine when the goal has been completed.
- **Process Specification:** Identifies and activates the skills, tactics, and process used to accomplish a goal.
- **Process Monitoring:** Monitors the effectiveness of skills, tactics, and process used to accomplish a goal.
- **Disposition Monitoring :** Monitors how one approaches a task.

The megacognitive system is continually interacting with the cognitive system throughout the task.

Metacognition is another important aspect of children’s learning (see Brown, 1978; Flavell and Wellman, 1977). The importance of prior knowledge in determining performance, crucial to adults as well as children, includes knowledge about learning, knowledge of their own learning strengths and weaknesses, and the demands of the learning task at hand. Metacognition also includes self-regulation—the ability to orchestrate one’s learning; to plan, monitor success, and correct errors when

appropriate—all necessary for effective intentional learning (Bereiter and Scardamalia, 1989).

Metacognition also refers to the ability to reflect on one’s own performance. Whereas self-regulation may appear quite early, reflection appears to be late developing. If children lack insight to their own learning abilities, they can hardly be expected to plan or self-regulate efficiently. But metacognition does not emerge full-blown in late childhood in some “now you have it, now you don’t” manner. The evidence suggests that, like other forms of learning, metacognition develops gradually and is as dependent on knowledge as experience. It is difficult to engage in self-regulation and reflection in areas that one does not understand. However, on topics that children know, primitive forms of self-regulation and reflection appear early (Brown and DeLoache, 1978).

### Cognitive System

The presenting task next passes through the cognitive system, which processes the information that is essential to learning the task (Anderson, 1995). This process includes the effective execution of steps for solving problems. It also creates novel ideals for the construction of new concepts. It also:

- stores and retrieves knowledge into permanent memory.
- processes knowledge by manipulating so that it can be used for specific tasks
- inputs and outputs information by communicating with others
- uses knowledge to accomplish specific tasks

It accomplishes these processes by drawing upon the knowledge domain.

### Knowledge Domain

The knowledge domain consists of information, mental processes, and psychomotor processes.

### Information

Information can be thought of as the library within us that organizes how we store information. All information can be broken down as elements, as shown in the chart below.

### Elements In The Information Domain Hierarchy

(going from the lowest to the highest)

**Vocabulary Terms** - The meaning of a word at a very general level.

**Facts:** Information about specific persons, places, events, etc. These are very specific, such as the United States has fifty states.

**Time Sequences:** First one thing happened, then another thing happened. These are important events between two periods in time. For example, Columbus discovered America in 1492 and America declared itself a free nation in 1776.

**Cause/Effect Sequences (If/Then):** One event effects another. It can be simple, such as a blown-out tire caused the accident or complex as there were a number of events that led to the Civil War.

**Episodes:** Events that have a setting, participates, duration, and effects (e.g. Word War II).

**Generalizations:** Statements in which examples can be provided (e.g. love is one of the most powerful human emotions).

**Principles:** Generalizations that deal with relationships (e.g. the increase in lung cancer is directly proportional to the increase in smokers) .

**Concepts:** A general category which a number of principles, generalizations, time sequences, cause/effect sequences, episodes, and vocabulary terms fall (e.g. learning, democracy).

Notice that in the information domain, each element builds upon the other. For example, you must understand the vocabulary terms before you can understand a fact. At the top of the domain are Concepts, which are the most difficult elements for a learner to extrapolate.

## **Mental Processes**

The Mental Process domain are methods for accomplishing a task, such as the steps for picking up a load with a forklift or the steps for solving an algebra problem.

### **Mental Process Hierarchy**

(going from the lowest to the highest)

**Single Rule** - Does not have a list of steps. It consists of one IF/THEN statement. e.g., if it is the beginning of a new sentence, then capitalize the first letter.

**Algorithms** - Has very specific steps which leads to specific outcomes. e.g., performing a math calculation

**Tactics** - Normally, these do not consists of a set of steps that must be performed in specific order. e.g., reading a histogram (it has rules for reading, but it does not have to be done in order).

**Macro Process** - A process that has a diversity of possible outcomes and involves the execution of many interrelated subprocesses. e.g., writing a term paper, using laboratory equipment

### **Psychomotor Process**

The psychomotor domain are our physical skills and abilities

## **Other Supporting Theories**

### **Feedback**

B.F. Skinner theorized that learners need to make active responses, and to do so regularly. These responses need immediate feedback and differential follow-ups; depending upon whether or not they are correct. Without immediate feedback, especially when the response is wrong, invites the student to learn a wrong response. These wrong responses then have to be unlearned. Critical training time is wasted by having the students unlearn wrong responses instead of learning new behaviors. When designing the learning activities, consider how to apply immediate feedback. Small student to instructor ratios, programmed learning, and well designed learning environments are just a few of the ways to accomplish this.

### **Practice**

Guthrie's study breaks skills into acts. Acts are defined as complicated behavior patterns usually involving some goal accomplishment. Acts are made up of many individual movements. Movements are specific responses to specific stimuli. Acts are composed of muscular contractions that are

the response to specific stimulus and are not dependent upon practice. But the learning of an act does depend on practice. Learning an act requires practice so that the proper movement is associated with its own cues.

Once acquired, associations are permanent (Good & Brophy), but they may not appear in every performance due to weak associations. These weak associations cannot be retrieved because of strong interference from other associations. Short practice periods develop weak associations which learners are not able to magnify into stronger ones.

Adams theorized that if we practice long enough we develop a mental image. For example, professional players are often known to utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a football, because they can instantaneously tell by the feel of the act what the result will produce. Not having balanced practice periods prevents learners from becoming fully comfortable with the feel and use of the skill they are attempting to acquire. Learners must have enough time to develop a complete mental image of the sequence of correct responses. Often we see learners who could perform in the classroom and then not be able to perform when they return to work. When designing the learning activities be sure to include realistic practical exercise and enough time for these exercises!

### **Distributed Practice**

Hull discovered that when practice periods are spaced apart (distributed practice), performance is superior to what it is when practice periods are close together (massed practice). Also, during practice periods, the learners' performance will gradually improve until some asymptotic (maximal) level is reached. If the learners are allowed to rest, and then resume practice, their performance will tend to exceed their previous asymptotic level (reminiscence effect). Learners that are provided rest or some other form of diversion between practice periods will reach higher levels of performance than learners who practice straight through without rest or diversion.

### **Cognition**

Wertheimer contrasts rote memorization with problem solving based on the Gestalt principles. In the former, the learner has learned facts without understanding them. Such learning is rigid and can be applied without truly understanding them. Learning in accordance with the Gestalt principles, however, is based on understanding the underlying principles of the problem. This type of learning comes from within the individual and is not imposed on by someone else. It is easily generalizable and is remembered for a long time. When one performs upon memorized facts without understanding them, one often makes stupid mistakes.

Werthemimer told this story to illustrate the point: A school inspector was impressed by the children that he had observed, but wanted to ask one more question before departing. "How many hairs does a horse have?" he asked. Much to the amazement of both the inspector and the teacher, a nine year old boy answered "3,571,962." "How do you know that your answer is correct?" asked the inspector. "If you do not believe me," answered the boy, "count them yourself." The inspector broke

Reaching an understanding, according to Wertheimer, involves many aspects of the learners, such as emotions, attitudes, perceptions, and intellect. In gaining insight into the solution of a problem, a learner need not be logical. Rather, the learner should cognitively arrange and rearrange the components of the problem until a solution based on understanding is reached. Exactly how this is done will vary from learner to learner. In one experiment a piece of paper with the following 15 digits was handed to a group of subjects with the instruction that they study it for 15 seconds: The paper contained these digits: 1 4 9 16 25 36 49 64 81. After the subjects studied the digits, they were asked to reproduce the sequence of numbers. Most subjects were able to reproduce only a few of the numbers. After a week most of them remembered none of the digits. Another group of subjects were asked to look for a pattern among the digits. After studying them, some of the subjects were able to determine that the numbers are the squares of the digits from 1 to 9. These subjects were able to reproduce the series perfectly not only during the experiment, but weeks and months afterward.

Other pointers to consider for an effective learning environment:



4. Check the spelling
  5. Look up customers' names and addresses
  6. Insert columns into the document
  7. Print a letter
  8. Print envelopes
- The above eight steps are meaningless unless the learner can put all of them together to produce a whole document ready for mailing. Help the learner to see that facts and ideas are part of a larger concept. Learners who are able to recite facts without seeing their interrelationship is meaningless.
  - Induce ambiguity by introducing problems and then help clarify the ambiguity by suggesting strategies for solving the problems. This is based on Spence's (1966) work which has emphasized anxiety (arousal) as a drive to learn. Encouraging some anxiety in learners that is subsequently reduced by

- Learning proceeds most rapidly if the information is presented in small steps (chunks), the learners are given rapid feedback, and the learners are able to proceed at their own pace.
- Significant learning is acquired through doing. The best instructional material allows the learner to participate in the learning process. Learning is best acquired by doing and practicing the desired task. This does not mean to make it a mimic session. A mimic session is used to show how a task is accomplished. Talking them through the task step-by-step provides a good feel for performing the task. After talking them through once or twice, use real life examples that they can work through on their own. A skill needs to be worked repeatedly several times before it becomes rote or comfortable. Coach, but ensure they work through the problems on their own.

1. Discuss among the group about the learning process.
2. Discuss about Linguistic and Non Linguistic Sensories in Learning process.

[illegible]

## LESSON 6

### ADULT LEARNING

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Dear Friends,

After reading previous few lessons you are position to explain learning and training. After reading this lesson You will be able to :

1. Understand and Explain Adult Learning
2. Differentiate between adult learning and Child learning
3. Apply the principles of adult learning for practical training.

Learning is a life-long activity; we are never too old to learn, but we are frequently resistant to change. People often talk about problems as if they safe-guarded their position, e.g, “There are so many problems I cannot change” What they mean is do not remove the problem or I might have to change. Learning is change.

### Adult Learning

#### Pedagogy

All formal education institutions in modern society were initially established exclusively for the education of children and youth. At the time they were established there was only one model of assumptions about learners and learning - the pedagogical model (derived from the Greek words, *ped* meaning “child” and *agogus* meaning “leader” so “pedagogy” means literally “that art and science of teaching children.”

This model assigned full responsibility for making all decisions about what should be learned, how it should be learned, when it should be learned. Students were given the . role of being submission recipients of the directions and transmitted content of the teacher. It assumed that they were depended personalities, that they had little experience that could serve as a resource for learning that they become ready to learn what they were told they had to learn (to get promoted to the next level), that they were subject -centered in their orientation to learning and that they were motivated by extrinsic pressure or rewards, The backbone methodology of pedagogy is transmission techniques. As educational psychologists started researching educational phenomena around the turn of the century they were governed largely by these assumptions too. But they were not really looking at learning; they were investigating reactions to teaching and the more they found out how teachers could control learners reactions, the more controlling teaching became. Pedagogy was king.

When adult education began to be organized systematically in the first quarter of this century, pedagogy was the only model teachers of adults had to go on, with the result that until recently adults were taught as if they were children. I believe that this fact accounts for many of the troubles adult educators encountered, such as a high drop-out rate (where attendance was voluntary), low motivation, and poor performance. When training began emerging as a speciality within the general adult

education movement almost half a century later, this was the only model available to trainers, as well.

#### Then Came Andragogy

The first inkling that the pedagogical model may not be appropriate for adults .1ppeared in a book by Eduard C Lindeman, “The meaning of Adult Education,” in 1926. Based on his experience as both an adult learner and a teacher of adults, Lindeman proposed that adults were not just grown-up children, that they learned best when they were actively involved in learning what, how, and when they learned But It was not until 1950 . When we began getting empirical research on adults as learners, that the notion that there are differences between youth and adults as learners began being taken seriously.

A seminal study by Houle spawned a crescendo of studies (Tugh. Peter, Penland, and others) of how adults learn naturally. (e.g. when they are not being taught\). These studies document the fact that adults do indeed engage in more intentional learning outside of formal instruction than in organized programs and that they are in fact highly self-directed learners. Meantime, Knowledge about adult learners was coming from other disciplines. Clinical psychologists were providing information on the conditions and strategies that promoted behavioural change (which is what education should be about too). Develop-mental psychogists were illuminating the development stages than adults experience throughout the life span, which are a main stimulus of readiness to learn, sociologists were exposing the effects that many institutional policies and practices have inhibiting or facilitating learning (especially the inhibiting effects of rules and regulations, requirements, registration procedures, time schedules and the like) . Social psychologists were revealing the influence of forces in the larger environment, such as social attitudes and customs, reward systems and socio-economic and ethnic satisfaction

Early in the 1960 European adult educators were feeling a need for a label for the growing body of knowledge about adult learners that would enable them to talk about it in parallel with the pedagogical model and they coined the term andragogy: It is derived from the Greek word, *ander*, meaning “adult” (literally, “man, not boy”). It was initially used to mean “the art and science of helping adults learn”, but, as will be shown later, the term has taken on a broader meaning. It is a term that is now widely used around the world as an alternative to pedagogy.

#### What Do We Know About Adults As Learners

The research cited above leads to the following assumptions about adults as learners on which the andragogical model is based :

1. Adults have a need to know why they should learn something. Tough found that adults would spend considerable time and energy exploring what the benefits would be of their learning something and what costs would

be of their not learning it before they would be willing to invest time and energy in learning it. We therefore now have a dictum in adult education that one of the first tasks of the adult educator is to develop a "need to know" in the learning what we have to offer. At the minimum this case should be made through testimony from the experience of the trainer or a successful practitioner; at the maximum by providing real or simulated experience through which the learners experience the benefits of knowing and the costs of not knowing. It is seldom convincing for them to be told by someone (like the boss) that would be good for them.

To practice-e-what t-preach; let me try to make a case for your learning about "Treating Adult learners as Adults." Let me quote from an article I wrote for the Training and Development journal of September 1976, "Separating the Amateurs from the Pros in Training."

When I first got into training in 1935 the assumption was made that one didn't need to have qualifications much different from any other administrative role to do a good job as a training director. The role was defined essentially as that of managing the logistics of organizing and operating activities for various groupings of individuals. If one had any experience in planning schedules, building budgets, getting out promotional materials, hiring people, and filling out reports, he (there were no she's at that time) was qualified. We were all amateurs. But no longer. During the intervening years there has been a body of knowledge about how adults learn and a body of technology for facilitating that learning that is changing the role of trainer and requiring that he or she knows things few teachers know and probably none of his or her associates know. The trainer must know' andragogy - the art and science of helping adults learn- and how it differs from pedagogy - the art and science of teaching youth. . . . This is the mark of the pro.

2. Adults have a deep need to be self-directing. In fact the psychological definition of "adult" is one who has achieved a self-concept of being in charge of his or her own life, of being responsible for making his or her own decisions and living with the consequences. At the point at which we arrive at this self-concept we develop a deep psychological need to be seen and treated by others as being capable of taking responsibility for ourselves. This fact creates a special problem for us in adult education and training in that although adults may be completely self-directing in most aspects of their lives (as full-time workers, spouses, parents, and voting citizens) when they enter a program labeled "education" or "training" they had back to their conditioning in school and college and put on their hats of dependency, fold their arms, sit back, and say, "Teach me". The problem arises if we assume that this is really where they are coming from .and start teaching them as if they were children. We then put them into an inner conflict between this intellectual map-learner equals dependent-and their deeper psychological need to be self-directing. And the way most people deal with psychological conflict is to seek to withdraw from the situation causing it. To resolve this problem adult educators have been developing strategies for helping adults to 'make a

quick transition from seeking themselves as being dependent learners to becoming self-directed learners

3. Adults have greater volume and different quality of experience than youth.

Except in certain pathological circumstances, the longer we live the more experience and more varied experience we accumulate. The greater reservoir of experience affects learning in several ways:

Adults bring into a learning situation a background of experience that is itself a rich resource for many kinds of learning for themselves and for others. Hence, in adult education, the greater emphasis on the use of experiential learning- techniques such as discussion methods and problem-solving exercises, that tap into the accumulated knowledge and skills of the learners, or techniques, such as simulation exercises and field experiences, that provide learners with experiences from which they can learn by analyzing them.

Adults have a broader base of experience to which t. attach new ideas and skills and give them richer meaning. The more explicit these relationships (between the old and the new) are made through discussion and reflection - the deeper and more permanent the learning will be.

It is predictable that a group of adults, especially if there is an age mix, will have a wider range of differences in background, interests ability, and learning styles than is true of any group of youth. Adult groups are heterogeneous groups. Accordingly increasing emphasis is being placed in adult education on individualized learning and instruction, through contract learning self-paced multimedia modules, learning resource centres and other means.

But there is a potentially negative consequence of this fact of greater experience - it tends to cause people to develop habits of thought and biases, to make presuppositions to be less open to new ideas. (How often have you heard somebody react to a new proposal "It won't work. We tried it five years ago and' it didn't work"? ) some techniques have been developed to. try to counter this tendency -sensitivity training open-mindedness scales, creativity exercises, and others.

But the difference in quality of experience adults bring with them is also significant. Few youth have had the experience of being full-time workers, spouses, parents voting citizens, organizational leaders, and of performing other adults roles. Most adults have. Accordingly, adults have a different perspective on experience : it is their chief source of self identity. To youth, experience is something that happens to them. But adults define them selves in terms of their unique experience. An adult's experience is who he or she is. So if adults' experience is not respected and valued, is not made use of as resource for learning they experience this omission not as a rejection of their experience but as a rejection of them as persons. Evidence' indicates that this phenomenon is especially characteristic of under educated adults.

4. Adults become ready to learn when they experience in their life situation a need to know or be able to do in order to

perform more effectively and satisfyingly. The pedagogical model makes the opposite assumption- that people become ready to learn what they are told by some authority figure (teacher, trainer, boss), that they have to learn because it's good for them or the authority figure demands it. Adults experience "being told" as infringing on their adulthood-their need to be self-directing-and tend to react with resentment, defensiveness, and resistance. Adults learn best when they choose voluntarily to make a commitment to learn.

This principle is often difficult to apply in business and industry since rightly or wrongly employer-provided training tends to be perceived as employers required training. Indeed, often attendance is compulsory. When I sense that there are people in one of my activities who have been "sent", I do two things to try to reduce the resistance it induces. First, I make it public that I realize that there may be some people in the room who aren't there because they wait to be, and that I am sorry this because it tends to get in the way of learning. But, I explain, there is nothing I or you can do to change this at this time, so let's accept it as a given and see if we can't have a pleasant and profitable time together anyway. More importantly, I try to involve them in discovering for themselves-through participation in simulation exercises self-diagnosing their learning needs through competency-based rating scales, observing role models of superior performance-the value for their own lives of learning what the program has to offer.

One of the richest sources of readiness to learn is the transitions people make in moving from one developmental stage to another. As Havighurst points out, as we confront having to perform the development tasks of the next at age of development, we become ready to learn those tasks; and the peak of our desire to learn them he calls the "teachable moment." A typical sequence of developmental tasks in work life would be (1) to begin a process of career planning (2) to acquire the competencies required for a first job, (3) to get a first job (4) to become oriented to the first job (5) to master the competencies required to perform excellently in the first job, (6) to plan and prepare for a next-step-up job, and so through a cycle of career development. The final development task would be to prepare for retirement from a career. A main implication of this concept is the importance of timing our educational offerings to coincide with the worker's developmental tasks. Indeed, some of the great goods of training have occurred as a result of

5. Adults enter into a learning experience with a task-centered (or problem centered or life-centered) orientation to learning. Children and youth have been conditioned by their school experience to have a subject-centered orientation to learning; they see learning as a process of acquiring the subject matter necessary to pass tests. Once that is done, their mission is accomplished. This difference in orientation calls for different ways to organizing the content to be learned. In traditional education that content is organized into subject-matter courses-such as composition II, in which sentence and paragraph structures are memorized and composition III, in which rules of outlining syntax and the like are memorized.

In adult education the content is organized around life tasks: Composition II becomes

"Writing for pleasure and profit" and composition III becomes "Improving Your Professional Communications."

I have found that this principle is commonly violated in orientation programs, in which the sequence of topic might be (1) The History and Philosophy of XYZ Co., (2) The Market and Products of XYZ Co., (3) The personnel policies of XYZ., and so on, instead of starting with a census of problems and concerns, along with problems and concerns of the organization and - trainer. But I strongly urge trainers to review their programs and restructure the units around tasks, problems, or life situations. The participants will see the program as such more relevant to their lives and they will learn the content with the intention of using it.

6. Adults are motivated to learn by both extrinsic and intrinsic motivators. One of the most significant findings of the search into adult learning is that adults are motivated to learn. Allen Tough, the researcher who has to date accumulated the largest volume of information about how adults learn in normal life, has yet to find a subject in his research who had not engaged in at least one major learning-project (a minimum of +hours of intentional learning) in the preceding year, and the average number of learning projects was over seven. The problem (and our challenge) is that they may not be motivated to learn what we want to teach them: hence the importance of following through on the first assumption above- developing a need to know. The pedagogical model makes the assumption the children and youth are motivated primarily, if not exclusively, by extrinsic motivator-pressures from parents and teachers, competition for grades, diplomas, and the like. Adult learners respond to extrinsic motivators - wage raises, promotion, better working conditions, and the like- up to the point that they are reasonably well satisfied but the more potent and persistent motivators such intrinsic motivators as the need for self-esteem broadened responsibilities, power, achievement, and the like. The message here as I read it, is to appeal to both the desire for job advancement and life enrichment in promoting your programs.

### Duplications For Practice

The assumptions of pedagogy and andragogy have a number of implication for what we do as human resource developers. One basic implication is the importance of making a clear distinction between a content plan and a process design.

When planning an educational activity, the pedagogy thinks in terms of drafting a content plan, and he has to answer only four questions to come up with a plan. (1) What content needs to be covered? (the assumption being that they will only learn what he transmits, and therefore he has to cover it all in the classroom). So he draws up a long laundry list of content terms. (2) How can this content be organized into manageable units? (1- hour, 3 -hour, etc. units). So he arranges the units in a sequence according to chronology (history, literature, political science) or from simple to complex (science, math). (4) What would be the most effective methods? Choice will probably be

lecture and assign reading; if unit 2 involves skill performance, the method of choice will probably be demonstration by him and drill, drill, drill by them. By answering these four questions he ends up with a content-transmission plan.

The andragog, on the other hand, when she (get the gender change?) undertakes to plan an education activity, sees her task as being twofold: first, and primarily so design and manage a process for facilitating the acquisition of content by the learners; and only secondarily to serve as a content resource (she perceives that there are many content resources in addition to her own-peers, supervisors, specialists and a variety of materials in the learner's environment, and that an important part of her responsibility is to keep up to date as to what these resources are and to link learners with them).

So the andragog has to answer very different kinds of questions to come up with a process design. (Notice that it is not a matter of the pedagog's being concerned with content and the andragog's not being concerned with it; rather, the pedagog is concerned with transmitting the content and the andragog is concerned with facilitating the acquisition of the content by the learners

The questions raised by the andragog have to do with implementing the following elements of an andragogical process design:

**1. Climate setting:** A prerequisite for effective learning to take place is the establishment of a climate that is conducive to learning. Two broad aspects of climate must be considered: institutional climate and the climate of training situation.

Among the questions that might be raised regarding institutional climate are: Do the policy statements of the institution convey a deep commitment to the value of human resources development in the accomplishment of the mission of the institution? Does the budget of the institution provide adequate resources for the support of significant human resources development (HRD) efforts? Is the HRD staff involved in the decision-making process as regards personnel policies- and programs? Are adequate physical facilities for HRD activities provided? Does the reward system of the institution give credit for the achievement of personal growth on the part of individuals and their supervisor?

As regards setting a climate in a training situation, these are the conditions that I think characterize a climate that is conducive to learning, and the questions that might be asked in creating a process design to achieve those conditions:

**2. A climate of mutual respect:** I believe that people are more open to learning if they feel respected. If they feel that they are being talked down to, embarrassed, or otherwise denigrated, their energy is diverted from learning to dealing with these feelings. I do several things to try to bring such a climate into being: First, I provide name tents-5 by 8 cards with their names printed on them with bold felt pens-so that I (and they) can start calling on them by name. Then I put them into small groups of five or six persons (preferably sitting around tables) and ask them to share their "whats" (their work roles); their "whos" (one thing about themselves that will enable others to see them as unique human beings); any special knowledge, skill, or other resources.

they would be willing to share with 'others; and any questions, problems or concerns they are hoping will be dealt with in this program. I ask one person in each group to volunteer to give a high-point summary of this information about each group. I feel that this hour is the most important hour in the whole training event, since it starts the process of creating a climate that is conducive to learning.

**A climate of collaborativeness rather than competitiveness:** The above sharing exercise causes the participants to start seeing themselves as mutual helpers rather than rivals. For many kinds of learning, the richest resources are within their peers, hence the importance of making these resources available.

**A climate of supportiveness rather than judgementalness:** I think I largely set this climate by being supportive in my own behaviour but the opening exercise also tends to establish peer-support relationships.

**A climate of mutual trust:** In order to reduce the instinctive mistrust with which people typically react to authority figures, in presenting myself I emphasize who I am as a human being rather than as an expert, and I urge them to call me by my first name.

**A climate of fun:** Learning should be one of the most joyful things we do and so I do everything I can to make the experience enjoyable. I make a lot of use of spontaneous (not canned) humor.

A human climate. Learning is a human activity; training is for dogs and 1 horses. So I try to establish a climate in which people feel that they are being treated as human beings not objects. I try to care for their human needs. Comfortable chairs, frequently breaks, adequate ventilation and lighting, availability of coffee or cold drinks, and the like.

The first questions an andragog asks in constructing a process design, therefore, is "what procedures should I use with this particular group to bring these climate conditions into being?"

**2. Creating a mechanism for mutual planning.** A basic law of human nature is at work here: people tend to feel committed to a decision or activity to the extent that they have participated in making the decision or planning the activity. The reverse is even more true. People tend to feel uncommitted to the extent they feel that the decision or activity is being imposed on them without their having a chance to influence it.

In planning a total programme all the course workshops/seminars of an institution, the usual mechanism is a planning committee, council or task force.- To be effective, it is critical that it be representative of all the constituencies the program is designed to serve. For a particular program, such as a course pre-workshop, I prefer to use teams of participants, with each team having responsibility for planning one unit of the program.

The fullest participation in planning is achieved, however, through the use of learning contracts, in which case the learners develop their own learning plans.

The second question the andragog answers in developing a process model therefore, is "what procedures will be used to involve the learners in planning?"

**3. Diagnosing the participant's learning needs:** The HRD literature is rich in techniques. Trainers can use for assessing



training needs as perceived by individuals, organizations and communities. These needs are the appropriate source of goals for a total program. But in a particular training event involving particular individuals, a learning need is not a need unless so perceived by the learner. One of the highest arts in training is creating the conditions and providing the tools that will enable learners to become aware of their training needs and therefore translate them into learning needs. A new body of technology being developed for facilitating this process, with emphasis on such self-diagnostic as simulation exercise, assessment centers, competency-based rating scales, and videotape feedback.

So the third set of questions the andragog asks in constructing a process design is "What procedures will use in helping the participants diagnose their own learning needs

**4. Translating learning needs into objectives:** Having diagnosed their learning needs participants now face the task of 'translating them into learning objectives-positive statements of directions of growth. Some kinds of learning (such as machine operation) lend themselves to objectives stated as terminal behaviours that can be observed and measured. Others (such as decision-making ability) are so complex that they are better stated in terms of direction of improvement.

So the fourth question the androgen asks is "What procedures can I use for helping participants translate their learning needs into learning objectives?"

**5. Designing and managing a pattern of learning experience:** Having formulated the learning objectives, the next task of the trainer and the participants is to design a plan for achieving them. This plan will include identify the resources most relevant to each objective and the most effective strategies for utilizing these resources. Such a plan is likely to include a mix of total group experiences including input by the trainer, subgroup (learning teaching team) experience, and individual learning projects. A key criterion for assessing the excellence of such a design is, how deeply involved is the participants in the mutual process of designing and managing a pattern of learning experiences?

So the fifth question the androgen asks is "What procedures can I use for involving the learners with me in designing and managing a pattern of learning experiences?"

**6. Evaluating the extent to which the objectives have been achieved:** In many situations institutional policies require some sort of "objective" (Quantitative) measure of learning outcomes. But the recent trend in evaluation research has been to place increasing emphasis on "subjective" (Qualitative) evaluation- finding out what is really happening inside the participants and how differently they are performing in life. In any case, the andragogical model requires that the learners be actively involved in process of evaluating their learning outcomes.

The sixth question, therefore, that the andragog asks is "What procedures can I use to involve the learners responsibly in evaluating the accomplishment of the learning objectives?"

By answering these six sets of questions the learning facilitator emerges with process design- a set of procedures for facilitating the acquisition of content by learners.

## But Not Andragogy versus Pedagogy

When I first began conceptualizing the andragogical model I perceived it as being, antithetical to the pedagogical model. In fact, in the book in which I first presented the andragogical model in detail, *The Modern Practice of Adult Education*, I used the subtitle "Andragogy versus Pedagogy." During the next few years I began getting reports from elementary and secondary school teachers saying that they had been experimenting with applying the andragogical model in their practice and finding that children and youth also learn better in many situations when they are involved in sharing responsibility. And I got reports from teachers of adults that they had found situations in which they had to use the pedagogical model. So when I revised the book in 1980 I used the subtitle, "From Pedagogy to Andragogy".

As I see it now, whereas for 13 centuries we had only one model of assumptions and strategies regarding education-the pedagogical model. Now we have two models. So we have the responsibility now checking out which set of assumptions is realistic in which situation and using the strategies of whichever model is appropriate for that situation. In general the pedagogical assumptions are likely to be realistic in those situations in which the content is totally strange to learners and in which precise psychomotor skills are involved as in machine operation. But even in these situations, elements of the andragogical model such as climate setting, might enhance the learning. And I use elements of the pedagogical model such as reinforcement, in my andragogical practice. So my stance now is not either-or, but both-as appropriate to the situation.

## Preparing for the Future

In the third quarter of this century we accumulated more research based knowledge about adults as learners than was known in all of previous history. In the past decade the body of knowledge had at least doubled I am confident that the present body of knowledge will at least double in the next decade. My colleagues in the biological sciences assure me that their disciplines will contribute some of the major breakthroughs, especially as regards the physiological, chemical and neurological (such as right-brain, left-brain) processes involved in learning. The technology of making resources for learning available is already in a state of revolution, especially with the development of computer and communications satellites. My own conviction is that by the end of this century most educational services will be delivered electronically to learn at their convenience in terms of time place and pace.

What a challenge we in human resources development face if we are to avoid the obsolescence of our work force. I can foresee this challenge requiring that we reconceptualize a corporation (or any social system) as a system of learning resources as well as production and service delivering system and redefine the role of HRD away from that of Managing the logistics of conducting training activities to that of managing a system of learning resources. We would then ask a very different set of questions from those we have traditionally asked in training and development. The first question would be, "What are all of the resources available in this system for the growth and develop-

ment of people?” We might come up with a chart that looks something like this:

### Managing a system of learning

Resources	Strategies for Enhancing their Utilization
Scheduled training activities (course, workshops, seminars)	Revise time schedule so as to make more accessible to employees Revise programs so as to make them more congruent with adult learning principles. Train presenters in adult education methods.
Line supervisor and managers (the most ubiquitous resources for day-in-and-day-out employee development)	Building responsibility for people development into their job descriptions. Build into supervisory and management training programs, sessions on principles of adult learning and skills in facilitating learning. Give credit in personnel appraisals for performance as people developers.
Libraries, media centres (printed materials, audiovisual and multimedia programs)	Arrange to be open during hours accessible to all employees Make information about resources available to all employees. Provide help in using them.
Individual employees, specialists make it and technicians (many people in organizations have knowledge and skills others would like to learn)	Store this information in a data bank and available to employees through an educational brokering center.
Community resources (courses, workshops, specialists, etc., in colleges and universities community organizations, professional associations commercial providers etc.)	Include in the above data bank.

If nothing more is done than has been described so far the quality of human resource development in a corporation would probably be improved. But learning would still be episodic, fragmented and disconnected. It can be made more systematic, incremental, and continuous through the use of learning contracts or development plans.

A contract simply specifies what an individual's objectives are for a given learning project, what resources will be used in fulfilling the objectives what evidence will be collected to demonstrate that the objectives have been fulfilled and how that evidence will be validated. In one corporation the contract is negotiated

between the individual and the HRD staff.; in another it is between the individual and his or her supervisor; in another it is between the individual and a team consisting of the supervisor, a representative of the HRD department, and a peer. Progress toward fulfilling the contract is monitored, and the evidence is validated by these same parties. Several corporations with a management-by-objectives program have incorporated the contracting process into the MBO process.

Several things happen when a systems approach is adopted. A heavier responsibility is placed on the line supervisors and managers for the development of their personnel than traditionally has been the case. This integrates the HRD function more closely with the operating function. and line supervisors and managers derive added self-esteem and job satisfaction from their developmental role once they have become adept at it.

Employees find that their personal and professional developments are more integrated with their work life. A much wider range of resources for learning are available to them and employees are involved directly involved in planning and achieving their own development-adding to their self-esteem and satisfaction.

For HRD professionals, the systems approach represents a major shift in role. They are less concerned with planning, scheduling and conducting instructional activities, and are more concerned with managing a system. One of their major responsibilities is to serve as consultants to the line-a closer and more functional relationship, and one more centre to the operation of the business.

How much more fulfilling a role!

## Learning Styles, Elements And Profiles

### Learning Styles

Learning styles can be defined as the way in which a participant processes information be taught and have a profound effect on the way in which a participant will respond to a trainer's teaching methods. The following types of learning styles have been identified.

- **Auditory** - The auditory learner best processes new information when it is heard. The auditory learner does well with listening to instructor lectures or pre-recorded lectures on tape.
- **Visual** - This type of learner processes information most effectively when it is presented by reading, demonstrations, illustrations, slides, transparencies and posters.
- **Kinesthetic** - Kinesthetic learners learn best by touching or manipulating new information as in hands-on exercises or lab situations where they perform tasks appropriate to the material being presented. The kinesthetic learner does best when working along with a demonstration or by taking notes while listening to a lecture.
- **Environmental** - The environmental learner finds it difficult to learn unless the learning environment is one in which they are physically comfortable and they can concentrate. Distractions such as temperature, lighting and noise level must be suited to their individual tastes. Keeping a check on

light, noise and temperature levels in the classroom will lessen obstacles to learning for the environmental learner. Some participants with learning differences that interfere with concentration and material retention can be thought to be environmental learners.

Any class you teach will have a combination of participants with different learning styles. You may notice that some learners use a combination of learning styles as opposed to one predominate learning style. For instructor-led training, be sure to you mix your material delivery to accommodate all learning styles by alternating lecture with visuals and hands-on activities. Keep a check on environmental factors such as light, noise and temperature levels.

It is common fact that any given class of 10 participants has 1 or 2 participants who will have difficulty learning your material, 1 or 2 participants who will have an extremely easy time learning your material, and 6 to 8 participants who will fall somewhere in the middle of the two extremes.

Also remember that most people learn 20% of what they hear, 30% of what they see and 80% of what they do. Teach your material in a way that it can be best understood and digested by all participants and vary your delivery methods between lecture, visuals and hands-on exercises.

### Exercise - Understanding Learning Styles

Refer to the instructions shown in the Appendix for Exercise 2. Complete the questionnaire shown in Exercise 2 and then refer to the Summary section to gain insight to the types of learning styles. A few of you will be asked to share your findings with the rest of the class.

### Solution - Understanding Learning Styles

Answer each question below. When finished, refer to the Summary section at the end of the questionnaire. This is a short exercise aimed at making you aware of some of the characteristics of the different types of learners and by no means is intended to be a comprehensive analysis of your personal learning style.

1. I prefer classes in which the instructor
  - a. uses films and videos
  - b. lectures and answers questions
  - c. let's us participate in group activities
  - d. opens the windows so I can have fresh air
2. To learn more about the operation of printers I would prefer to
  - a. read the user guides
  - b. listen to someone tell me how they work
  - c. do some hand-on work with printers
  - d. take a computer-based tutorial in a private, quiet setting
3. To remember things best, I
  - a. create a mental picture
  - b. repeat what I'm trying to remember several times out loud to myself
  - c. write it down

4. Assembling a bicycle from a diagram and instructions would be
  - a. a piece of cake for me
  - b. absolutely impossible unless I had someone to read the directions for me
  - c. OK if I had a chance to experiment with the parts and the tools first
  - d. a complete disaster unless I went to a quiet room with lots of light, the right tools and no interruptions
5. I prefer training in which I
  - a. watch the instructor demonstrate new concepts
  - b. listen to the instructor lecture and give examples
  - c. handle equipment or work with models
  - d. am not too cold or hot, and the chairs are comfortable
6. To understand and remember how a machine works, I would
  - a. read a diagram or illustration
  - b. listen to an audio tape on the machine's operation
  - c. write notes on how it works
  - d. need to have some time in private and without interruptions to study the machine's operations
7. I prefer to learn new ideas by
  - a. reading and writing notes
  - b. speaking and listening
  - c. drawing or working with my hands
  - d. learning at home on my sun porch in my sweats
8. If someone is giving me directions, I prefer that they
  - a. draw me a map or write down the directions for me
  - b. simply tell me how to find the place I am looking for
  - c. write down the directions myself while the person gives them to me

### Summary - Understanding Learning Styles

If your responses to the above questions were mostly:

a's - you predominantly depend on visual learning style

b's - you predominantly depend on auditory learning style

c's - you predominantly depend on kinesthetic learning style

d's - you predominantly depend on environmental learning style

### Learning Elements

Most learners, especially the adult learner, tend to do well when they are actively involved in their own learning. Since most adults come to a training event with well established values, beliefs and opinions, they generally consider themselves to be strong participants in their own learning process. The effective trainer is wise to recognize this.

Adults also prefer to be given problem solving opportunities as opposed to being given solutions to problems. The instructor who simply states solutions without providing a problem solving environment will be less effective with adult learners.

Adults prefer training that is personalized and addresses specific needs. Job-relevant information where the adult is able to see a correlation with material presented to their own job responsibilities is most desired by adults.

## **Adults as Learners**

### **(Adult Learning Styles: A Foundation For Staff Development)**

Stephen Lieb, Senior Technical Writer and Planner for the Arizona Department of Health Services and Part-time Instructor at South Mountain Community College has identified a profile and some common attributes for the adult learner. Any trainer who understands these attributes will be more effective when training the adult learner. It's a simple fact that adults do learn differently than teens and children, but any teacher would serve those being taught well by applying these concepts to any audience.

The field of adult learning was pioneered by Malcom Knowles. He identified the following characteristics of adult learners:

**“Adults are autonomous and self-directed:** They need to be free to direct themselves. Their teachers must actively involve adult participants in the learning process and serve as facilitators for them. Specifically, they must get participants’ perspective about what topics to cover and let them work on projects that reflect their interests. They should allow the participants to assume responsibility for presentations and group leadership. They have to be sure to act as facilitators, guiding participants to their own knowledge rather than supplying them with facts. Finally, they must show participants how the class will help them to reach their goals (e.g., via a personal goals sheet).

**Adults have accumulated a foundation of life experiences and knowledge that may include work-related activities, family responsibilities, and previous education:** They need to connect learning to this knowledge/experience base. To help them do so, they should draw out participants’ experience and knowledge which is relevant to the topic. They must relate theories and concepts to the participants and recognize the value of experience in learning.

**Adults are goal-oriented:** Upon enrolling in a course, they usually know what goal they want to attain. They, therefore, appreciate an education program that is organized and has clearly-defined elements. Instructors must show participants how this class will help them attain their goals. This classification of goals and course objectives must be done early in the course.

**Adults are relevancy-oriented:** They must see a reason for learning something. Learning has to be applicable to their work or other responsibilities to be of value to them. Therefore, instructors must identify objectives for adult participants before the course begins. This means, also, that theories and concepts must be related to a setting familiar to participants. This need can be fulfilled by letting participants choose projects that reflect their own interests.

**Adults are practical, focusing on the aspects of a lesson most useful to them in their work:** They may not be interested in knowledge for its own sake. Instructors must tell participants explicitly how the lesson will be useful to them on the job.

### **As do all learners, adults need to be shown respect:**

Instructors must acknowledge the wealth of experiences that adult participants bring to the classroom. These adults should be treated as equals in experience and knowledge and allowed to voice their opinions freely in class.

**Adults are people with years of experience and a wealth of information:** Focus on the strengths learners bring to the classroom, not just gaps in their knowledge. Provide opportunities for dialogue within the group. Tap their experience as a major source of enrichment to the class. Remember that you, the teacher, do not need to have all the answers, as long as you know where to go or who to call to get the answers. Students can be resources to you and to each other.

### **Adults have established values, beliefs and opinions:**

Demonstrate respect for differing beliefs, religions, value systems and lifestyles. Let your learners know that they are entitled to their values, beliefs and opinions, but that everyone in the room may not share their beliefs. Allow debate and challenge of ideas.

### **Adults are people whose style and pace of learning has probably changed:**

Use a variety of teaching strategies such as small group problem solving and discussion. Use auditory, visual, tactile and participatory teaching methods. Reaction time and speed of learning may slow, but the ability to learn is not impaired by age. Most adults prefer teaching methods other than lecture.

**Adults relate new knowledge and information to previously learned information and experiences:** Assess the specific learning needs of your audience before your class or at the beginning of the class. Present single concepts and focus on application of concepts to relevant practical situations. Summarize frequently to increase retention and recall. Material outside of the context of participants’ experiences and knowledge becomes meaningless.

**Adults are people with bodies influenced by gravity:** Plan frequent breaks, even if they are 2-minute “stretch” breaks. During a lecture, a short break every 45-60 minutes is sufficient. In more interactive teaching situations breaks can be spaced 60-90 minutes apart.

**Adult have pride:** Support the students as individuals. Self-esteem and ego are at risk in a classroom environment that is not perceived as safe or supportive. People will not ask questions or participate in learning if they are afraid of being put down or ridiculed. Allow people to admit confusion, ignorance, fears, biases and different opinions. Acknowledge or thank students for their responses and questions. Treat all questions and comments with respect. Avoid saying “I just covered that” when someone asks a repetitive question. Remember, the only foolish question is the unasked question.

**Adults have a deep need to be self-directing:** Engage the students in a process of mutual inquiry. Avoid merely transmitting knowledge to expecting total agreement. Don’t “spoon-feed” the participants.

### **Individual differences among people increase with age:**

Take into account differences in style, time, types and pace of

learning. Use auditory, visual, tactile and participatory teaching methods.

**Adults tend to have a problem-centered orientation to**

**learning:** Emphasize how learning can be applied in a practical setting. Use case studies, problem solving groups, and participatory activities to enhance learning. Adults generally want to immediately apply new information or skills to current problems or situations.”

**Some Contemporary Principles of Adult Learning**

The process of action learning, founded by Reginald Revans about 50 years ago in England, is based on contemporary views of adult learning. Action learning asserts that adults learn best when:

1. Working to address a current, real-world problem
2. They are highly vested in solving the current problem
3. They actually apply new materials and information and
4. Exchange ongoing feedback around their experiences

In addition, adults often learn best from experience, rather than from extensive note taking and memorization

**Learning Strategies**

Learning strategies refer to methods that students use to learn. This ranges from techniques for improved memory to better studying or test-taking strategies. For example, the method of loci is a classic memory improvement technique; it involves making associations between facts to be remembered and particular locations. In order to remember something, you simply visualize places and the associated facts.

Some learning strategies involve changes to the design of instruction. For example, the use of questions before, during or after instruction has been shown to increase the degree of learning. Methods that attempt to increase the degree of learning that occurs have been called “mathemagenic”.

A typical study skill program is SQ3R which suggests 5 steps:

- (1) survey the material to be learned, (2) develop questions about the material, (3) read the material, (4) recall the key ideas, and (5) review the material.

Research on metacognition may be relevant to the study of learning strategies in so far as they are both concerned with control processes. A number of learning theories emphasize the importance of learning strategies including: double loop learning (Argyris), conversation theory (Pask), and lateral thinking (DeBono). Weinstein (1991) discusses learning strategies in the context of social interaction, an important aspect of Situated Learning Theory.

**Activities and Assignments**

1. What are various types of learning.

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2. What is adult learning.

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3. How is adult learning different than other types of learning.

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4. How does adult learn.

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5. How does knowledge of adult learning help a trainer.

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## LESSON 7

### PRINCIPLES OF EFFECTIVE TRAINING AND LEARNING

Dear Friends,

Now you already know about training & development as well as its significance.

In this lesson we will go through some principles of training and learning.

**You will also be able to correlate how it contributes in making training success.**

As defined by a famous author training is learning process. Hence to make training effective and successful one must understand about learning and training principles. In previous chapters you have studied about learning, learning styles & strategies, types of learning, learning process.

### Learning and Teaching

The training programme will not be effective if the trainer is poorly qualified or ill-equipped with the technical aspects of the content or if he lacks aptitude for teaching and teaching skills. Training comprises of mainly learning and teaching. Training principles can be studied through the principles of learning and principles of teaching.

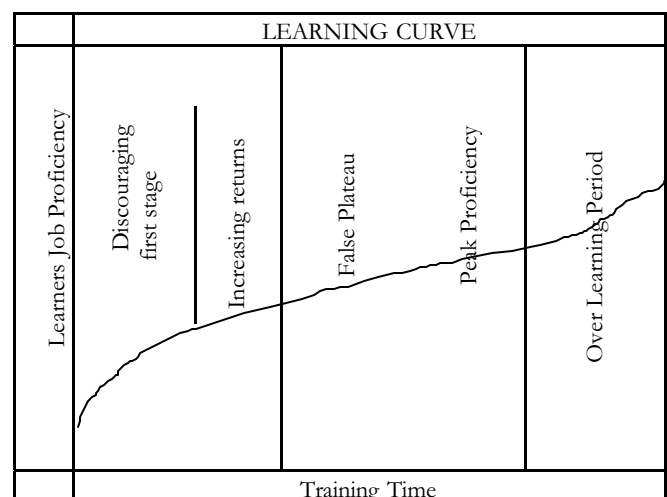
### Learning Principles

1. Learning requires purposeful activity.
2. Learning is a process of the whole individual.
3. Learning is problem solving. Challenging problems stimulate learning.
4. Learning is based on past experiences.
5. Learning results from stimulation through the senses.
6. The more vivid and intense the impressions, the greater the chance of remembering.
7. Interest is essential to effective learning. Learning requires motivation.
8. Friendly competition stimulates learning.
9. Recognition and credit provide strong incentives for learning.
10. People learn more when they are held to account and made to feel responsible for learning.
11. Knowing 'why' makes learning more effective.
12. Knowledge of the standards required makes learning more effective.
13. Things should be taught the way they are to be used.
14. Teaching should be logical or orderly.
15. The most effective learning results when initial learning is followed immediately by application.
16. Early successes increase chances for effective learning.
17. Repetition, accompanied by constant effort toward improvement, makes for effective development of skill.

18. Feelings of both teacher and student affect learning.
19. Students learn many things in addition to skills and information (attitudes, interests, appreciations, etc.).
20. Continuous evaluation is essential to effective learning.

### Learning Patterns

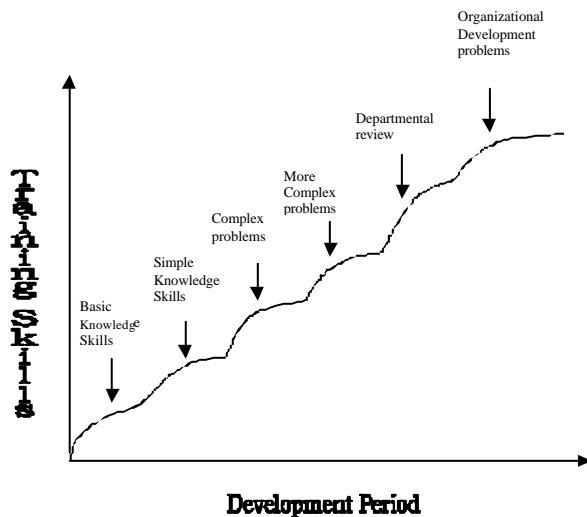
Trainers need some understanding of the patterns in which new skills are learned. The employee is likely to find himself unusually clumsy, during the early stages of learning. This can be called discouraging stage. After the employee adjusts himself to the environment, he learns at a fast rate. A 'plateau' develops after the lapse of more training time due to a loss of motivation and lack of break in training schedule and time. The trainee reaches the next stage when he is motivated by the trainer and/or some break or pause in time and training process is given. The trainee at this stage learns at a fast rate. Special repetition of the course leads the trainee to reach the stage of over-learning as shown in below diagram.



Thus, it is clear that, learning rarely takes place at a constant rate. It varies according to the difficulty of the task, ability of the individual and physical factors. However, the rate of learning varies from one individual to another.

### Characteristics of Learning Process

1. Learning is a continuous process.
2. People learn through their actual personal experience, simulated experience and (from others experience (by using the knowledge which represents experience of others).
3. People learn step by step, from known to unknown and simple to complex as shown in following figure.



4. There is a need for repetition in teaching to improve skill and to learn perfectly.
5. Practice makes a man perfect. Hence, opportunity should be created to use, transfer the skills, knowledge and abilities acquired through learning. It gives satisfaction to the learner.
6. Conflicts in learning: Conflict in learning arises when the trainer knows or has developed some habits which are incorrect in terms of the method being learned.

### The Climate for Learning

Conducive climate is highly essential for serious participation, attentiveness, creation of interest, and sincerity of learner. Climate for learning consists of working conditions, relationship with other trainees, and trainers/instructors, conditions for relaxation, freedom, scope for social interaction, and formation of social groups. Conducive climate for learning should be provided in view of its significance in training. It consists of ideal physical and psychological environment. Ideal physical environment, consisting of suitable location with space, adequate accommodation, audio-visual aids, air conditioning, ventilation, lighting and other facilities like canteen, facilities for relaxation, should be provided. Ideal psychological environment, consisting business atmosphere, friendly environment, frequent communication, follow-up regarding performance and progress, enthusiastic, helpful and broad minded trainer etc., should be created and provided. Provision for measuring learner's progress through tests should also be made in order to regulate, correct and follow-up the training programmes.

### Learning Problems

The instructor should have the knowledge of the possible learning problems. He should identify the problems of trainees and take steps to solve them. The possible learning problems are:

- a. Lack of knowledge, skill, aptitude and favourable attitude.
- b. Knowledge and skill not being adopted.
- c. Existence of anti-learning factors: Most operational situations contain. A number of elements which will restrict

the development of learning regardless the methods employed.

- d. Psychological problems like fear and shy,
- e. Inability to transfer of learning to operation situation.
- f. Heavy dependence on repetition, demonstration and practice.
- g. Unwilling to change.
- h. Lack of interest about the knowledge of results.
- i. Absence of self-motivation.
- j. Negative attitude about involvement and participation.

### Teaching Principles

In addition to learning principles, teaching principles should also be taken care for effective training:

- a. The employee must be taught to practice only the correct method of work.
- b. Job analysis and motion study techniques should be used.
- c. Job training under actual working conditions should be preferred to class room training.
- d. Emphasis should be given more on accuracy than speed.
- e. Teaching should be at different time-intervals.
- f. It should be recognised that it is easier to train young workers than old workers due to their decreasing adaptability with the increase in age. Exhibit 8.6 shows principles of teaching basic skills and Exhibit 8.7 shows principles of teaching basic Physical Movements.

### Principles of Teaching Basic Skills

1. The worker must be taught and must practice only correct methods of work. This is the basic principle.
2. First establish the best way of doing a job - use job analysis and/or time and motion study techniques.
3. Follow the principles of best movements in work.
4. Job training under actual working conditions is superior to classroom and formal training.
5. Emphasise accuracy first - speed second.
6. Training is more efficient when distributed over short periods of time.
7. Remember the practice aims - efficiency increases with repetition of the task. However, you should expect learning plateaus when no apparent progress is made, followed by additional spurts of improvement.  
Therefore, you should carry out distributed practice over longer period than is commonly believed (otherwise workers settle down at production speeds lower than their real abilities).
8. When a plateau is reached, use incentives and other devices to get more improvement.
9. Age and learning: You can train older workers as well as younger ones.

Learning ability does not deteriorate rapidly with age - instead, older workers have learned more bad habits and therefore need retaining.

## Principles of Teaching Basic Physical Movements

1. Successive movements should be so related that one movement passes easily into that which follows, each ending in a position favourable for the beginning of the next movement.
2. The order of movements should be so arranged that little direct attention is needed for passage from one to another. In other words, they should be so arranged that the mind can attend to the final aim or end of the operation instead of being distracted by the work of initiating successively the several movements which are involved in a task.
3. The sequence of movements is to be so framed that an easy rhythm can be established in the automatic performance of the various elements of operation.
4. From the principles which have been stated follows the corollary that a continuous movement is preferable to angular movements involving sudden changes in the direction of movement.
5. The number of movements should be reduced as far as possible within the scope of limitations suggested above. In general, reducing the number of movements will facilitate a rhythmic method of working and automatisation as a means of reducing the volitional direction of work.
6. Simultaneous use of both hands should be encouraged.
7. When a forcible stroke is required, the direction of movement and placement of material should be so arranged that, as far as practicable, the stroke is delivered when it has reached its greatest momentum.

## Principles of Training

Providing training in the knowledge of different skills is a complex process. A number of principles have been evolved which can be followed as guidelines by the trainees. Some of them are as follows:

1. **Motivation:** As the effectiveness of an employee depends on how well he is motivated by management, the effectiveness of learning also depends on motivation. In other words, the trainee will acquire a new skill or knowledge thoroughly and quickly if he or she is highly motivated. Thus, the training must be related to the desires of the trainee such as more wages or better job, recognition, status, promotion etc. The trainer should find out the proper ways to motivate experienced employees who are already enjoying better facilities in case of re-training.
2. **Progress Information:** It has been found by various research studies that there is a relation between learning rapidly and effectively and providing right information specifically, and as such the trainer should not give excessive information or information that can be misinterpreted. The trainee also wants to learn a new skill without much difficulty and without handing too much or receiving excessive information or wrong type of progressive information. So, the trainer has to provide only the required amount of progressive information specifically to the trainee.
3. **Reinforcement:** The effectiveness of the trainee in learning new skills or acquiring new knowledge should be reinforced

by means of rewards and punishments. Examples of positive reinforcement are promotions, rise in pay, praise etc. Punishments are also called negative reinforcements. Management should take care to award the successful trainees.

The management can punish the trainees whose behaviour is undesirable. But the consequences of such punishments have their long-run ill effect on the trainer as well as on the management. Hence, the management should take much care in case of negative reinforcements.

4. **Practice:** A trainee should actively participate in the training programmes in order to make the learning programme an effective one. Continuous and long practice is highly essential for effective learning. Jobs are broken down into elements from which the fundamental physical, sensory and mental skills are extracted. Training exercises should be provided for each skill.
5. **Full Vs. Part:** It is not clear whether it is best to teach the complete job at a stretch or dividing the job into parts and teaching each part at a time. If the job is complex and requires a little too long to learn, it is better to teach part of the job separately and then put the parts together into an effective complete job. Generally the training process should start from the known and proceed to the unknown and from the easy to the difficult when parts are taught. However, the trainer has to teach the trainees based on his judgement on their motivation and convenience.
6. **Individual Differences:** Individual training is costly, and group training is economically viable and advantageous to the organisation. But individuals vary in intelligence and aptitude from person to person. So the trainer has to adjust the training programme to the individual abilities and aptitude. In addition, individual teaching machines and adjustments of differences should be provided.

## Article

What Can I Do To Increase the Effectiveness of the Learning Experience?

### Affective Behaviors

Getting someone to change their affective behavior is one of the hardest tasks to accomplish. That is because the training often threatens the learners' self-image. So, it becomes important to affirm the learner's core values, such as moral, social, religious, family, political, etc. Learners who attend training in which their beliefs or values are supported are much more likely to "let down their guard" and accept the learning points.



If you confront the learners with learning points that suggests they may have acted in a foolish or in a dangerous manner, they become resistant to change. No one wants to be told that they



did something stupid. Thus, it is important to remind them of their “goodness” in order to make the various learning points easier to digest. The learning will not be so threatening because thinking about an important value will have affirmed each learner’s image of himself or herself as a smart and capable person. This also points out the invalid concept of a learner as an empty vessel. You have to “draw” them into the learning, not simply “pour” the learning into them.

### Why is safety so hard to train?

(**Note:** The following example uses safety, but this method works with a wide variety of affective behaviors.

Unlike a lot of other tasks, it is often easier to do something the unsafe way, rather than the safe way. For example, if I run out of charcoal lighter, it is much easier and quicker to use the can of gasoline in the garage than drive two miles to the nearest store; it is much quicker to cross in the middle of the street than walk to the corner-crosswalk; it is faster and easier to jump on a piece of equipment and start operating than to perform some checks beforehand.

Getting someone to act safely requires that they not only gain the required knowledge and skills, but that they also change their attitude (affective domain). Otherwise, they will know how to act, but will not do so as their self-systems kick in and convince them to do it the fast and easy way.

We all perform calculated risks (which in reality are unsafe acts to various degrees), e.g., I might never use gasoline to start a barbecue (unless I was starving and had no means to get fluid), but I might cross the street outside of the crosswalk if it was not busy.

This is why organizations have safety class after safety class - they never getting around to changing the attitudes of the learners. They hope that drilling the same old knowledge and skills into the learners with various methods will eventually pay off and produce safe learners. However safety requires that we know the rules (knowledge), know how to act (skills), and have a proper attitude for it (affective).

### One Solution

A learning program might go something like this (I am keeping this simple so that you can add, remove, or adjust the steps for other behaviors):

Have each learner explain three or four safety rules or principles that they value dearly and why. Also, have them record their selections on a flip chart.

This helps to internalize the belief that they are “good” persons, which makes them more receptive to change. This is best done in small groups (mix the groups up throughout the various activities).



### Sort of like “cheerleading.”

Gather the groups back together and have them discuss their values or principles. Tape these values to the walls so that they may be used for further reminders.

Discuss the concept of the difficulty of getting people to act safely (e.g. it is often quicker and easier not to act in a safe manner).

Again, using small groups, have them discuss calculated risks (unsafe acts) that they have performed, e.g., not coming to a complete stop at a stop sign. Have them record the reasons on a flipchart.

Next, have them confront the inappropriate behaviors by asking why we take these risks when they might clash with our core values and principles. (Note: You can have them discuss a number of other things depending on your desired outcome - e.g. discuss if the reasons they listed for taking the “risks” are the same reasons other employees might use. If not, what might some of their reasons be?)

Gather them back together and using their input, extract the central themes of their discussions.

Have them brainstorm some activities or solutions that they can use in their workplace to make it a safer place (this allows them to become part of the solution). For ideas on brainstorming activities.

### Changing Affective Behaviors is not Easy

Note that changing affective behaviors is generally not a one shot activity. But, going to the core of the matter is better than repeating the same old skills and knowledge that they already understand. Building a wide variety of these “cheerleading” activities will give you the three required building blocks of learning difficult behaviors:

Gaining new skills,  
learning new knowledge,  
and changing Affective behaviors.

**Now think , discuss and write your conclusion about following:**

1. What are learning principles?

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2. Explain the important Learning and training principles.

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3. Discuss how teaching is different than training.

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4. List down the principles of training.

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### Points To Ponder

The Learning Organization:  
Has its time REALLY come?

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### Perspective #1...

*'He who wants milk should not sit on a stool in the middle of the pasture expecting the cow to back up to him.'*

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### A Definition...

Discuss amongst yourself  
what a TRUE “Learning  
Organization” is...

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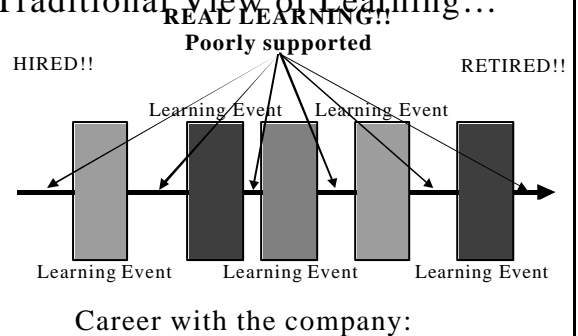
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### Traditional View of Learning...



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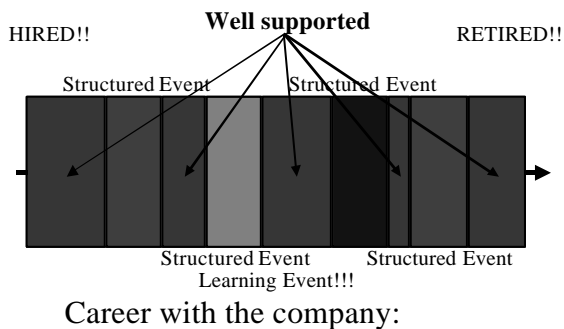
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## Learning Org.'s View of Learning...



## Cultural Issues...

- Cultural Change: Top down
  - “Internet speed”
- Managers!!!
- Learning begins when they start and NEVER ends – This means time to learn!!
- Changing roles – Are we ready? What has to change to become true change agents?

## Perspective #2...

*“The organizational problems we face today can not be solved by the same level of thinking that created them...”*

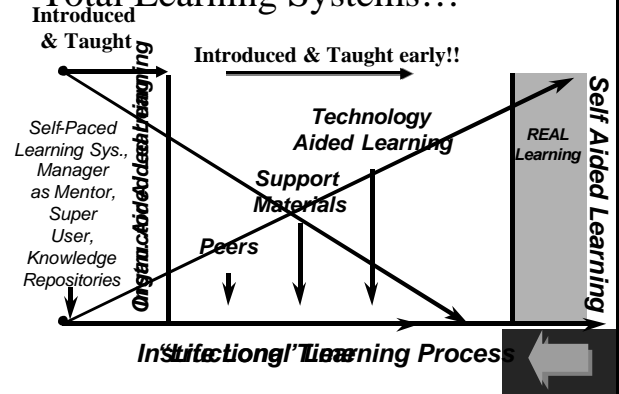
## Perspective #4...

*“The best way to predict your future is to make it!!”*

## Educational Issues...

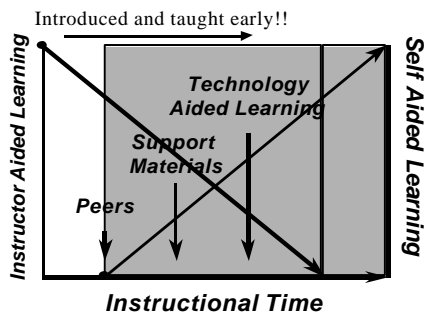
- Expanding Learn To Learn
- Let “modalities”/tools do what they do best.
  - Reinventing the classroom
    - With and without walls!!!
  - Self Study
    - Technology based
    - Paper based
- Learning objects
- Knowledge, learning, and process management

## Total Learning Systems...



## Learn to Learn: Classroom

Ramp Up/Ramp Down



## Perspective #5...

*“Nothing will ever be attempted if all possible objections must first be overcome...”*

### Technology Issues...

- Stop talking about Technology and start talking about learning
  - Design based on Instructional models not technology capabilities
- Give Synchronous a chance – Build communities
- True Portable computing – ebooks??
- Where should it be and NOT be...
  - We're becoming invasive!!

### Perspective #6...

***“It’s good to remember that the tea kettle, although up to its neck in hot water, continues to sing”***

### Let’s begin in our own backyard...

- Visit a school and see the computer labs
- What is the local funding and curriculum for technology INTEGRATION K-12 in your district?
- Offer inservice programs for teachers
- Talk to local business about funding and internship programs
- Speak to kids about the REAL IT world...

### Final Perspective...

***“A ship in a harbor is safe, but that’s not what ships are built for...”***

## Effective Learning . . .

- Results Orientation
- Learner-Centered
- Engaging



## Learner-Centered

- Choice
  - **What** they learn
  - **How** they learn it
- Active!
  - 60% or **more** of training time spent in over LEARNER activities
  - Meaningful **guided** and **unguided** practice
  - Meaningful **examples** and **analogies**

## Results Orientation

- Job-Based
- Organized
- Accountable
- Media supports methods

## Engaging

- Attention
- Relevance
- Confidence
- Satisfaction

## Experience Design . . . Making sure the experience leaves the user wanting more

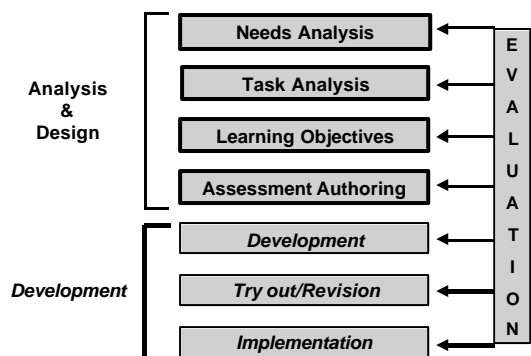
- Creativity and Imagination
- Interaction and flow
- Interface design

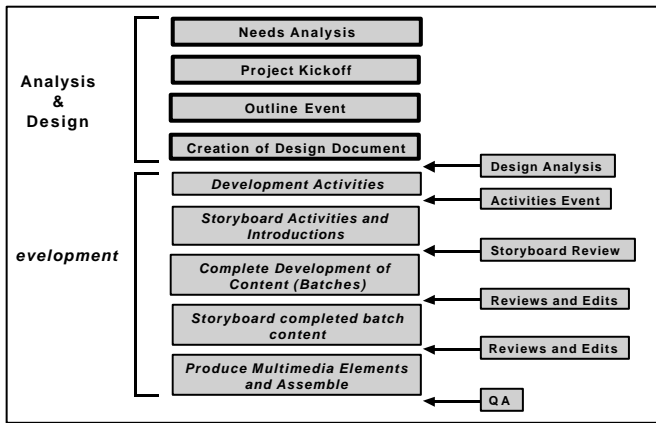
## How is it done?

- Consistent and Systematic **approach**
- Concrete **criteria** and **guidelines**
- Consistent **training, evaluation & feedback**
- **Integration of processes** for blended solution delivery (online and offline)

## Integrate for Blended Learning

- Don't **assume** one approach is best for all in all situations
- Be **willing to change** perspective on traditional approaches/products







## LESSON 8

### EFFECTIVE TRAINING

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In previous lessons of this unit you were explained about Conceptual background of training, education and development. You now know how important training is if an organization has to survive in long run.

After reading this lesson you will be able to

1. explain what is effective training
2. to identify the factors influencing training effectiveness
3. to conduct effective training sessions.
4. know the significance of humour in training

#### Introduction

Managing the social impact of the organization is the most complex task of management. It is dependent on the management's ability to 'think through' the total effectiveness of the organization. An organization can be seen as an effective organization essentially at three levels.

Firstly, The organisation is productive i.e it is able to produce the goods or services it is intended to produce,

Secondly, The organization is efficient i.e it produces the goods or services with a minimum expenditure of resources particularly the scarce resources and

Thirdly, the organisation has reputation for excellence i.e it has a public image that its goods or services are of a high quality audits management is alert to its responsibilities within and without the organisation.

#### Managerial Effectiveness and Information

The effectiveness of a manager depends on four aspects information skill, vision and motivation.

Information is what the manager learnt in his academic career in training courses, by reading books and periodicals and by listening to authorities and thinkers in the field. This covers three types of information: Functional Information, organizational Information, and Environment Information.

Apart from these three types of information, the manager requires two skills to ensure his effectiveness.

The first skill is the functional skill i.e the ability to use the techniques required for operating in his functional area. Functional skill differs from functional information. Information can be obtained by reading or listening. Skill needs actual practice over a minimal period of time.

Each functional area has its own skills, Sales manager must know salesmanship, production manager must know machine loading, materials manager must know inventory control and so on. However there is one skill that all of them require and that is interpersonal skill.

Interpersonal skill is the ability to deal with people. A typical manager is working in a hierarchical set up, consisting of the boss, colleagues and subordinates. Most managers have also to deal with people from outside the organization, i.e customers,

suppliers, government officials etc. The effectiveness of a manager i.e his ability to get things done obviously depends on how well he can tackle these people.

**The effectiveness in T & D process will depend on the accuracy of the following:**

1. Training need identification
2. Training need assessment
3. Training need justification
4. Budgeting and controlling the cost.
5. Selection of learning process & training methodology
6. Planning, designing & conducting the process
7. Evaluation of programme, the trainee & the feedback records.

Of course, the role of T & D specialist can not be ignored in this process as he is the facilitator and motivator and his perceptions, competence and attitude play an important role in making T & D programme really effective and fruitful

**In coming lesson you will be studying these aspects in details:**

#### How to Ensure Better Transfer of Learning

Anyone responsible for designing, managing or conducting a program knows the frustration experienced when participants in the program do not, cannot or will not apply what supposedly "They were taught." There are many reasons for this lack of transfer, some of which are beyond the control of those who provided the instructions. Often those who can help people apply the learning in the "real world" do not know how, do not agree with what is to be applied or in some other way inhibit rather than support the application process.

In spite of such "real world" conditions, certain factors inhibit effective (proper and consistent) learning transfer that should be dealt with in the formal (academic-clinical) instructional process. These factors include: confirming clear concepts, proper use of simulation and enhancing social transmission. Incorporating these three elements into the learning and application process can reduce the often severe loss of learning that occurs when participants move into or return to their responsibilities.

#### Confirming Clear Concepts

In this day of performance oriented training/education it is often overlooked that learners need to have clear mental pictures associated with the tasks they are taught to perform or refine. Many people complete a programme with the ability to demonstrate certain desired actions, but with no real concept of what they are doing, why the results and how their work relates to other elements they will confront in the "real world". When they confront real situations, they are caught off-balance because their mental picture of the situation is incomplete or fuzzy.

The program designer and instructor should make sure that participants have formed clearer, “context” pictures so that they have all the needed elements in their minds to guide their future actions. With concept-learning as opposed to the more typical information learning participants who have formed concepts can recognize when, how and why to use their learning in situations beyond the instructions

Take, for example a task or responsibility participants should have learned. They should be able to confirm, before they complete the instruction that they have clear concepts mental pictures) of the desired results they are to produce; how such results relate to broader outcomes and to results produced by others; and what specific actions, resources and constraints are involved in producing such results.

Of assume they should have learned how a particular system operates. In that case they should be able to confirm that they understand: the purpose of the system; the function of each component; and when the system is and is not operating properly. In Examples, if such concepts are incomplete, insurance or fuzzy, proper transfer of the task or knowledge of the system is in serious jeopardy.

A number of techniques exist for confirming concepts, most of which involve the participants in some form of the thinking process called “classifying.” This process requires a person to identify and justify whether each of a number of given situations is or is not an example of the concept he or she is supposed to have learned. To do so, the person must use both his or her current concept and data about each particular situation. The value of this confirmation process is that it provides valid evidence about the, accuracy and completeness of the person’s concept and his or her ability to apply it, so that if either is found wanting remediation can be provided before he or she leaves the learning environment.

Multiple choice, true-false and yes-no answer objective tests do not confirm concepts. Nor do explanations that do not include application of particular ‘concepts. For instance, a person has not confirmed that he or she has a sufficient concept of the operation of a machine by naming its parts or stating its use. If he or she cannot identify situations in which the machine is and is not operating as it should and then explain the structural and operational relationships involved he or she will probably run into difficulty in applying that

To summaries this issue, instructors and program developers should ensure that participants have developed conceptual knowledge of the task, procedures systems, etc

That makes up the content of the program. Without such confirmed knowledge, performance on the job is likely to be rote rather than intelligent and continued progress toward competency is unnecessarily difficult. The most important concept for participants to form is a clear, complete, accurate mental picture of the end-result they are to produce. Too often, competency is thought to be what someone does rather than what someone produces. And if the person lacks the proper concept of what is to be produced -consistently and under varying conditions- he or she is not likely to realize that his or her performance is incompetent, much less know how to improve it.

## Proper use of situation

In an ideal program application of learning is never left to chance. Participants under the guidance of their instructor, follow a “cumulative-rotation’s” process. That is, they rotate between learning and application so that as each new task, procedure, strategy and concept is learned, it is applied cumulatively to the real situation until the total desired outcome is produced. In this way not only does guided application take place, but needed attitudes (and teamwork) can be built or reinforced, because the focus is on the end-result rather than on each isolated specific learning.

In many training education situations, it is possible with proper planning to create the type of cumulative-rotation instructional process described above. There are many situations however, in which simulated (clinical) application is the only feasible means to create such a process. With the advent of sophisticated technology remarkable simulations of real situations can be and have been developed. Unfortunately, instructors and program

In many training education situations, it is possible with proper planning to create the type of cumulative-rotation instructional process described above. There are many situations however, in which simulated (clinical) application is the only feasible means to create such a process. With the advent of sophisticated technology remarkable simulations of real situations can be and have been developed. Unfortunately, instructors and program developers often become more intrigued with the “Technology” of the simulations than with the learning results that could and should be produced. the same “”means rather than ends” focus also dominates the participants .The key to effective learning through simulation are the cumulative-rotation process and the “debrief” that follows each application .Often debriefing is the weakest linking in the instructional process .because instructors do not know how to Involve participants in using the particular thinking processes that maximize the application of learning .the most essential is the need for a systematic thinking process for identifying the critical similarities and difference between the earlier “academic” situation( lecture film demonstration ,etc.) the stimulated (clinical)situation and later on, between both those and the “real world situation

This thinking skill and those involved in projecting predicting planning, assessing and critiquing (and the instructional strategies that foster such thinking) need to be thoroughly understood by both designers and instructors of simulation exercises. Other-wise, the preparation for and the debriefing of such experiences can be dominated by the ~instructor. There should be opportunities for participants to properly use the thinking processes involved in the transfer/application of learning.

The term “hands-on” is often used to refer to “real” as opposed to “academic” or “class-room” learning. Unfortunately, many designers and instructors confuse real with concrete experience, and this confusion can create unnecessary difficulties in the transfer of learning. A simple example is training in the CPE procedure-e. Usually, participants are exposed first to the procedure through live or filmed demonstration, followed by a “hands-on” experience with a life like dummy. The dummy provides a “concrete” in the sense that people have physical -

operational contact with what is to be learned. Without guided practice however in how to determine the critical similarities and difference between those experiences and the actual one, the ultimate proper application of the “hands-on” learning to real situations can be impaired.

As a general principle, simulation” hands-on” experiences and the technology that creates them should not be designed or used until the developers and instructors have accurately identified and incorporated the thinking processes participants need to achieve the desired’ earning result. in such clinical activities, that result should be proper fusion and application concepts cause-effect principles attitudes and skills, followed by proper analysis and projection to the “real world”. Otherwise participants can be lulled into a sense /’ of confidence that can lead to trouble.

### Enhancing Social Transmission

If the purpose of instruction is to lay the groundwork for competency, then it needs to include more than knowledge and/or skill development. Again, competency is what competency produces, and producing desire~ results consistently requires certain attitudes and teamwork skills, as well as concepts and technical skills The advent of instructional technology, systems learning and individualized (self paced) instruction has seriously impeded progress toward effective learning transfer and competency building.

The reasons are many, but among the more important are lack of attention to attitude-building; emphasis on “atomized” rather than “contexted” learning and inadequate opportunities for “rather than contexted” learning and inadequate opportunities for “social transmission.”

The term “social transmission” was used by the psychologist Piaget to refer to the need for learners to consistently and productively communicate what they are learning to other people is research and that of other indicates that people learn better, faster and retain longer when they have frequent and appropriate opportunities to verbalize and share what they are learning with other learners or with instructors. There is some evidence to suggest that effective social transmission also plays a critical role in the development of attitudes and self-confidence

In many programs particularly those that rely primarily or solely on independent learning modules computer technology or programmed instruction, the use of social transmission as a technique for building and reinforcing learning is minimal. Even in so-called group-learning situations, instructors often do not know precisely what learners need to “transmit” why and how best to help them. As a result, discussions and interactions do not lead to sustained productive learning that when applied, creates competency

Because of technological advances, productive interaction between work-term members will be more critical than it has been in the past. The skills involved can and should.

Be built in as an essential element in any training/education program, because the instructional environment can provide an excellent opportunity to learning terms that. learn to use interaction skills to produce better learning results- not just for the team, but for each individual in the team. Then, when

individuals complete the program and move on (either to the work situation or further training/education), they are better prepared to work collaboratively to produce quality results.

Too often, organizations try to deal with need for good communication and interaction skills by creating special training programs that focus solely on these elements. It is far more cost-efficient and results-effective to build them into new or existing technical supervisory or management training programs so that people learn to use these skills as an integral part of their training and education

Educators and training professionals have almost complete control over these three factor that affect learning transfer. They can be incorporated without changing the content of programs .Each factor focuses on what can be done by design and instruction to assist the learner. Strengthening anyone or all of these factors should better confirm that’ “what was taught is what was learned”, and “what was learned is more likely to be applied -properly and consistently.”

### General Training Tips to Make Training Effective

When planning training think about:

- your objectives - keep them in mind all the time
- how many people you are training
- the methods and format you will use
- when and how long the training lasts
- where it happens
- how you will measure its effectiveness
- how you will measure the trainees’ reaction to it

When you you give skills training to someone use this simple five-step approach:

1. prepare the trainee - take care to relax them as lots of people find learning new things stressful
2. explain the job/task, skill, project, etc - discuss the method and why; explain standards and why; explain necessary tools, equipment or systems
3. provide a demonstration - step-by-step - the more complex, the more steps - people cannot absorb a whole complicated task all in one go - break it down - always show the correct way - accentuate the positive - seek feedback and check understanding
4. have the trainee practice the job - we all learn best by actually doing it - (‘I hear and I forget, I see and I remember, I do and I understand’ - Confucius)
5. monitor progress - give positive feedback - encourage, coach and adapt according to the pace of development

Creating and using progress charts are helpful, and are essential for anything complex - if you can’t measure it you can’t manage it. It’s essential to use other training tools too for planning, measuring, assessing, recording and following up on the person’s training.

Breaking skills down into easily digestible elements enables you to plan and manage the training activities much more effectively. Training people in stages, when you can build up each skill, and

then an entire role, from a series of elements, keeps things controlled, relaxed and always achievable in the mind of the trainee.

Establishing a relevant 'skill set' is essential for assessing and prioritising training for any role. It is not sufficient simply to assess against a job description, as this does not reflect skills, only responsibilities, which are different. Establishing a 'behaviour set' is also very useful, but is a more difficult area to assess and develop. If you want more information or guidance about working with Skill and Behaviour Sets, and advanced assessment and training planning methods please contact us, giving a brief outline of your situation. Using Skill-Sets to measure individual's skills and competencies is the first stage in producing a training needs analysis for individuals, a group, and a whole organisation. You can see and download a free Skill-Set tool and Training Needs Analysis tool the free resources page.

Psychometric tests (and even graphology - handwriting analysis) are also extremely useful for training and developing people, as well as recruitment, which is the more common use. Psychometric testing produces reliable assessments which are by their nature objective, rather than subjective, as tends to be with your own personal judgement. Your organisation may already use systems of one sort or another, so seek advice. See the section on psychometrics or get in touch.

**Some tips to make learning more enjoyable and effective:**

- keep instructions positive ('do this' rather than 'don't do this')
- avoid jargon - or if you can't then explain them and better still provide a written glossary
- you must tailor training to the individual, so you need to be prepared to adapt the pace according to the performance once training has begun
- encourage, and be kind and thoughtful - be accepting of mistakes, and treat them as an opportunity for you both to learn from them
- focus on accomplishment and progress - recognition is the fuel of development
- offer praise generously
- be enthusiastic - if you show you care you can expect your trainee to care too
- check progress regularly and give feedback
- invite questions and discussion
- be patient and keep a sense of humour

**Induction training tips:**

- assess skill and knowledge level before you start
- teach the really easy stuff first
- break it down into small steps and pieces of information
- encourage pride
- cover health and safety issues fully and carefully
- try to identify a mentor or helper for the trainee

As a manager, supervisor, or an organisation, helping your people to develop is the greatest contribution you can make to their well-being. Do it to your utmost and you will be rewarded

many times over through greater productivity, efficiency, environment and all-round job-satisfaction.

Remember also to strive for your own personal self-development at all times - these days we have more opportunity and resource available than ever to increase our skills, knowledge and self-awareness. Make use of it all.

## **Tips for Assessing Organizational Training Effectiveness**

Look at and understand the broad organizational context and business environment: the type, size, scale, spread, geography, logistics, etc., of the business or organization. This includes where and when people work (which influences how and when training can be delivered). Look also at the skills requirements for the people in the business in general terms as would influence training significance and dependence - factors which suggest high dependence on training are things like: fast-changing business (IT, business services, healthcare, etc), significant customer service activities, new and growing businesses, strong health and safety implications (chemicals, hazardous areas, transport, utilities). Note that all businesses have a high dependence on training, but in certain businesses training need is higher than others - change (in the business or the market) is the key factor which drives training need.

Assess and analyse how training and development is organized and the way that training is prioritised. Think about improvements to training organization and planning that would benefit the organisation.

Review the business strategy/positioning/mission/plans (and HR strategy if any exists) as these statements will help you to establish the central business aims. Training should all be traceable back to these business aims, however often it isn't - instead it's often arbitrary and isolated.

Assess how the training relates to the business aims, and how the effectiveness of the training in moving the business towards these aims is measured. Often training isn't measured at all - it needs to be.

Look at the details and overview of what training is planned for the people in the business. The training department or HR department should have this information. There should be a

clear written training plan, including training aims, methods, relevance and outputs connected to the wider aims of the business.

Look also at how training relates to and is influenced by appraisals and career development; also recruitment, and general ongoing skills/behavioural assessment. There should be process links between these activities, particularly recruitment and appraisals, and training planning. Detailed training needs should be driven substantially by staff appraisals. (It goes without saying that there should be consistent processes and application of staff appraisals, and that these should use suitable job performance measures that are current and relevant to the operations and aims of the business.)

Look particularly at management training and development. The bigger the business, generally the bigger the dependence on management training and development.

Look at new starter induction training - it's critical and typically a common failing in situations where anything higher than a low percentage of new starters leave soon after joining.

Look for the relationships between training, qualifications, job grades and pay/reward levels - these activities and structures must be linked, and the connections should be visible to and understood by all staff.

Look especially at staff turnover (% per annum of total staff is the key indicator), exit interviews, customer satisfaction surveys, staff satisfaction surveys (if they exist) for other indicators as to staff development and motivational needs and thereby, training deficiencies.

Look for any market research or competitor analysis data which will indicate business shortcomings and weaknesses, which will imply staff training needs, obviously in areas of the most important areas of competitive weakness in relation to the business positioning and strategy.

Look to see if there is director training and development - many directors have never been trained for their roles, and often hide from and resist any effort to remedy these weaknesses.

Base training recommendations and changes on improving training effectiveness in terms of:

- relevance to organizational aims
- methods of staff assessment
- training design/sourcing
- training type, mix and suitability, given staff and business circumstances (consider all training options available - there are very many and some are relatively inexpensive, and provide other organizational benefits; in-house, external training courses and seminars, workshops, coaching, mentoring, job-swap, secondment, distance-learning, day-release, accredited/qualification-linked, etc)
- remedies for identified organizational and business performance problem areas, eg., high staff turnover, general attrition or dissatisfaction levels, customer complaints, morale, supplier retention and relationships, wastage and shrinkage, legal and environmental compliance, recruitment difficulties, management and director succession, and other

key performance indicators of the business (which should be stated in business planning documents)

- comparative costs of different types of training per head, per staff type/level
- measurement of training effectiveness, and especially feedback from staff being trained: interview departmental heads and staff to see what they think of training - how it's planned, delivered, measured, and how effective it is

### Creating the Most Effective Training

By Mark Rose, University of Oklahoma Outreach Executive Program - Team Quest

I'm often asked what I do in my job. It usually goes something like, "What do you do for the University of Oklahoma?" "I help equip teams with skills and tools to become more effective," I reply. "My main focus is using experiential learning for team development." This answer typically results in glassy eyes, a nod of the head and a quick change of the subject.

To be fair, most people don't know the amount of work it takes to be a trainer, much less care. But, to be a good trainer, there has to be some structure to it. The good news is that there is a model for the design of effective training. Most trainers have learned that no matter what they are teaching, they have to use different ways to meet the variety of learning styles of their participants. Some trainers might intuitively use different ways to cover their content but not know why it works - they just know that it does. Good trainers know how and why using a variety of delivery components can create the most effective training.

The premise for creating the most effective training is built on the foundation of Malcolm Knowles' work (originally in 1973) who was critical in developing the idea of Andragogy or Adult Learning Theory. Andragogy is based on several assumptions:

- Adults need to know why they should learn something.
- Adults need to direct their own learning.
- Adults have a variety of experiences that can be used as resources for other adult learners, and they prefer experiential techniques.
- Adults are ready to learn when they have a need for a knowledge or skill that can be applied to their life.
- Adults have a life-centered orientation to learning.
- Most adults are motivated to continue growing and developing.

Using these assumptions of Adult Learning Theory, we modified a common model for instructional design that uses three different components for effective training. The model shows that a relatively equal distribution of these three components provides the most effective training for adult learners.

**Content**-This is the subject matter as illustrated by notes in the Participant's Handbook, lecture, notes created by the learners, etc. It relates to the competencies presented in the training.

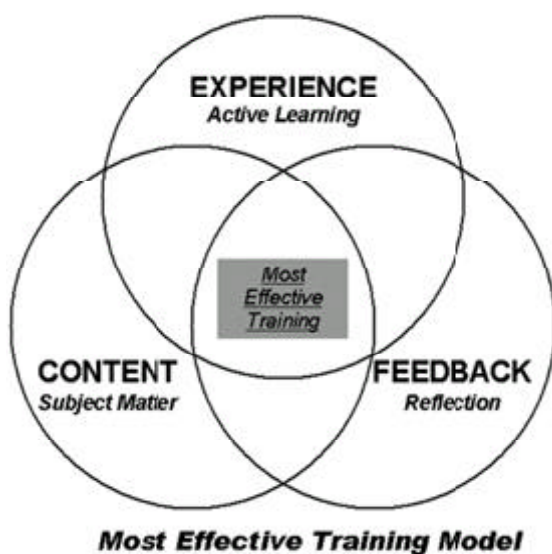
**Experience**-This is the active learning that participants experience which encourages their discovery of a learning point or their practice of a new skill. It can be a game or physical

activity, but it can also be a written exercise or group discussion. A session should offer a variety of auditory, visual and kinesthetic experiences, neither all games nor all discussions.

**Feedback**-This is the participants' **reflection** upon a competency's relevance, their personal application of the session's content or the significance of their own experience. It is frequently facilitated by the trainer, but may also be facilitated by the group.

For example, you might be providing training on stages of group development with a newly formed work team. The **Content** component could include a paper copy of Tuckman's Stages of Group Development (1965). You would explain the model and the characteristics of each stage. This would be a brief overview so that the team members could have a common language about the model. Some trainers call this 'frontloading' which is a way to introduce a topic to your group before an experience. The **Experience** component could be any type of activity where the group is engaged in learning about group development. Examples of this component could be watching a video of another group interacting.

Finally, the **Feedback** component would include some type of reflection about the activity they experienced. After watching the video of another group interacting, the facilitator might ask group members questions about what they saw and where that fits into the stages of group development.



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This is just one example of how a trainer might use this three component model for designing effective training. An important thing to remember is for the most effective training to take place, the delivery of each major topic should include approximately equal proportions of all three components - Content, Experience and Feedback. Throughout each training, the order of the components should be varied so that each is modeled introducing, exploring and summarizing a topic.

## Significance of Training

### Humour in Training

Many trainers feel that training is a serious business - and, to a point, they are correct. It's true to say, we sometimes struggle to

show ourselves as a valuable, important part of the company and in some cases are even seen as hippy do-gooders who waste resources and money. "The last thing I need", I hear you say, "is for the CEO to walk by and see us all throwing beanbags or splitting our sides laughing".

In this article, though, I will share with you my philosophy on humour that will argue the opposite - i.e. that training is indeed serious, but the training experience needn't be! This philosophy is summed up nicely with an Oscar Wilde quote, which I'll share with you at the end of the article.

I'm often inspired by quotes and sayings, so I've chosen two of them to illustrate my points to you today.

### 1. "Laughter is the shortest distance between two people" - Anon

Almost all training sessions will begin with some sort of icebreaker or game. The reason? As professional trainers, we realise that it is our responsibility to make these people comfortable, relaxed and open. These are pre-requisites to adult learning and make the whole experience more pleasant for all involved.

If your training programme requires participants to interact or work as a team, then it is even more vital that there is a rapport and a trust between them, if they are to derive maximum benefit from the activities.

I tell you here and now there is no better way to achieve this than to get them laughing together.

You don't believe me? Ask anyone who saw this year's series of "Child of our time" on BBC television. Professor Robert Winston ran an experiment with two children of about 4 years of age. He sat one boy and one girl, who had never met, in front of a funny video. While watching it together, it was as though cupid himself crept into the room. They laughed so much that all barriers between the unacquainted children crumbled and the little girl couldn't resist the urge to put her arm around the boy. He didn't complain and, shortly after, the rapport was such that she planted a peck on his cheek without a word of warning!

Let's hope your training participants show more self-control!

Still not convinced? Ask any waiter what is the single most effective way to get a good tip. It's not the food and it's not pouring the wine every time the customer puts down their glass. "Get them laughing" the waiter will say. "Don't try to be Billy Connolly or laugh at anyone, but if you help them to laugh, they'll relax immediately and you'll have your taxi fair home from that one table". I'm quoting myself there, by the way - I was that waiter and there are more parallels to being a trainer than you'd realise!

So, in a nutshell, humour helps the group to relax and to quickly and easily develop a feeling of unity, rapport and trust. What more would you want for your group? Oh yes, you want them to learn too. You'd better keep reading then.

### 2. "Laughter is good for you - it's like jogging on the inside" - Anon

In case you didn't already know, laughing is very, very good for your health. A quick web search will back up my

See the following picture and comment about it.



Practical de-stressing measures include introducing flexi-time and providing help with childcare. Organising workshops on managing stress can also help - employees learn coping strategies and how to access their inner Ommm. If it is possible, an

open policy dress code should be introduced, along with the encouragement of personal expression. It is of little consequence that the Star Wars frieze above Eamon's desk doesn't float your boat. If it helps him use the Force, then why not?

A bit of bribery goes a long way. Competitive salaries with regular reviews, a pension plan and health insurance schemes are major factors that determine how happy workers feel in their jobs. On-the-job stress is greatly reduced once people know that they won't have to secure a second job to feed the family. Perks such as mobile phones/company cars/pet elephants can also help employees feel appreciated. Because above all, employees, like every female cast member of Guys and Dolls, just want to be loved.

Morale can be boosted with simple things like staff outings and lunches. However, don't be afraid to get creative with your de-stressing methods. If you feel that your employees would become more productive with a neck rub every Tuesday, then get thee to a masseuse.

Bad staff relations can be a major cause of stress. If certain employees think that their manager makes Hannibal Lecter look reasonable, then it's time for action. A safe grievance procedure should be put in place, where employees can air their concerns without embarrassment. Training schemes for managers can also help to nip potential problems in the bud.

So if you are tired of seeing shaking workers glowering at you from behind the photocopier, it's time to de-stress that workplace. Look forward to improved productivity and lots of smiling - and that's just from you. After all, you did get to choose the masseuse...

By David Granirer\*

### Introduction by Susan Heathfield

I've featured David Granirer at the About HR site in the past because he combines wit with useful information in an approachable writing style. As I visit workplaces these days, I see a lot of up-tight people who are worried about their futures and their opportunities. In these uncertain times, David is right, often the one thing we do control is our reaction to the work situation in which we find ourselves.

I'm a serious proponent of empowerment, as any of you who have read this site for any time know. Consequently, choose to be a cheerleader at work. Choose to have a say and make a difference. Choose to contribute your best talents and skills. Your workplace will be better for your contribution and that will be a good thing for both you and your organization. David Granirer tells you more.

Regards,

Susan

### Humor for Retention

Picture this: a team of welfare workers on the front-lines of a poor neighborhood, serving difficult, high-needs clients. And if that's not tough enough, each has a caseload of about 300 and works for an organization undergoing massive funding cuts, downsizing, and policy changes.

But every day after coffee it's the same. The supervisor and two workers appear in the reception area. "What song do you wanna

hear? Do you wanna hear Jazz? Rock? Folk?" Then, "playing" accordion folders and staple removers as finger cymbals, they launch into the world's worst rendition of "Across The Universe" by John Lennon, to the hysterical laughter of their colleagues.

"It's our way of keeping up morale," says a team member. "We're so overwhelmed, so stressed, so burned out. This is how we keep our sanity."

As more and more organizations reengineer, merge, restructure, downsize, rightsize, and even capsize, employees confront uncertainty on an almost daily basis. The rules keep changing in terms of what they're supposed to do, how they're supposed to do it, who they do it for, and whether they get to do it at all. And since most have little or no control over the making of these rules, the result is often a sense of powerlessness that translates into increased stress, decreased wellness, demoralization, absenteeism, and lower productivity, all of which affect rates of employee retention. And we all know that people are an organization's number one asset, and losing them costs money.

So the big question for both individuals and organizations is: how do you keep up spirits, continue to work effectively, and maintain health and sanity in a crazy-making situation? The team of welfare workers described chooses to laugh. They could also choose despair, cynicism, bitterness, or negativity, but instead team members choose laughter. As one worker states, "We could either cry, or we could laugh, but you can only cry for so long. We'd had enough of crying, and it was time to do something else."

So, how do you help employees, who have little or no control over external events, survive a crazy-making situation? Organizations need to encourage employees to take control over the one aspect of the situation they do control - how they choose to respond to it. And on those days where workers feel overwhelmed, overworked, and have no idea what's going to happen next, the only rational, life-affirming response is to go find some colleagues, and break out the clown noses, kazoo's, and Groucho glasses.

### Why Laughter?

Why is laughter such a positive choice? We all know that it makes us feel good, but in today's bottom-line oriented workplace, the term "feel good" is too nebulous to have much impact on how people go about structuring their job interactions and professional relationships. And most organizations are not going to promote humor as part of their culture because some "touchy feely" wellness devotee thinks that having the boss come to work dressed as a chicken will create a happy afterglow.

So any discussion of the benefits of laughter needs to be more tangible and focused on addressing positive morale, a major factor contributing to the retention of valued employees. Remember though, humor is a coping mechanism to aid in employee retention, not a cure-all for other systemic problems affecting organizations.



## Activity and Assignments

1. What is effective training.

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2. What are major factors contributing in making training effective.

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3. High light significance of Humour in training.

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4. What is the role of trainer in making it a success.

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5. Why is it important for trainer to understand about effective training.

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## LESSON 9

### COLLECTION OF ARTICLES

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#### Thoughts on Effective Training

One commonality found in Deaf-Blind Projects throughout the county is the provision of training to both parents and service providers alike. Although this training varies in its content, format and delivery methods, it shares the common intent of developing skills that will transfer into the classroom, home and community.

Current literature in the field of school reform has identified three concepts that influence professional development activities and effective training.

- Results driven education, meaning that the success of staff development should be measured not only in changed practioners behavior, but also in its impact on child outcomes.
- Systems thinking, the recognition that staff development must be approached from a systems perspective, recognizing that change to one part of a system impacts other parts of the system.
- Constructivism, the belief that learners build their own knowledge structures rather than just receive them from others. In response to constructivism, staff development activities must involve practioners in the learning process and include a variety of participatory activities.

One result of incorporating these attributes into project training activities will be an increase in the likelihood of achieving identified training outcomes and positively impacting training recipients.

It is also important to recognize the unique needs of adults in a learning endeavor. These include the need to have:

- Meaningful information
- Expectations known
- Experience respected
- Reinforcement provided
- Feedback given
- Diverse teaching styles used
- A sense of relevancy
- Self-direction
- Freedom from anxiety
- Immediate application



This Project is supported by the US Department of Education, Office of Special Education Programs (OSEP). Opinions expressed herein are those of the authors and do not necessarily represent the position of the US Department of Education.

#### Elements of Quality Training

Inservice training and professional development activities are extremely resource intensive, both in personnel time and actual dollars. Yet, the major activity of many training projects is the

provision of training to a variety of audiences on a multitude of content and topic areas.

As such, projects must strive to provide training that is meaningful, relevant and effective.

However it must acknowledge that on occasion trainings are not what the participants had hoped for and occasionally the training has missed the mark!

The current literature describes several key elements that are critical to the design and implementation of effective inservice training and professional development activities. These elements consistently appear in time-tested professional development models and contribute to both the models effectiveness and longevity.

One such nationally validated model, the Teaching Research Inservice Model (TRIM), has combined these elements into a sequential process, which has been successfully used for the design and implementation of both short and long-term training activities that have addressed a variety of content and topic areas. The six elements that comprise the Teaching Research Inservice Model are:

- Identifying needs
- Determining training outcomes
- Determining training objectives
- Developing training activities
- Designing and implementing evaluation measures
- Providing follow-up technical assistance and support

Incorporating these elements into training activities may not only increase the participant's skill acquisition, it will also increase the effectiveness of the project's training activities

#### 1. Identifying Needs

Identifying needs is the first step in designing effective training activities. Needs assessments identify the specific topical/skill areas that recipients of the training perceive as their greatest, or one of their greatest, areas of need. Needs assessments should be focused on specific skills or competencies identified as relevant rather than being open-ended. Open-ended assessments, or assessments designed for other programs, do not provide the information needed to design effective trainings.

A thorough needs assessment builds consensus and ownership in the training activities.

Training participants are most receptive and interested when the content is relevant and meaningful to them. A needs assessment approach relies heavily on the perceptions of practitioners and does not counter balance or weight these responses with the training needs perceived by others. As a balance to the perceived needs of staff, it may be useful to also complete an assessment using a tool designed to measure program performance.

## 2. Determining Training Outcomes

In effective training activities the desired outcome(s) of training is clearly conceptualized and articulated. A well-conceptualized and articulated outcome is needed to drive the remainder of the training plan. The outcomes impact the intensity and pedagogy of the training activities, as well as the design of the evaluation of the success of the training.

## 3. Determining Training Objectives

Effective training occurs when the expectations of training are clearly defined. Your objectives should identify the expected competencies or behaviors to be demonstrated by the participants at the conclusion of the training experience. Your objectives should also prescribe the “who, what and how” in observable and measurable terms. Your objectives should logically lead to attainment of the desired outcome(s). When the desired outcome is stated as knowledge, the objectives relate to varying ways in which the participant can demonstrate his/her increased knowledge, but since our ultimate outcome is only knowledge, it would not be necessary to engage participants in elaborate and time-consuming practice or role-play activities in which they demonstrated certain skills.

## 4. Developing Training Activities

Training activities are the vehicle by which participants achieve the desired competencies stated in your objectives. The activities comprise the content and pedagogy of your trainings.

Training activities should be designed to accomplish one of three possible outcomes:

- Increased **awareness** of the topic being taught
- Increased **knowledge** of the topic being taught
- Mastery of the skills needed to **implement** the topic being taught

The outcomes you are attempting to achieve dictate the level of complexity of your activities.

If the outcome is merely to increase awareness, a much simpler activity may be offered than if the outcome is skill implementation. If the outcome of the training is skill implementation, research confirms that the following four attributes should be included within the training activities:

- A knowledge of the theory supporting the content of the training
- Demonstration and shaping of the skills to be learned
- Guided and independent practice of the skills
- Feedback on the performance of the skill

Although it may be necessary to rely on the standard lecture/listen format for parts of the training, participants will be far more engaged in the content if varying methods of presenting information are utilized. Adult learners have preferred modalities for acquiring new information. Some find auditory input to be the easiest way to learn, and they become confused by visuals. Visual learners take in new information most efficiently

through their eyes and absorb minimally from auditory input. Others prefer to see a concrete demonstration of the new concept. Remember, our audiences will benefit most from presentation of the new information in a variety of ways, one building upon or reinforcing another.

## 5. Designing and Implementing Evaluation Measures

Evaluation occurs at several levels and must go beyond the traditional measure of satisfaction to demonstrate the trainings effectiveness and to provide the information to revise and refine your training activities. Evaluation systems should include:

- Measures obtained during training
- Measures obtained at the completion of training activities
- Measuring implementation of the knowledge or skills presented after the training has occurred

By carefully weaving your evaluation components before, during and after training, it is possible to evaluate on an ongoing basis the strengths and needs of your activities (both formative and summative). Trainers are able to revise and adapt the training on a timely basis and make necessary accommodations to assist participants to successfully complete the objectives.

## 6. Providing Follow-up Technical Assistance and Support

To be effective, programs must provide follow-up support to participants as they implement newly learned skills. The traditional, one-shot workshop continues to be utilized even though we know that little implementation occurs without follow-up TA and support. When the intent of training is implementation of new knowledge and skills, specific plans for providing follow-up support to the participants must be woven into the training, not tacked on as an afterthought.

Effective training assumes that the support provided to assure implementation is the second, but equally important, component of the training activity.

How support is provided takes many shapes and depends upon your outcome (awareness, knowledge or skill) and the resources. A variety of approaches have been demonstrated as effective and include:

- On-site visits
- Mentoring or coaching
- Video review
- Live video interactions
- Product review and feedback
- Observations

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The Search for an Effective Training Model for Adults Moving Off Welfare Moving families off welfare roles is just the beginning of their journey into the mainstream work economy and social system. For many heads of household, life management skills and positive social and financial experiences are needed to supply the courage and confidence to face such major life changes.



Many educators both within and outside of Extension have looked at ways to make this process more effective. Seaman and Fellenz (1989) and Levine (1992) defined learning characteristics distinctive to adults and suggested ways to engage the adult learner. Griffiore, Phenice, Walker, and Carolan (1999) looked at life-issue priorities that might motivate learning. Van Tilburg Norland (1992) identified individual characteristics associated with Extension participation in learning processes. Jones (1992) stressed the importance of creating a learning environment that fosters critical thinking. Richardson (1994) noted the preference of Extension clientele for learning through experience.

A number of additional researchers have focused specifically on training methods for welfare audiences. Couchman, Williams, and Cadwalader (1994) outlined process-related tenets for successful community-based adult education programs including the importance of understanding the audience. DeBord, Roseboro, and Wicker (1998) noted the importance of involving parents in their own learning in parenting education. Borden and Perkins (1999) stressed the need for community collaboration and provided methods for accessing that collaboration. Lackman, Nieto, and Gliem, in developing an instrument to evaluate programs for low-literacy audiences, validated a number of teacher characteristics that generated high reliability in teacher evaluation.

Finally, the theoretical framework for a collaborative effort similar to PACE, the Montana State University Extension Services' EDUFAIM program (Duncan, Dunnagan, Christopher and Paul, 2001) provides insight into theoretical and practical issues in the learning process.

In general, extant writings support the work of Malcolm Knowles' (Knowles, Holton, and Swanson, 2000) andragogical approach to adult learning. Andragogy is based on the following assumptions:

1. Adult learners bring life experiences to the learning process that should be acknowledged.
2. Adults need to know why they need to learn something, and how it is relevant to their lives.
3. Experiential, hands-on learning is effective with adult learners.
4. Adults approach learning as problem-solving.
5. Adults learn best with the topic is of immediate value to them in their lives.

Although the PACE development team had access to a wealth of information on adult learning, team members felt that they lacked a clear mandate from the Department of Human Services for training facilitators in the learning process. The University of Tennessee's PACE team had the following objectives for the training model that would articulate that process.

- The effective training model would be simple, so that upon repetition and training over several months, facilitators could commit it to memory.
- The PACE team would need to be able to present the model within the time constraints available for training—approximately 1 hour for the initial workshop.

- The model would have the capacity to be developed and expanded at future training sessions.
- The practical application of the model would be easily understood.
- The model would be specific to, and build upon, the insights of experienced Families First Facilitators.
- The Families First program would feel ownership of the model.

### Methods for Developing the Training Model

Not long into the discovery phase of servicing the contract, the Parenting and Consumer Education (PACE) Extension development team realized that the Department of Human Services had not yet formally identified or communicated to its facilitators what it considered to be the characteristics of effective training. One of the first tasks of the development team was to develop consensus among administrators and experienced facilitators on the characteristics of effective training and to design a training model that represented that philosophy.

The PACE development team consisted of Extension state specialists in family life, family economics, and staff development. This team requested that TDHS administrators identify groups of managers, specialists, case workers, and experienced facilitators within the organization who reflected the best of the department's intrinsic standards and training philosophies to provide input into the development process.

Although the PACE team used a variety of methods to gather information during the discovery process, the bulk of information about training expectations and standards were gathered using a group facilitation process called the "Workshop Method" developed by the Institute of Cultural Affairs (Spencer, 1989) and through a series of focus group sessions. The initial workshop session was held with a group of TDHS employees selected by TDHS administration. The group included assistant administrators, state program specialists, district managers, local managers, and case workers. An Extension District Program Leader led the session.

In addition to the workshop session, focus group sessions were held in each of the four Department of Human Services districts across Tennessee. Participants were selected by the district administrative staffs working with the DHS state staff and members of the PACE training team assigned to each district.

Focus group format and questions were designed to be consistent among all four sessions. Sessions were led by state Extension specialists and Extension PACE trainers, and were videotaped for analysis by the PACE development team. Questions centered on experienced trainers' perceptions of the characteristics of effective training. The PACE development team also conducted both phone and written surveys of contract providers and Extension field staff that had experience working with similar audiences.

Extension Specialists on the PACE team integrated the findings from the workshop and focus group into a model that served as the basis of PACE curricula and training conducted under the DHS contract.

## Findings Regarding an Adult Training Model

### Basic Findings

Information collected during the discovery process supported the assumptions of the andragogical approach of Knowles and others regarding the training process. In addition, the following basic premises were advanced.

1. **The training process is important.** Although quality, accurate information and curricula are important to the success of training, experienced Families First training facilitators agreed that the training process itself is of equal importance. Sessions with facilitators verified the importance of not just delivering information to participants, but also providing them with “hands-on” experiences in applying new learning and practicing new skills.
2. **Participants in training programs need experiences that require progressively more active participation in, and responsibility for, their own learning.** Learning should include opportunities for practicing decision making, recognizing one’s own learning needs, identifying resources to meet those needs, and planning and organizing one’s own learning.
3. **Participants need opportunities to broaden their networks in the mainstream work community.** This includes development of social skills and strengthening self-efficacy to broaden their comfort zone in a variety of community work settings and volunteer activities.

### Training Model

In addition to the basic premises above, Families First training providers and staff identified specific criteria for good training. The characteristics identified by facilitators and TDHS staff were synthesized and organized into a model (Figure 1) by a member of the state PACE leadership team. The resulting model of effective training has four major criteria.

1. **Effective training is learner focused.** Effective training identifies and addresses issues important to the learner, while building on learner strengths. It includes opportunities for active participation by the learner, while recognizing and drawing on the knowledge and experience of the learner. Learning is facilitated through peer exchange, and is culturally and ethnically meaningful. All participants are drawn into the discussion.
2. **Effective training demonstrates productive behavior and effective life skills.** Effective training integrates decision-making, planning, organization and implementation skill building. It models and reinforces workplace ethics and productive use of time. Local and community resources are an integral part of the learning environment. Opportunities for learners to expand social networks are provided. Learners are challenged to take responsibility for their own lifelong learning.
3. **Effective training inspires and motivates.** Effective training increases the learner’s knowledge about the subject matter, and reinforces worthwhile values and principles. It provides opportunities for humor and fun during learning,

while maintaining a positive focus. Learners leave the session with a feeling of accomplishment.

4. **Effective training celebrates personal and group achievements.** Incentives to mark learning milestones are incorporated into effective training. On-going assessment and learner-based feedback is critical to the success of any training session. Learners are acknowledged and recognized for their contributions by the larger community. Opportunities to include children and other household members in the learning process are also made available. Community leaders who can bring other resources to bear on the issue at hand are included as an integral part of the learning process.

**Figure 1.**  
Training Model



### Application

Experienced trainers develop their own effective strategies to facilitate participant growth through innovative teaching methodologies and group dynamics. As part of the training of Families First PACE facilitators, the Extension PACE team gave trainers an opportunity to share effective techniques they had gained from their own experience, underscoring the value of the knowledge, skills, and expertise they contributed to the learning process.

Facilitators were then presented the training model. After a brief explanation of the model, facilitators were asked to join a discussion group focusing on one of the four model criteria. After self-assignment to discussion groups, the groups were given prompt posters (Figures 2, 3, 4, and 5) and asked to brainstorm additional ways to implement criteria from the model in their classroom.

**Figure 2.**

Prompt Poster 1

#### **Effective training is learner focused. It:**

- Identifies and addresses issues important to the learner.
- Identifies and builds on learner strengths.
- Includes active participation by the learner.
- Recognizes and draws upon the knowledge and experience of the learner.
- Facilitates learning through peer exchange.
- Is culturally and ethnically meaningful.
- Draws everyone into the discussion.

**Examples of specific ways to implement these criteria:**

- Ask participants to list issues which are particularly important to them. List them on the board and explain when and how you will address them in class.
- Provide a “question box” for participants to drop in questions or issues that are important to them, yet they are hesitant to ask during class.
- Have participants graph their family trees. Use these as a basis of discussion about parenting or financial management styles and practices.
- Have a covered dish luncheon. Participants bring food they consider an important part of their family culture.
- Generate “round robin” answers in which everyone in the group responds to a question or issue in turn.

**Figure 3.**

Prompt Poster 2

**Effective training models productive behavior and effective life skills. It:**

- Integrates decision-making, planning, organization and implementation skill building.
- Models and reinforces workplace ethics and productive use of time.
- Integrates local and community resources.
- Provides opportunities for learners to expand social networks.
- Challenges learners to take responsibility for their own lifelong learning.

**Examples of specific ways to implement these criteria:**

Start and end classes and activities on time.

- Identify one or more days each week when participants wear “professional” dress.
- Ask participants to identify a topic they’d like to learn more about. Help them develop a plan to research their topic using community resources (people and information). Follow up with a report to the class.
- Ask participants to interview someone who works at a job they would enjoy doing. Provide guidance in developing the right approach and questions to ask.
- Ask participants to make a “time line” from birth to age 80, dividing the line into 8 segments representing 10 years each. Have them list, in each segment, some new things they needed (or will need) to learn to live well during that period in life.

**Figure 4.**

Prompt Poster 3

**Effective training inspires and motivates. It:**

- Presents accurate information.
- Increases learner knowledge about the subject matter. o Reinforces worthwhile values and principles.
- Provides opportunities for humor and fun during learning.
- Maintains a positive focus.

- Gives the learner a feeling of accomplishment.

**Examples of specific ways to implement these criteria:**

If you have a “permanent” classroom, fill the walls with inspirational posters and art. If not, write a new or funny saying on the board before each class.

- Collect inspirational or humorous stories pertinent to the topics you discuss and share them with participants.
- Collect amazing and interesting facts for generating discussions.
- Bring in an expert to talk with the class about a related topic. Make sure that this visit involves *discussion* with the class rather than a “lecture.”
- Discuss how participants might tell the difference between reliable information and hearsay.

**Figure 5.**

Prompt Poster 4

**Effective training celebrates personal and group achievements. It:**

- Incorporates incentives to mark learning milestones.
- Provides for assessment and learner-based feedback.
- Is acknowledged by the larger community.
- Provides opportunities to include children and other household members.
- Include community leaders who can bring other resources to bear for participants.

**Examples of specific ways to implement these criteria:**

- Pin small ribbons on participants who have reached a milestone or performed with excellence. Different colored ribbons can denote different accomplishments.
- Invite local officials or leaders to present “graduation” certificates and attend a reception to mingle with participants. (Candidates for political office are usually particularly eager to do this.)
- Recruit a committee of community volunteers to develop a plan for incentives and awards.
- Have a local civic or community club “adopt” your groups, providing both support and incentives.
- Involve community volunteers in planning a “graduation” reception or tea.

Ideas were collected from groups in training sessions across the state and compiled into a booklet for follow-up training sessions. Input from the learners (facilitators) became an integral part of the training process, leading to real “buy-in” from most program participants.

**Results**

As the Extension training team developed training for PACE facilitators, they were careful to model criteria identified for effective training and include activities to increase facilitators’ skills in training. The effective training model has been used in 14 training sessions with more than 300 PACE facilitators. The use of the model as an inherent part of the PACE facilitator process has resulted in successful outcomes for facilitators as

well as Families First clientele. The following quotes are representative examples of reactions.

“Thank you. This was one of the best training sessions I have been to since I began my job.”

“The demonstration of facilitating activities and how to implement them was one of the most helpful parts of the training.”

“In regards to the PACE training...we thoroughly enjoyed the atmosphere and training methods presented. This has been the first training seminar in awhile that actually produced quality results. It felt as though the University of Tennessee Extension Service...actually feels the way we, as facilitators, do with regards to our customers....We left this training ready and willing to facilitate the PACE curriculum.”

“The ability to use hands-on activities and the excellent use of communication skills was a most helpful part of the training.”

“The training was a wonderful example of teamwork.”

Table 1 summarizes the evaluation response from Families First facilitators at the first six sessions at which the training model was used and presented. Additional data is currently being collected to more completely evaluate the effectiveness of the training methods.

<b>Table 1.</b> Summary of Perceptions of Facilitators from 6 PACE Training Sessions as a Percentage of Total Response (Ranked on scale of 1 to 5 with 1 indicating "Not at all" and 5 indicating "To a great degree") n = 216					
Criteria	1	2	3	4	5
Training was learner focused	0	0	6.9	38.4	54.6
Training included active participation by learner	0	0	2.7	29.6	67.6
Learning was facilitated through peer exchange	0	0.4	9.2	29.2	61.1
Training was culturally and ethnically meaningful	0	1.3	13.0	38.9	47.2
Training encouraged learner to assume active responsibility for learning	0	0.4	5.5	36.6	57.4
Training modeled productive behavior and effective life skills	0	0	6.5	39.3	54.6
Training inspired and motivated	0	0.4	9.2	26.8	63.9
Training acknowledged individual and group achievements	0	0.4	7.9	34.7	57.4
Flow of learning was appropriate	0	0.4	10.2	36.6	53.2
Training addressed the needs of Families First participants	0	0.9	6.9	30.5	62.0

## Conclusions and Recommendations

It is naive for an Extension professional to feel that if information is delivered during a learning activity, the educational mission has been accomplished. The broader mandate that learning generate change in behavior, practice, or belief requires a much more sophisticated science and art. In today's information-rich culture, Extension's store of information no longer

makes the organization unique. Rather, Extension's organizational strength and uniqueness lie in the experience and capability of its professionals to motivate individuals and groups to action.

It is important for Extension educators to develop and field test useful models for program design and delivery that include behavior change. It is equally important for the models to be linked to sound educational theory that will be valued by partnering agencies and understood by the targeted clientele.

The process described in this article accomplished these objectives and resulted in information that now provides a framework for quality training in a broad range of FCS programming. The criteria in Table 1 list standards against which training in a variety of subjects can be measured. Descriptions of training model components in Figures 2, 3, 4, and 5 provide practical ways that the findings can be applied in any training situation. Further development of the model has resulted in additional insights with practical application beyond the scope of this article.

## Notes -

## LESSON 10

### APPROACHES TO TRAINING

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#### Systematic Approach to Training

Dear Friends,

This lesson is going to expose you towards systematic approach towards training.

The steps in training process.

After reading this lesson you will be able to

1. Understand the systematic approach towards training
2. Explain various steps in training process
3. Apply the systematic training procedure for training function in your department

#### The Training Procedure

One of the better personnel programmes to come out World War II was the Training Within the Industry (TWI) programme of the War Manpower Commission. This was basically a supervisory training programme to make up for the shortage of civilian supervisory skills during the war. One of the parts of this programme was the job instruction training course, which was concerned with how to teach? The training procedure discussed below is essentially an adoption of the job instruction training course, which has been proved to have a great value.

The important steps in training procedure are discussed below:

- a. Preparing the Instructor: The instructor must know both the job to be taught and how to teach it. The job must be divided into logical parts so that it can be taught at a proper time without the trainee losing plan. For each part one should have in mind the desired technique of instruction, that is, whether a particular point is best taught by illustration, demonstration or explanation.

A serious and committed instructor must:

- i. know the job or subject he is attempting to teach,
  - ii. have the aptitude and abilities to teach,
  - iii. have willingness towards the profession,
  - iv. have a pleasing personality and capacity for leadership,
  - v. have the knowledge of teaching principles and methods,
  - vi. be a permanent student, in the sense that he should equip himself with the latest concepts and knowledge.
- b. Preparing the Trainee: As in interviewing, the first step in training is to attempt to place the trainee at ease. Most people are somewhat nervous when approaching an unfamiliar task. Though the instructor may have executed this training procedure, many times he or she never forgets its newness to the trainee. The quality of empathy is a mark of the good instructor.
  - c. Getting Ready to Teach: This stage of the programme is class hour teaching

involving the following activities:

Planning the programme.

- Preparing the instructor's outline.
- Do not try to cover too much material.
- Keep the session moving along logically.
- Discuss each item in depth.
- Repeat, but in different words.
- Take the material from standardised texts when it is available.
- When the standardised text is not available, develop the programme and
- course content based on group approach. Group consists of employer, skilled employees, supervisors, trade union leaders and others familiar with job requirements. Group prepares teaching material.'
- Teach about the standard for the trainee like quality, quantity, waste or scrap, ability to work without supervision, knowledge or procedure, safety
- rules, human relations etc.
- Remember your standard, before you teach.

#### Planning Training Sessions

1. Every lesson should be planned.
2. Know how many and what kind of students you are teaching?
3. Layout the subject-matter.
4. Select the best method of instruction.
5. Decide what the students need in the way of preparation.
6. Make plans to capture and maintain student interest
7. Plan summary of points to be emphasised.
8. Plan for using of training aids, if any.
9. Have a rehearsal of the lesson?
10. Plan for examination questions.

Take periodical progress of the trainees, and application into account.

- d. Presenting the Operation: There are various alternative ways of presenting the operation, viz., explanation, demonstration etc. An instructor mostly uses these methods of explanation. In addition one may illustrate various points through the use of pictures, charts, diagrams and other training aids Exhibit 8.10 presents training aids. Demonstration is an excellent device when the job is essentially physical in nature. The following sequence is a favorite with some instructors:

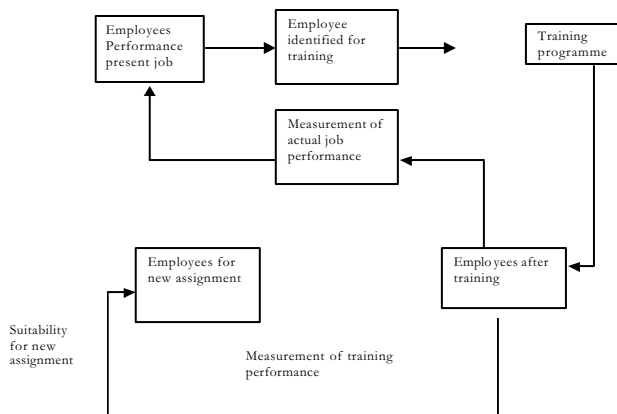
- i. Explain the sequence of the entire job.



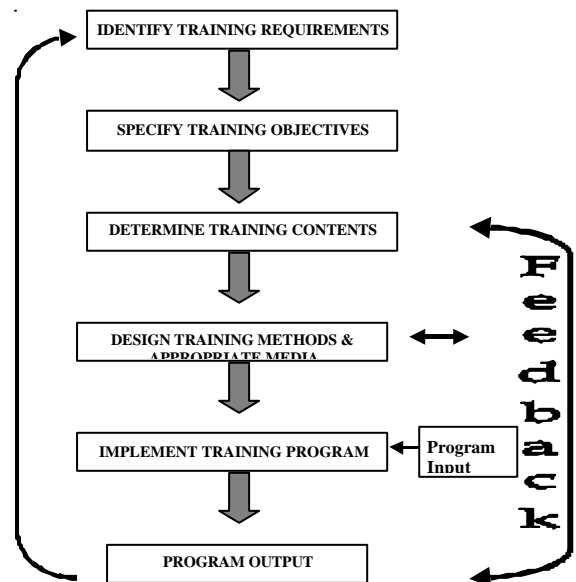
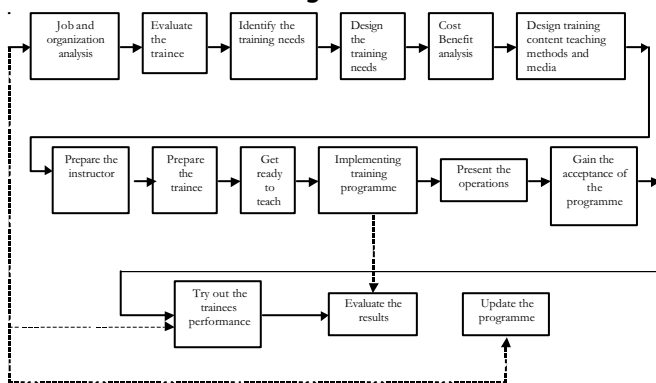
- ii Do the job step-by-step according to the procedure.
  - iii Explain the step that he is performing
  - iv Have the trainee explain the entire job.
- e. Try Out the Trainee's Performance: As a continuation of the presentation sequence given above, the trainee should be asked to start the job or operative procedure. Some instructors prefer that the trainee explains each step before doing it, particularly if the operation involves any danger. The trainee, through repetitive practice, will acquire more skill.

### Training Aids

- Films, Slides, Projectors, Movies, Stills.
  - Charts, Graphs, Rash Cards, Rannel Boards, Pictograms..
  - Pamphlets, Brochures, Handbooks, Manuals.
  - Libraries and Reading Rooms.
  - Teaching Machines, Closed Circuit IV.
  - Exhibits, Posters and Displays.
  - Notice Boards, Bulletin Boards, Enlarged Drawings.
  - Cartoons, Comic Books, Books.
- f. Follow-up: The final step in most training procedures is that of follow-up. When people are involved in any problem or procedure, it is unwise to assume that things are always constant. Follow-up can be adopted to a variable reinforcement schedule as suggested in the discussion of learning principles. The follow-up system should provide feed-back on training effectiveness and on total value of training system as shown in below



### Training Procedure



*Training Process Flow Chart*

## High Yield Training Checklist

### Before Training

1. What Are The Specific, Immediate & Important Competencies You Seek? (What Must You Know & Be Able To Do That Warrant The Training Investment?)
2. Is A Training Session The Best Way To Develop The Needed Competencies? (Consider A Book, Coaching, Mentoring, A Video On The Subject, etc.)
3. Does Your Boss Agree With The Need For The Targeted Competencies & Is She Willing To Help You Follow Thru? (Will She Prioritize & Hold You Accountable For Each New Competency?)
4. Can You Identify A Training Program With Training Objectives That Match Your Learning Objectives?
5. Will The Content And Activities Described In The Program Agenda Clearly & Convincingly Produce The Targeted Learning Objectives?
6. Is There Assigned Or Recommended Pre-Work To Improve Program Effectiveness Or Efficiency?
7. Have You Prepared Need-Specific Work Situations To Work On In Class?

### During Training

1. Did You Arrive Early Enough To Meet The Instructor And Discuss Your Learning Expectations?
2. Did You Review The Program Book Before The Class Began To Identify Key Training Areas In Advance?
3. Did You Write Your Notes, Ideas And Comments In Your Program Book To Avoid Loss & Make Later Access Easy?
4. Did You Ask Questions Whenever Key Point Clarification Was Needed Or You Wanted To Know How A Particular Skill Could Be Applied To Your Situation?

5. Did You Stretch Out Of Your Comfort Zone When Practicing New Skills During Group Role Plays?
6. Did You Maximize Practice & Feedback By Volunteering For Whole Class Demonstrations?
7. Did You Enthusiastically Participate During Large & Small Group Activities?
8. Did You Provide Thoughtful Feedback To Other Small Group Participants?
9. Did You Develop A Realistic Follow Through Plan Before Leaving?

### **After Training**

1. Did You Meet With Your Boss As Soon As Possible To Review The Program Experience & Follow Thru Plan?
2. Did You Solicit Coaching Help From A Boss Or Mentor To Help You Stay On Track With Your Follow Thru Plan?
3. Did You Schedule Competency-Building Activities Into Your Daily Planner?
4. Did You Offer To/Actually Lead A Brown Bag Overview Of The Training Program High Points For Co- Workers?
5. Did You Review Your Levels Of Competency-Specific Improvement At Two, Four And Six Months-After?
6. Did You Provide The Company, Your Supervisor And/Or The Trainer With A Review Of The Program's Productivity-Enhancing Impact?

### **Playbook for Coordination**

1. What Is The Specific Outcome Or Activity That The Team Is Responsible For? (Are They Solving A Problem (Solution), Resolving An Issue (Agreement), Or Testing A New Method (Preferable?)
2. Who Is The Team Sponsor & What Are The Performance/ Outcome Standards?
3. Does The Team Possess Or Have Access To Sufficient Resources? (What New Equipment, Capital, Support, Etc. Will Or Might Be Required?)
4. Is The Team Made Up Of The Right Players? (Are Team Mates Skillful, Knowledgeable And Innovative Enough To Produce The Desired Outcome?)
5. Do All Team Mates Have A Roster That Is Dedicated Solely To Names, Numbers & Addresses Of The Team?
6. Has A Plan Been Prepared That Clearly Communicates Expected Team Actions, Handoffs And Outcomes?
7. Does Everyone On The Team Use A Planner To Schedule & Follow Through On Team Actions?

### **Fundamentals for Execution**

1. Have All Team Mates Made Overt Commitments To Do Their Individual Best & To Work For Team Excellence?
2. Do Bosses To Whom Team Mates Report Adjust Workloads & Priorities To Allow For Team Participation?
3. Do Team Mates Look For Improvement Opportunities & Bring Them To The Team For Consideration?
4. Do Team Meetings Include Only Those People Who Are Required In Order To Accomplish The Meeting Objective?

5. Does The Team Leader Prepare & Distribute Team Meeting Summaries To The Entire Team & Others Who Need To Know?
6. Does The Team Practice Consensus When Considering Issues, Opportunities Or Problems? (Everyone's Opinions & Options Are Voiced & The Best Team Action Is Synthesized By The Leader.)
7. Do Team Mates Take Note Of & Comment On The Unique Contributions Of Others?
8. Do Team Mates Ask For Help Only When It Is Absolutely Essential?

### **Leadership for Direction**

1. Does The Leader Establish & Maintain A Strong Relationship With The Team Sponsor?
2. Does The Leader Schedule & Protect Enough Time To Do All Of The Necessary Activities?
3. Does The Leader Make Team Decisions When Necessary & Delegate Decisions When Appropriate?
4. Does The Leader Use Plans & Performance Information To Anticipate & Pre-empt Problems Or Shortfalls?
5. Does The Leader Support, Encourage & Have Fun With Team Mates?
6. Does The Leader Identify & Remedy Conflicts Between Team Mates, Team Mates & Their Bosses & Others Who Might Impact Team Success?

### **Before the Meeting**

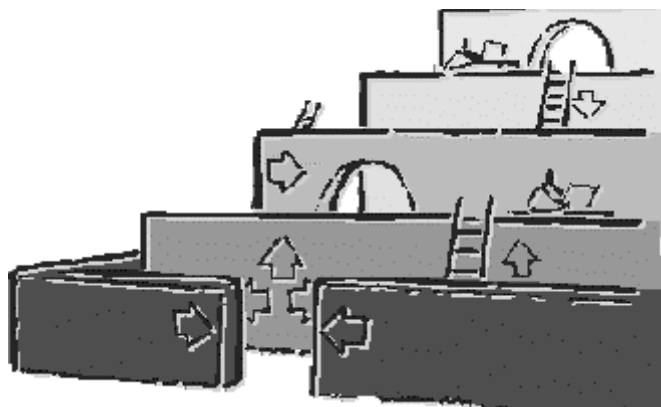
1. Is A Meeting The Best Way To Handle Your Communication Need? (Consider A Memo, Conference Call, E - mail, Video Conference, Presentation, etc.)
2. What Must You Leave The Meeting With (A Decision, Commitment, Ideas, Consensus, etc.) In Order For It To Be A Success? (After You Answer This, Revisit The Question Above)
3. What Is The Sequence Of Topics That Must Be Addressed In Order To Accomplish Your Meeting Objective?
4. In What Ways (Discussion, Brainstorming, Planning, etc.) Must You Address Each Topic And For How Long?
5. Who Must Be Present At Your Meeting For You To Accomplish Your Objective?
6. Where Should The Meeting Be Held In Order To Increase Comfort And Reduce Influence? (i.e.. You Influence More In Your Office)
7. When Should You Meet And For How Long?
8. Have You Prepared And Sent A Detailed Agenda To All Participants?

### **During The Meeting**

1. Did You Arrive Early Enough To Prep The Meeting Room And Yourself?
2. Did You Start The Meeting On Time?
3. Did You Confirm That Everyone Received And Understood The Agenda And Is Prepared To Work?

- ## After the Meeting

- Did You Probe Any Participants Who Were Unusually Quiet Or Who Expressed Reservations With Topics Or Outcomes?



## Activity and Assignment

- ## Game

### Conducting Training Programme:

For this game, from five teams with your classmates. Each team will play one activity as follows:

Team No.	Activity
1.	Identifying the training needs on the basis of job analysis, man-analysis, through questionnaire method, observation method, interview method etc.
2.	Formulating training programme and schedule by analysing the tasks and/ or activities.
3.	Writing the training material based on the operations, training needs, skills, knowledge and attitude to be imparted. Write the material according to the break-up of the programme.
4.	Administering the programme - Divide the team into: (i) instructors, (ii) operators of audio-visual aids, and (iii) secretarial assignments. Train the instructors and other members of the team in doing their activities. Allocate the lessons or sessions to the instructors based on their experience and/or interest.
5.	Evaluation and feedback: Divide the team into four persons. One person evaluates the task of identifying the needs, second person evaluates the task of formulating programmes and schedule, third person evaluates the task of administering the programme and fourth person co-ordinates these four and provides feedback information to the team concerned in time and follows up the control, carrying out etc.

[illegible]

## LESSON 11

### TRAINING NEED ASSESSMENT

Dear Friends

Now you know the systematic approach to training and training process.

In this lesson you are going to be exposed to the first step of training process i.e. Training Need Identification.

The right identification of training needs is the most significant and crucial job for a manager.

As a Manager you must also know what are various methods to training need identification, which is explained in this lesson.

A Needs Assessment is a systematic exploration of the way things are and the way they should be. These “things” are usually associated with organizational and/or individual performance.

WHY design and conduct a Needs Assessment? We need to consider the benefits of any Human Resource Development (HRD) intervention before we just go and do it:

- What learning will be accomplished?
- What changes in behavior and performance are expected?
- Will we get them?
- What are the expected economic costs and benefits of any projected solutions?

We are often in too much of a hurry. We implement a solution, sometimes but not always the correct intervention. But we plan, very carefully and cautiously, before making most other investments in process changes and in capital and operating expenditures. We need to do the same for Human Resource Development.

The largest expense for HRD programs, by far, is attributable to the time spent by the participants in training programs, career development, and/or organization development activities. In training, costs due to lost production and travel time can be as much as 90-95% of the total program costs. Direct and indirect costs for the delivery of training are about 6% of the total cost, and design and development count for only about 1-2% of the total (2). Realistically, it makes sense to invest in an assessment of needs to make sure we are making wise investments in training and other possible interventions.

Training needs are identified on the basis of organisational analysis, job analysis and man analysis. Training programme, training methods and course content are to be planned on the basis of training needs. Training needs are those aspects necessary to perform the job in an organisation in which employee is lacking attitude/apptitude, knowledge, skill.

**Training needs = Job and Organizational requirement – Employee specifications**

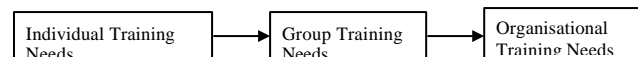
Training needs can be identified through identifying the organisational needs based on:

- i. **Organisational Analysis:** This includes analysis of objectives, resource utilisation, environments, climate: Organisational strengths and weaknesses in different areas like accidents, excessive scrap, frequent breakage of machinery, excessive labour turn-over, market share, and other marketing areas, quality and quantity of the output, production schedule, raw materials and other production areas, personnel, finance, etc.
- ii. **Departmental analysis:** Departmental strength and weakness including special problems of the department or a common problem of a group of employees like acquiring skills and knowledge in operating computer by accounting personnel.
- iii. **Job Role Analysis:** This includes study of jobs/roles, design of jobs due to changes, job enlargement, and job enrichment etc.
- iv. **Manpower Analysis:** Individual strengths and weaknesses in the areas of job knowledge, skills etc.

#### Methods Used in Training Needs Assessment

##### Group or Organisational Analysis Individual Analysis

Organisational goal and objectives	Performance appraisal
Personnel/ Skill inventories	Work Sampling
Organisational climate indices	Interviews
Efficiency indices	Questionnaires
Exit interviews	Attitude survey
MBO or work planning systems	Training progress
Quality circles	Rating scales
Customer survey/satisfaction data	Observation of behaviour
Consideration of current and projected changes	



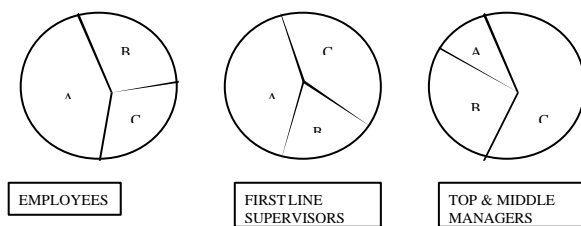
#### Assessment Methods

The following methods are used to assess the training needs:

- i. Organisational requirements/weakness.
- ii. Departmental requirements/weaknesses.
- iii. Job specifications and employee specifications.
- iv. Identifying specific problems.
- v. Anticipating future problems.
- vi. Management's requests.
- vii. Observation.
- viii. Interviews.
- ix. Group conferences.
- x. Questionnaire surveys.
- xi. Test or examinations
- xii. Check lists

### xiii. Performance Appraisal

#### Training Needs for Employees at different Level



#### Training Content for Different Categories of Employees

Training methods and content may not be the same for different categories of employees. As such management has to train the employees of different categories in different areas and through different methods based on the job analysis. Training methods and content for a few jobs are discussed hereunder with a view to giving an idea to the reader

##### Supervisory Training

Supervisors mostly learn to supervise under the guidance of a manager. Hence, the emphasis should be on the on-the-job training methods. These methods can be supplemented by various off-the-job training methods. Course content of training to this category include: production control, organisation methods, work/activity control, method study, time study, job evaluation, company policies and practices, personnel policies, procedures, programmes, training the subordinate, grievance handling, disciplinary procedure, communication, effective inspection, report writing, performance appraisal, personnel records, dealing with absenteeism, labour turn-over, industrial and labour laws, leadership qualities etc.

##### Sales Training

Emphasis should be towards on-the-job as well as off-the-job training methods in training the sales personnel. Course content include job knowledge, organisational knowledge, knowledge about the company products, Customers, competitors, sales administration procedures, law concerning sales, special skills like prospecting, making presentations, handling objections, closing the sales etc., employee attitudes such as loyalty to the company and trust in the company products, understanding and tolerance with regard to potential and existing customers.

##### Clerical Training

Emphasis may be given on the off-the-job training in training the clerical personnel. The training content includes organisation and methods, company policies, procedures and programmes, background knowledge of the company, forms, reports, written communication, clerical aptitude, maintaining ledgers, records etc

##### Clerical Training

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### Four Steps to Conducting A Needs Assessment:

#### Step 1. Perform A "Gap" Analysis.

The first step is to check the actual performance of our organizations and our people against existing standards, or to set new standards. There are two parts to this:

- Current situation: We must determine the current state of skills, knowledge, and abilities of our current and/or future employees. This analysis also should examine our organizational goals, climate, and internal and external constraints.
- Desired or necessary situation: We must identify the desired or necessary conditions for organizational and personal success. This analysis focuses on the necessary job tasks/standards, as well as the skills, knowledge, and abilities needed to accomplish these successfully. It is important that we identify the critical tasks necessary, and not just observe our current practices. We also must distinguish our actual needs from our perceived needs, our wants.
- The difference the "gap" between the current and the necessary will identify our needs, purposes, and objectives.
- What are we looking for? Here are some questions to ask, to determine where HRD may be useful in providing solutions: (3)
- Problems or deficits. Are there problems in the organization which might be solved by training or other HRD activities?
- Impending change. Are there problems which do not currently exist but are foreseen due to changes, such as new processes and equipment, outside competition, and/or changes in staffing?
- Opportunities. Could we gain a competitive edge by taking advantage of new technologies, training programs, consultants or suppliers?
- Strengths. How can we take advantage of our organizational strengths, as opposed to reacting to our weaknesses? Are there opportunities to apply HRD to these areas?
- New directions. Could we take a proactive approach, applying HRD to move our organizations to new levels of performance? For example, could team building and related activities help improve our productivity?
- Mandated training. Are there internal or external forces dictating that training and/or organization development will take place? Are there policies or management decisions which might dictate the implementation of some program? Are there governmental mandates to which we must comply?

#### Step 2. Identify Priorities and Importance.

The first step should have produced a large list of needs for training and development, career development, organization development, and/or other interventions. Now we must examine these in view of their importance to our organizational goals, realities, and constraints. We must determine if the identified needs are real, if they are worth addressing, and specify their importance and urgency in view of our organizational needs and requirements (4). For example (5):

- Cost-effectiveness: How does the cost of the problem compare to the cost of implementing a solution? In other words, we perform a cost-benefit analysis.
- Legal mandates: Are there laws requiring a solution? (For example, safety or regulatory compliance.)
- Executive pressure: Does top management expect a solution?
- Population: Are many people or key people involved?
- Customers: What influence is generated by customer specifications and expectations?

If some of our needs are of relatively low importance, we would do better to devote our energies to addressing other human performance problems with greater impact and greater value.

### Step 3. Identify Causes of Performance Problems and/or Opportunities.

Now that we have prioritized and focused on critical organizational and personal needs, we will next identify specific problem areas and opportunities in our organization. We must know what our performance requirements are, if appropriate solutions are to be applied. We should ask two questions for every identified need: (6)

- Are our people doing their jobs effectively?
- Do they know how to do their jobs?

This will require detailed investigation and analysis of our people, their jobs, and our organizations — both for the current situation and in preparation for the future.

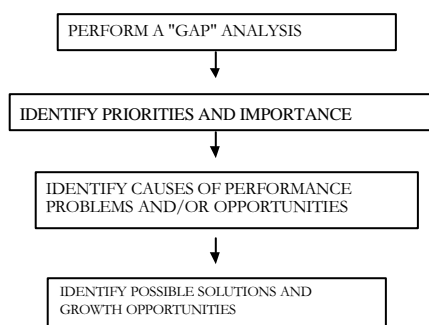
### Step 4. Identify Possible Solutions and Growth Opportunities.

If people are doing their jobs effectively, perhaps we should leave well enough alone. (“If it ain’t broke, don’t fix it.”) However, some training and/or other interventions might be called for if sufficient importance is attached to moving our people and their performance into new directions.

But if our people ARE NOT doing their jobs effectively:

- Training may be the solution, IF there is a knowledge problem.
- Organization development activities may provide solutions when the problem is not based on a lack of knowledge and is primarily associated with systematic change. These interventions might include strategic planning, organization restructuring, performance management and/or effective team building.

#### Training Need Assessment Flow Chart



### Techniques for Investigating Organizational and Personal Needs:

Use multiple methods of Needs Assessment. To get a true picture, don’t rely on one method. It is important to get a complete picture from many sources and viewpoints. Don’t take some manager’s word for what is needed.

There are several basic Needs Assessment techniques. Use a combination of some of these, as appropriate:

- direct observation
- questionnaires
- consultation with persons in key positions, and/or with specific knowledge
- review of relevant literature
- interviews
- focus groups
- tests
- records & report studies
- work samples

An excellent comparison of the advantages and disadvantages of each of these methods can be found in the Training and Development Journal. (7)

Remember that actual needs are not always the same as perceived needs, or “wants”. Look for what the organization and people really need they may not know what they need, but may have strong opinions about what they want.

Use your collected data in proposing HRD solutions:

- Use your data to make your points. This avoids confronting management since your conclusions will follow from your Needs Assessment activities.
- Everybody should share the data collected. It is important to provide feedback to everyone who was solicited for information. This is necessary if everyone is to “buy into” any proposed training or organization development plan.

Having identified the problems and performance deficiencies, we must lay out the difference between the cost of any proposed solutions against the cost of not implementing the solution. Here’s an economic “gap analysis”:

- What are the costs if no solution is applied?
- What are the costs of conducting programs to change the situation?

The difference determines if intervention activities will be cost-effective, and therefore if it makes sense to design, develop, and implement the proposed HRD solutions.

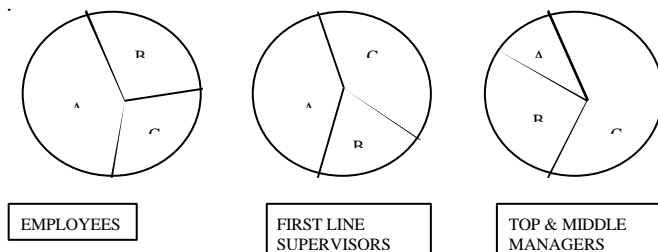
### Summary Steps in A Needs Analysis:

- Perform a “gap” analysis to identify the current skills, knowledge, and abilities of your people, and the organizational and personal needs for HRD activities
- Identify your priorities and importance of possible activities
- Identify the causes of your performance problems and/or opportunities Identify possible solutions and growth opportunities.

and finally:

- Compare the consequences if the program is or is not implemented
- Generate and communicate your recommendations for training and development, organization development, career development, and/or other interventions

### Training Needs for Employees at different Level



A: Technical Skills And Knowledge

B: Knowledge On Organisation And External

C: Conceptual And Interpersonal Skills

## Quick Review

### Training Assessment Methods

- Identifying Specific Problems: Such problems are: productivity, high costs, poor material control, poor quality, excessive scrap and waste, excessive labour management troubles, excessive grievances, excessive violation of rules of conduct, poor discipline, high employee turnover and transfers, excessive absenteeism, accidents, excessive fatigue, fumbling, discouragement, struggling with the job; standards of work performance not being met, bottlenecks in production, deadliness not being met, and delayed production. Problems like these suggest that training may be necessary. For this the task and the workers should be closely observed and the difficulties found out.
- Anticipating Impending and Future Problems bearing on the expansion of business, the introduction of new products, new services, new designs, new plant, new technology and of organisational changes concerned with manpower inventory for present and future needs.
- Management Requests: The supervisors and managers may make specific request for setting training programmes. Though this method is simple and a correct evaluation of the employees performance deficiencies can be made, but often such recommendations may be built on faulty assumptions; and requests may not coincide with each other or organisational goals.
- Interviewing and Observing the Personnel on the Job: Interviewing personnel and direct questioning and observation of the employee by his supervisors may also reveal training needs.
- Performance Appraisal: An analysis of the past performance records of the perspective trainee and comparing his' actual performance with the target performance may provide clues to specific interpersonal skills that may need development.

- Questionnaires: Questionnaires may be used for eliciting opinion of the employees on topics like communication, satisfaction, job characteristics, their attitude towards working conditions, pay, promotion policies etc. These will reveal much information about where an employee's skills and knowledge are deficient.
- Checklist: The use of checklist is a useful supplement to interviews and observations. Through it, more reliable information can be obtained and the data got are quantifiable. This facilitates evaluating the training programme's effectiveness.
- Morale and Attitude Surveys: An occasional personnel audit may be conducted to forecast future promotions, skill requirements, and merit rating, to initiate informal discussions and an examination of records and statistics regarding personnel, production, cost, rejects and wastages. All these generally reveal the potential problems to be tackled through training programmes.
- In addition, tests of the interpersonal skills through handling of posed cases and incidents, may also reveal training needs.
- Test or examinations.
- Check lists.
- Performance appraisal.

## Check List For Identifying Training And Development Requirements

### Determine Immediate Needs

- Evaluate current 'training and development programmes to determine whether training produces the desired behavioural changes.
  - Evaluate ongoing training programmes.
    - Review training documents for adequacy.
    - Observe trainers and trainees in the learning environment of a classroom, a shop or a laboratory.
    - Analyse in-course and end-of-course test results.
    - Interview trainers and trainees.
  - List and analyse shortfalls in the process or products. Determine whether they are due to:
    - Poor organisation;
    - Inadequate supervision;
    - Poor communication;
    - Improper personnel selection or policies or procedures;
    - Unclear policies;
    - Poor job design;
    - Equipment or materials problems;
    - Work methods;
    - Inappropriate work standards;
    - Inadequate operator or supervisory training.
- Survey all the aspects of the operations of an enterprise to determine the areas where additional training is required.

- a. Compare job descriptions and applicant specifications with personnel records.
  - b. Analyse performance ratings.
  - c. Analyse all the records of an enterprise to identify areas of possible deficiency.
  - d. Identify and analyse operating problems.
  - e. Use interviews, questionnaires, group conferences, tests, and work samples to determine training problems.
  - f. Subject each problem to a careful analysis to determine whether it is due to: (1) Poor organisation;
2. Inadequate supervision;
  3. Unclear or ambiguous policies;
  4. Poor communication;
  5. Improper, personnel selection policies;
  6. Poor job designs;
  7. Equipment or material deficiencies;
  8. Improper work methods;
  9. Inappropriate work standards;
  10. Training deficits.
- iii. Determine Long-range Training Needs
    - a. Analyse an enterprise's plans, policies and forecast to determine their potential impact on staffing needs.
    - b. Identify and analyse future systems, equipment, techniques, and procedures to determine their impact on personnel requirements.
  - c. Determine whether current training systems will support future personal requirement in terms of:
    - i. Operative personal workers;
    - ii. Supervisory personnel;
    - iii. Managerial personnel;
  - d. Identify training System shortfalls.
  - m. For each training requirement, determine whether training be provided on or off the premises, and whether it should be normal or on-the-job. Consider:
    - a. Comparative costs: and
    - b. The availability of in-house personnel, equipment and facilities.
  - iv. Summaries training needs.
  - v. For off-the-premises programmes, develop Objectives, prepare contract specifications, solicit and evaluate proposals, and select contractors.
  - vi. For in-house programmes, develop objectives and guidelines following the procedures laid down for the purpose

## Various Approaches To Training Need Analysis

In a traditional Task or Needs Analysis, the analyst generates a list of tasks to be performed. This list is integrated into a survey to be completed by job incumbents, subject matter experts and supervisory personnel. Respondents are asked to evaluate the frequency, the criticality of each task to the successful

performance of the job, and the amount of training required to reach proficiency. The surveys are then compiled and a committee discusses the findings and approves the tasks.

For many jobs, this basic Traditional Task Analysis works just fine. For others, some different tools might be required. The following are Analysis instruments that may be incorporated into the analysis.

### People-Data-Things Analysis

Jobs are often characterized by the proportions of time spent on people, data, and things. Performance deficiencies are often the result from a mismatch between the nature of a job, and the employee's preference for focus on people, data, or things. Although most jobs entail that the jobholder work with all three, there is usually one of the three that the job most extensively focuses on. Listing all job responsibilities under one of the three categories will provide the information as to what major role an employee will be expected to fulfill — a people person, a data person, or a thing person. The following verbs will help you to properly place a responsibility into a category:

- people duties: advises, administer, briefs, communicates, coordinates, conducts, consults, counsels, critiques, delegates, demonstrates, directs, explains, facilitates, guide discussions, implements, informs, instructs, interviews, manages, mentors, negotiates, notifies, plans, participates, persuades, promotes, provide feedback, organizes, sells, speaks (public), sponsors, supervises, teaches, trains, tutors, welcomes
- data duties: analyzes, arranges, audits, balances, budgets, calculates, compares, compiles, computes, designs, determines, documents, estimates, forecasts, formulates, identifies, lists, monitors, obtains, predicts, prepares, selects, surveys, tracks
- thing duties: activates, adjusts, aligns, assembles, calibrates, constructs, controls, cooks, cuts, develops, disassembles, drives, grows, inspects, lifts, loads, maintains, maneuvers, monitors, mixes, operates, paints, packs, repairs, services, transports, writes

### Tabletop Analysis

Using a facilitator, a small group of 3 to 10 subject matter experts convene to identify the various tasks to be performed. A minimum of one job incumbent and one supervisor are needed to discuss the tasks. The facilitator conducts the sessions and documents the information. Through brainstorming and consensus building, the team develops a sequential list of tasks. Following this process, the team determines which tasks should be trained. Task selection is based on the frequency, difficulty, criticality and the consequences of error or poor performance. This method is labor intensive for the subject matter experts. The validity of the identified tasks is dependent upon the credibility of the selected subject matter experts. For consistency, the team of experts should remain the same throughout the process. The table-top method of job analysis typically consists of:

- Orienting the team.
- Reviewing the job.
- Identifying the duty areas associated with the job.



- Identifying the tasks performed in each duty area and write task statements.
- Sequencing the duty areas and task statements.
- Selecting tasks for training.

### Hybrid Method

This involves both a quantitative analysis and consensus building. Using job task documents, a list of tasks is compiled by an analyst. Through an iterative process involving consensus building, the validity of the task list is assessed by subject matter experts, supervisors and job incumbents. Through discussions, each task's complexity, importance and frequency are numerically rated by members of the consensus group. Once the tasks are identified, the group identifies and validates the knowledge, skills and abilities required to perform each task.

### Cognitive Task Analysis

For tasks with a high cognitive component, (i.e., decision making, problem solving, or judgments), a traditional task analysis may fail to identify those cognitive skills required to perform a given task or job. A cognitive task analysis is performed to identify and to describe the cognitive components of a task. There are a variety of methodologies available to help the instructional designer to represent and define the various knowledge structures needed to perform a task or job. These techniques can also be used to define expert systems and the "expert" in Intelligent Tutoring Systems. There are three knowledge structures: declarative, procedural and strategic:

1. Declarative knowledge tells us why things work the way they do, or that the object or thing has a particular name or location. It includes information about the concepts and elements in the domain and the relationships between them. The type of knowledge found at this level include facts, principles, rules of science and concepts. "Knowing the rules of good database design" is one example. Another is "knows the names, location, and prices of all the SKUs in inventory." Methods for eliciting declarative knowledge:
  - Card Sorting - The researcher obtains sets of concepts that broadly cover the domain (derived from glossary, texts, or gleaned from introductory tutorial talk), then transfers each concept onto a card. Subject matter experts then sorts the cards into common groups or functions according to similarity. The SMEs then creates the sorting criteria. The groups themselves are grouped until eventually a hierarchy is formed.
  - Data Flow Modeling - An expert is interviewed. The researcher then draws data flow diagram using data gathered from interview. Expert verifies diagram.
2. Procedural knowledge tells us how to perform a given task. Procedural knowledge contains the discrete steps or actions to be taken and the available alternatives to perform a given task. With practice, procedural knowledge can become an automatic process, thus allowing us to perform a task without conscious awareness. This automatically also allows us to perform more than one complex task at a given time. A couple of examples would be "creates a v-ditch using a motored grader" or "types a letter at 95 words per minute." Methods for eliciting procedural knowledge:
  - Interviewing - This is a variation of a basic interview. There are several variations. Some of them are: (1) working backwards through the problem, (2) drawing a concept map, (3) showing an expert photographs depicting system in a number of states and asking questions, (4) expert describes procedure to interviewer and then the interviewer teaches it back to the expert.
  - Discourse Analysis (observation) - An expert helps an user while a researcher records the process. The transcript is then analyzed for tasks and elements. The data is then converted into a taxonomy.
3. Strategic knowledge is comprised of information that is the basis of problem solving, such as action plans to meet specific goals; knowledge of the context in which procedures should be implemented; actions to be taken if a proposed solution fails; and how to respond if necessary information is absent. An example of this would be a production plant manager who formulates a plan to meet the needs of a greatly increased forecast. Methods for eliciting strategic knowledge:
  - Critical Decision Method (Interview) first method - Interview of expert to identify non-routine events that challenged her expertise and events which expertise made a significant difference. A time line of events is then constructed and key points are further probed.
  - Critical Decision Method (Interview) second method - A semi-structured interview is performed utilizing specific probes designed to elicit a particular type of information. The data is then examined for perceptual cues, judgment details, and decision strategy details that are not generally captured with traditional reporting methods.

### Observing the Expert Analysis

This method uses an observer to record an expert performing a task. The observer is a person who aspires to be an expert in a similar job. The trainer's role is to set the analysis in motion by briefing the observer and the expert regarding the intended outcome of the observation. This method works best when three similar experts are observed by three different aspiring observers. After the observations, the observers become a task force who meet with the training analysis who functions as a discussion facilitator.

### Verification

This technique allows training program products to be determined based on work at other facilities on the same or similar tasks. This process can save significant effort and cost. Communication with, or benchmarking visits to the facilities will enable each facility to take advantage of existing experience and materials. Use of this technique requires the help of SMEs and a trained facilitator. These experts use various lists and documents to decide which tasks apply and to identify the tasks that require modification to reflect job requirements. The verification technique consists of the following steps:

- Gathering relevant existing training materials and task information from local and external sources.
- Comparing this information to the facility-specific needs.
- Modifying the information as needed.

- Verifying the accuracy of the information by Subject Matter Experts.

### Functional Analysis

When a position that performs a large number of tasks (e.g., management or engineering) is being analyzed, a technique called functional analysis can be used. Rather than conducting a job analysis to identify specific tasks, major functions within the position are identified. After the competencies necessary to perform the major functions are identified, those competencies can be analyzed to determine objectives for training. For example, a manager might make many plans such as production planning, personal requirements, facility and equipment requirements, forecasting materials, and formulating budgets. The training objectives needed to perform these actions might read as: Create a Gantt Chart, Build a Capacity Requirement Plan, or Use the Basic Exponential Smoothing Model for forecasting.

### Templating

Training content can be determined by the careful review and analysis of a template (a list of system facilities, procedures, theory topics, or generic learning objectives). The template technique uses a simplified process for determining content or developing learning objectives associated with the operation or maintenance of a specific system. This technique produces generic and system-specific learning objectives for the training and evaluation of personnel. Some organizations have approached the design of training based on the systems an individual operates or maintains. A template containing generic learning objectives is reviewed by subject matter experts for applicability. This approach directly generates system-specific terminal and enabling learning objectives. It is important that the template be carefully reviewed to determine the applicability of each item to the system. If this review is not accomplished, the result can readily become “know everything about everything.” The template technique includes the following steps:

- Develop or modify an existing template to meet facility needs.
- Use of a trainer and a subject matter experts to select applicable objectives and/or complete portions of the template for a given system, component, or process.

### Document Analysis

This technique is especially valuable when accurate procedures and other job related documents are available. Document analysis is a simplified technique for determining required knowledge and skills directly from operating procedures, administrative procedures, and other job related documents. A SME and a trainer review each section and step of the procedure or document to determine training program content. Document analysis consists of the following steps:

- Review the procedure or document and list the knowledge and skills required by a worker.
- Verify the accuracy of the results.

Now try to think, discuss with friends, observe and write about your conclusion on following:

1. List down various incidences leading to identification of training needs in any organization.

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2. What is the link between training need identification and organization objectives.

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## Activity and Assignment

1. Carry out Training need Identification for any Company.
2. Prepare Job Description and Job Specification for training manager and explain how it will help in training need analysis.
3. What is the role of need analysis in training? Do you think that all training programmes are based on such analysis.
4. How do you identify the training needs of an enterprise?

## Cases

### Cases 1. Credit Appraisal To Computer Applications

Mr. Naveen has been working as a Manager (Credit Appraisal) in State Bank of India since 1970. He got first rank in his M.A. from Andhra Universities in 1969. He rose from Officer - Grade IV to Officer Grade I in a short span of 10 years. Personnel records of the bank show that he is an efficient manager in Agricultural Credit, Industrial Credit and Credit to small business etc. The bank is planning to computerise the project appraisal department. In this connection Mr. Naveen was asked to take training in computer operations. But he was quite reluctant to undergo training.

### Question

1. Why was Mr. Naveen reluctant to undergo training?

## Also Observe Some of the Formats Realting to Needs Assessment Here

### Instructional Skills Inventory

Name: \_\_\_\_\_ Date: \_\_\_\_\_

This inventory lists 34 skills which successful instructors use when conducting a training session in a classroom. It will help you identify your strengths and potential areas for development.

**The skills are organized in the following categories:**

- Demonstrating Preparation
- Establishing a Learning Climate
- Making Presentations
- Leading Discussions and Question/Answer Sessions
- Conducting Learning Exercises

To complete the inventory, read each skill. Assess your level of competence/confidence for each skill by assigning a rating in the column indicated.

**Use the rating scale below:**

- 1 = You consider this skill to be a development need
- 2 = You consider this skill to be adequate, but not a clear strength
- 3 = You consider this skill to be a real strength

**After you've completed the survey:**

- Identify your 3 strongest skills
- Identify the 3-5 skills that you would most like to develop

### Instructional Skills Inventory

Skill	Rating
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#### Demonstrating Preparation

1. Explain the learning objectives, program agenda, and role expectations up front.
2. Demonstrates knowledge of the subject matter.
3. Is well organized and advances the various learning activities smoothly.
4. Manages time effectively, controls distractions, and maintains an appropriate learning pace.
5. Uses transitions to provide flow and a sense of continuity among the various learning activities.
6. Obtains closure at appropriate points with summary statements.

#### Establishing a Learning Climate

7. Is comfortable working with the group.
8. Helps participants see the relevance of the program to their jobs.
9. Uses vocabulary which is not offensive, condescending, or patronizing.
10. Is supportive and helpful to participants.
11. Listens and responds to participants' reactions.
12. Displays energy and enthusiasm.

Skill	Rating
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#### Making Presentations

13. Develops points clearly and to the point.
14. Uses body movement and eye contact to enhance delivery.
15. Uses adequate voice modulation and maintains an appropriate pace.
16. Uses concrete, simple language; avoids jargon or imprecise language.
17. Uses meaningful examples, analogies, and illustrations to clarify points.
18. Uses flip charts or other visual aids to present key points.

#### Leading Discussions and Question/Answer Sessions

19. Uses appropriate questions to direct and stimulate responses.
20. Asks follow-up and probing questions to shape and extend responses.
21. Avoids using closed-ended questions when trying to open up discussion.
22. Reinforces participants for contributing, thereby increasing participation.
23. Uses flipcharts or other visual aids to capture participants' comments.
24. Repeats questions from participants before addressing answers.
25. Draws on participants' experience for examples to illustrate points.
26. Calls on participants to evaluate appropriateness of a given response.
27. Avoids biasing participants by overusing an experience or opinions.

Skill	Rating
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#### Conducting Learning Exercises

28. Gives complete, concise, and clear instructions.
29. Explains the purpose of the exercise as well as the mechanics.
30. Monitors learning exercises unobtrusively and offers help when needed.
31. Facilitates the exchange of experiences, so participants can learn from one another during the debriefs of learning exercises.
32. Asks appropriate initiating and clarifying questions to prompt and extend participants' learning during the debrief session.
33. Builds upon and extends participants' ideas and analysis.
34. Uses appropriate paraphrases and summaries to highlight learning points.

\*\*\*\*\*

**List Your 3 Major Strengths Below:**

- 1.
- 2.
- 3.

### List 3 Areas That You Would Like to Improve

- 1.
- 2.
- 3.

### Notes -

[illegible]

## LESSON 12

### TRAINING FOR PERFORMANCE

Friends,

In earlier few lessons you have understood the training and development process in detail. You were also exposed in detail about the training need assessments.

**We know now that major need of training is for performance and is identified with performance gap.**

After reading this lesson you will be able to

1. Know what is performance evaluation
2. How performance evaluation helps in identification of training needs
3. What types of training needs can be classified with training needs can be identified with performance evaluation.
4. How to conduct performance coaching

#### Performance Coaching

If you don't do it first, your competitors will...

#### Introduction

Achieving excellence through performance is accomplished in two major ways. The first way is taking a proactive stance by unearthing or preventing counter-productive methods. For example, you might implement diversity and sexual harassment training programs **before** they become a problem within the organization.

The second way is to correct performance problems that arise within the organization. This is accomplished by first, identifying the **root cause** and secondly, implementing a plan of action to correct the problem. Although people are our most important asset, sometimes it seems as if they are our biggest headache.

There are four major causes of performance problems:

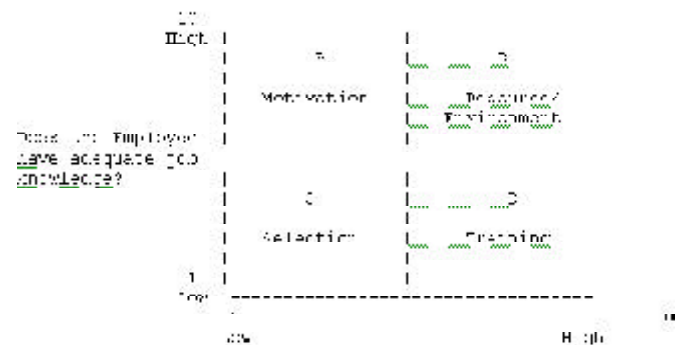
**Knowledge or Skills** - The employee does not know how to perform the process correctly - lack of skills, knowledge, or abilities.

**Process** - The problem is not employee related, but is caused by working conditions, bad processes, etc, etc.

**Resources** - Lack of resources or technology.

**Motivation or Culture** - The employee knows how to perform, but does so incorrectly.

The Performance Analysis Quadrant (PAQ) is a tool to help in the identification. By asking two questions, "Does the employee have adequate job knowledge?" and "does the employee have the proper attitude (desire) to perform the job?" and assigning a numerical rating between 1 and 10 for each answer, will place the employee in 1 of 4 the performance quadrants:



Does the employee have the proper attitude (desire) to perform the job?

1. Quadrant A (Motivation): If the employee has sufficient job knowledge but has an improper attitude, this may be classed as motivational problem. The consequences (rewards) of the person's behavior will have to be adjusted. This is not always bad...the employee just might not realize the consequence of his or her actions.
2. Quadrant B (Resource/Process/Environment): If the employee has both job knowledge and a favorable attitude, but performance is unsatisfactory, then the problem may be out of control of the employee. i.e. lack of resources or time, task needs process improvement, the work station is not ergonomically designed, etc.
3. Quadrant C (Selection): If the employee lacks both job knowledge and a favorable attitude, that person may be improperly placed in the position. This may imply a problem with employee selection or promotion, and suggest that a transfer or discharge be considered.
4. Quadrant D (Training): If the employee desires to perform, but lacks the requisite job knowledge or skills, then additional training may be the answer.

Also note that the fix does not have to be the same as the cause. For example, you can often fix a process problem with training or maybe fix a motivation problem with attitude or (affective domain) training .

#### Show, Tell, Do, and Check

#### Lacks the Skills, Knowledge, or Abilities to Perform

This problem generally arises when there is a new hire, new or revised process, change in standards, new equipment, new policies, promotion or transfer, or a new product. In this case, there is only one solution...training. The training may be formal classes, on-the-job, self-study, coaching, etc. To determine if training is needed, we only need to ask one question, "Does the employee know how to perform the task?" If the answer is yes, then training is not needed. If the answer is no, then training is required. This is where good coaching skills come in.

## Coaching Skills

Many people tend to use the terms coaching, mentoring, and training interchangeably. However, there are differences. Mentoring is often thought of as the transfer of wisdom from a wise and trusted teacher. He or she helps to guide a person's career, normally in the upper reaches of the organization. However, this perception is starting to change as organizations are now implementing mentoring at all levels of a company structure.

Note: Mentor comes from the age of Homer, in whose Odyssey, Mentor is the trusted friend of Odysseus left in charge of the household during Odysseus's absence. Athena, disguised as Mentor, guides Odysseus's son Telemachus in his search for his father. Fénelon in his romance *Télémaque* (1699) emphasized Mentor as a character, and so it was that in French (1749) and English (1750) mentor, going back through Latin to a Greek name, became a common noun meaning "wise counselor." Mentor is an appropriate name for such a person because it probably meant "adviser" in Greek.

Training is about **teaching** a particular skill or knowledge.

Coaching, on the other hand, is about **increasing** an individual's knowledge and thought processes with a particular task or process. It creates a supportive environment that develops critical thinking skills, ideas, and behaviors about a subject. Although it is closely tied to training, it is more personal and intimate in nature.

Also, the main difference between a coach and a trainer, is that coaching is done in real time. That is, it is performed on the job. The coach uses real tasks and problems to help the learner increase his or her performance. While in training, examples are used within the classroom (the task or problems may be based upon real ones however).

Mentoring is more career developing in nature, while training and coaching are more task or process orientated. Also, mentoring relies on the mentor's specific knowledge and wisdom, while coaching and training relies on facilitation and developmental skills. Although there are these differences, you could say that the three are synergistic and complementary, rather than mutually exclusive as most people would agree that a good coach trains and mentors, a good trainer coaches and mentors, and a good mentor trains and coaches.

**A performance coach is also a:**

- Leader - who sets the example and becomes a role model.
- Facilitator - is able to instruct a wide verity of material.
- Team Builder - pulls people into a unified team.
- Peace Keeper - acts as a mediator.
- Pot Stirrer - brings controversy out in the open.
- Devil's Advocate - raises issues for better understanding.
- Cheerleader - praises people for doing great.
- Counselor - provides intimate feedback.

**In order to coach, it help to use a few facilitating techniques:**

- Draws people out:
- "What do others think?" or "What do you think?"

- "I've heard from (name) so far...are there any other thoughts?"
- "And what else?"
- Silence (20-30 seconds) - gives the learners a chance to think. Also, groups tend to abhor silence, if you wait long enough someone will usually speak up.
- "(Name), you look like you have something to say..."
- Interprets comments:
- Words verses tune or tone (many questions are not really questions but a need for self-assurance).
- Intent verses wording (learners often have a hard time wording new subject matters).
- Sees beyond the learners paradigms and filters.
- Clarifies thoughts or comments
- Use models and experiences to bring life to the subject.
- Looks for multiple points to expound on the subject.
- Looking for similarities and differences.
- Senses group energy
- Sparks up the group with various energizers.
- Takes breaks as needed.
- Has a sense of timing.
- Handling objections
- Try not to personalize (the learners will become defensive).
- Reflect on the objection for a moment to ensure you understand the objection.
- Encourage conversation.
- Remember to breath and relax.
- How we treat each other:
- Accepting each other into the group.
- Individual responsibility.
- Being right verses being successful.
- Influence verses dominance (pull rank).
- Confidentiality and trust.
- Supporting each other.
- Active listening.
- Conflict resolution.

## Process or Environmental Problems (Not Related to Employees)

Many performance problems are due to bad process, that is, the process does not support the desired behavior. It has often been said that people account for 20% of all problems while bad processes account for the rest. See the Continuous Process Improvement Page for tracking down inefficient processes.

## Resources

Just because the problem is caused by a lack of resources or technology, does not mean expenditures are needed. Remember, the fix does not have to be the same as the cause. In this case you might be able to get with your team to brainstorm new processes or procedures that will eliminate the need for new resources.

## Motivation



Often the employee knows how to perform the desired behavior correctly, the process is good, and all resources are available, but for one reason or another, chooses not to do so. It now becomes a motivational issue. Motivation is the combination of a person's desire and energy directed at achieving a goal. It is the cause of action. Motivation can be intrinsic - satisfaction, feelings of achievement; or extrinsic - rewards, punishment, or goal obtainment. Not all people are motivated by the same thing, and over time their motivation changes.

Although many jobs have problems that are inherent to the position, it is the problems that are inherent to the person that cause us to lose focus from our main task of getting results. These motivational problems could arrive from family pressures, personality conflicts, a lack of understanding how the behavior affects other people or process, etc.

When something breaks the psychological contract between the employee and the organization, the leader must find out what the exact problem is by looking beyond the symptoms, find a solution, focus on the problem, and implement a plan of action. One of the worst situations that a leader can get into is to get all the facts wrong.

Start by collecting and documenting what the employee is not doing or should be doing - tasks, special projects, reports, etc. Try to observe the employee performing the task. Also, do not make it a witch hunt, observe and record what the employee is not doing to standards. Check past performance appraisals, previous managers, or other leaders the employee might have worked with. Try to find out if it is a pattern or something new.

Once you know the problem, then work with the employee to solve it. Most employees want to do a good job. It is in your best interest to work with the employee as long as the business needs are met and it is within the bonds of the organization to do so.

### Causes of Problems

Expectations or requirements have not been adequately communicated.

This motivational issue is not the fault of the employee. By providing feedback and ensuring the feedback is consistent, you provide the means for employees to motivate themselves to the desired behavior. For example, inconsistent feedback would be for management to say it wants good safety practices, then frowns on workers who slow down by complying with

regulations. Or expressing that careful workmanship is needed, but reinforces only volume of production.

Feedback must be provided on a continuous basis. If you only provide it during an employee's performance rating period, then you are NOT doing your job.

Also, ensure that there is not a difference in priorities. Employees with several tasks and projects on their plates must be clearly communicated as to what comes first when pressed for time. With the ever increasing notion to do more with less, we must understand that not everything can get done at once. Employees often choose the task that they enjoy the most, rather than the task they dislike the most. And all too often that disliked task is what needs to get performed first.

### Lack of Motivation

A lack of motivation could be caused by a number of problems, to include personal, family, financial, etc. Help employees to recognize and understand the negative consequences of their behavior. For counseling techniques see Leadership and Motivation and Confrontation Counseling. For some training exercises see Performance Counseling Activity.

### Shift in Focus

Today, it's a lucky employee (or unlucky if that employee thrives on change) that does not have her job restructured. Changing forces in the market forces changes in organizations. When this happens, ensure that every employee knows:

How has the job changed and what are the new responsibilities?

Why the job was restructured. Is it part of a longer overhaul?

How will their performance be evaluated and by whom?

Do they need to learn new skills?

Can the old responsibilities be delegated?

How will their career benefit from this transition?

What new skills or training do they need to perform successfully?

Will this make them more marketable in the future?

By keeping them informed, you help to eliminate some of the fear and keep them focused on what must be performed.



### Performance Feedback Verses Criticism

In general, there are two different forms of information about performance - feedback and criticism. Feedback was originally an engineering term that refers to information (outcome) that is fed back into a process to indicate whether that process is operating within designated parameters. For example, the sensor in a car's radiator provides feedback about the engine temperature. If the temperature rises above a set point, then a secondary electrical fan kicks in.

When dealing with human performance, feedback refers to observable behaviors and effects that are objective and specific. This feedback needs to be emotionally neutral information that describes a perceived outcome in relation to an intended target. For example, “During the last two meetings, you announced the tasks and how to perform them, rather than asking for input. That does not give people the opportunity to take ownership of their work.” People who receive feedback in this manner can use the data to compare the end results with their intentions. Their egos should be aroused, but not bruised.

Compare this to criticism that is emotional and subjective. For example, “You dominate the meetings and people do not like it!” The recipient has much more difficulty identifying a changeable behavior other than to try to be less dominant. Also, the angry tone of the criticism triggers the ego’s defensive layer and causes it to be confrontational or to take flight (fight or flee), thus strengthening the resistance to change...which is exactly the opposite of what you need to be done. Delivering effective performance feedback takes time, effort, and skill; thus criticism tends to be a popular choice for providing feedback. Since we receive far more criticism than feedback, our egos have become accustomed to fighting it off. We have all seen people receive vital information, yet shrug it off through argument or denial, and then continue on the same blundering course.

### **Receiving Feedback**

Being able to give good feedback should not be the only goal; we also need to be aware of the need to receive and act upon feedback, even if it is delivered in a critical manner. That is, we need to develop skills that help us extract useful information, even if it is delivered in a critical tone.

Allowing attitudes of the criticizer to determine your response to information only weakens your chances for opportunity. Those who are able to glean information from any source are far more effective. Just because someone does not have the skills to give proper feedback, does not mean you cannot use your skills to extract useful information for growth. When receiving information, rather it be feedback or criticism, think “How can I glean critical information from the message.” Concentrate on the underlying useful information, rather than the emotional tones. Also note what made you think it was criticism, rather than feedback. This will help you to provide others with feedback, rather than the same emotional criticism.

### **Using Feedback**

Giving feedback, instead of criticism, can best be accomplished by following two main avenues:

**Observing behavior** - Concentrate on the behavior. Why is it wrong for the organization, team, individuals, etc.; not why you personally dislike it. Your judgment needs to come from a professional opinion, not a personal one. Report exactly what is wrong with the performance and how it is detrimental to good performance.

Concentrate on pointing out the exact cause of poor performance. If you cannot determine an exact cause, then it is probably a personal judgment which needs to be ignored.

State how the performance affects the performance of others. Again, if it does not affect others, then it is probably a personal judgment.

**Do unto others, as you want them to do unto you** - Before giving the feedback, frame the feedback within your mind.

It might help to ask yourself, “how do I like to be informed when I’m doing something wrong?”

What tones and gestures would best transfer your message? Remember, you want the recipient to seriously consider your message, not shrug it off or storm away.

### **Final Thoughts**

Ralph Doherty wrote an interesting article about “Commitment vs. Compliance” in *Beyond Computing* (July/August 1998 p. 44):

In compliance environments, employees are told what to do. Although you may turn them loose to perform their jobs, the goals and objectives come from upper-management.

In commitment environments, employees are involved in determining the strategies, directions, and tasks needed to achieve the organization’s objective’s. This is accomplished by:

Involve all essential people in developing action plans in areas that are critical to success.

Identify critical success factors and formulate the plans necessary to achieve those objectives. Everyone in the department, from the front-line workers to managers are used in this process.

Drive the methodology deeper into the organization by cultivating an environment in which almost everything is linked to employee involvement. The heart of this strategy is by sharing information and involving people at all levels of the organization. Also, hold regular team meetings in which everyone is encouraged to speak what is on their mind.

Give workers direct access to top management. This keeps top-management in tune with the wants and needs of front-line employees.

### **Read the Case and Comment your Views**

We’re Doing Great!

How Come We’re Not Performing?

#### **Many of us Misunderstand Performance**

You may be losing performance in your organization because you don’t really understand what performance is. Certainly, if all employees are getting good performance reviews from their supervisors once a year, then all must be fine, right? Wrong! If the performance of the organization’s groups, processes and employees do not contribute directly to organizational results, the organization is not performing well. Neither are the employees or the processes. They’re working hard, doing things right — but they’re not doing the right things.

Consider the following, rather simple story. The story points out the typical problems that can come from not having a performance system in place. This story is about a performance problem with employees, a trainer and an organization. The story includes:

Myth: “I’ll Know Results When I See ‘Em”

Training for Skills — or a Good Time?

What Are You Doing? What Should You Really Be Doing?

Some Reasons for a Performance Management System

Key Terms: Results, Measures and Standards



Performance Problem: Vague Priorities  
Weighting Results to Convey Priorities  
Measures: Some You Can Count and Some You Describe  
Performance Problem: Inconsistent Desired Results Across the Organization

## The Story

### A Common Misunderstanding: “I’ll Know Results When I See ‘Em’”

Employee Ed is a new employee at a print shop. He has been hired to run a machine that prints out high-quality pictures. The pictures go to other departments, including the Catalog Department, to use in brochures, catalogs, advertisements, etc.

Ed’s new supervisor, Supervisor Sam, is new on the job, too. He’s worked hard to get where he’s at. He was an expert at running the collating machine. Sam’s machine took printed images from machines like Ed’s and organized them into the Catalog Department’s final product, a catalog.

Sam doesn’t like Ed at first. Ed looks just like Sam’s brother whom Sam does not like at all. Still, as a new supervisor, Sam tries to give Ed a chance.

Sam wants to be sure that Ed does a good job. He isn’t all that sure what “good job” means, but he thinks he’ll know it when he sees it. So Sam sends Ed to a course to learn how to run the print machine. The description of the course said students would learn all about the machine. That should work out fine.

### Training for Skills — or a Good Time?

Teacher Tom wants to convince supervisors to send employees to his course. Tom claims the **result** from his course is that each student will know how to run the printing machine. Tom hasn’t really thought about how to achieve that **result**. He knows a lot about the machine and likes to tell people about it. So he thinks he’ll be a fine teacher.

Tom includes a lot of lectures in the course. He tells students all about the machine’s history, some tough times he had learning about the machine and how students can get a lot done with the machine if they know what they’re doing. The rest of the time, Tom tells students how to do the various procedures needed to run the machine. After reviewing the last procedure, Tom tells his students that the course is over. He tells them that they’ve been a good audience, he enjoyed teaching them and hopes they got a lot out of the course. Tom wants to be sure the course achieves its **result**, so he has the students fill out a questionnaire.

Ed now likes Tom a lot and feels very good about the course so he gives the course a very high rating. Tom seemed to know a lot about the machine. Tom told a lot of jokes, the room was nice and the materials were very impressive. With all the stuff Tom told Ed, Ed now feels he could do anything with the machine. Later that day, Ed tells Supervisor Sam that the course was very good. Sam is very pleased about his decision and is glad the course accomplished strong **results**.

### What are you Doing? What Should you Really Be Doing?

The next day, Sam briefly notices that Ed is much happier at his job. “Great”, Sam thinks. “A satisfied employee is a productive employee! Right?” (Wrong. Job satisfaction doesn’t mean job

performance. Some research indicates job satisfaction can actually decrease productivity.)

Later that afternoon, Sam has more time to watch Ed at his job. Soon Sam is horrified! It doesn’t seem like Ed knows what he’s doing at all! Sam thinks to himself, “I knew Ed wouldn’t work out! I just knew it!” Sam glances through several of the prints from Ed’s machine. He finds one that’s smeared and torn. Sam concludes that Ed didn’t learn anything at all. He confronts Ed. “What are you doing? You’re slow and all your prints are ruined! You’ve wasted the company’s money!” Ed feels scared and stupid.

Sam and his company have a typical performance management problem. If Sam had followed the principles of performance management, he would have been more clear to himself and to Ed about what Sam wanted as **results** from Ed’s job. Sam would have been more clear about how he would **measure** Ed’s results. Sam would have been more clear about how his expectations, or performance **standards**, for Ed.

Teacher Tom has a similar problem. If he had thought more about performance results, measures and standards, he would have thought about what knowledge and skills his students would need to run the machine. He would have thought about how he’d know if the students could actually run the machine or not. Also, he would have thought about how well students should be able to run the machine by the end of the course. It’s likely that Tom would have included time in the course for students to actually practice on the machine. He would have included some way to test students’ skill levels to ensure they achieve Tom’s preferred result. He would have included some way to later get supervisors’ feedback about employees’ skills on the job. It’s very likely that Tom’s course would have achieved its result: students who can operate their machines to some specified performance standard.

### Reasons for a Performance Management System

Back at work, Sam discusses the situation with his Boss Bob. Sam wants to fire Ed — and do it now. Bob calmly disagrees. He tells Sam, “We can turn this thing around. I’ll tell you how.”

He begins to give Sam a broad overview of a performance management system. “Basically, a performance management system is a way to ensure we get results from all our employees. Heck, if Ed’s teacher knew about performance, Ed might have learned something! They don’t call it training any more, you know. They call it Performance Technology or something like that.”

Sam interrupts, “Look. I can tell if Ed’s doing a good job or not. I’ve got his job description. I’ve used the performance appraisal form. Besides, I don’t feel good about those performance appraisals. They’re just something you do once a year, usually to fire somebody. They’re just paperwork. The guys are scared of them. I dread them. I’m trying to build a team here!”

Bob responds, “You don’t understand. A performance system is more than job descriptions. A job description lists what duties, what responsibilities a certain job has. It doesn’t tell the employee what results are really expected of him, what he’s supposed to produce. It doesn’t keep telling you, the supervisor, how well you expect the employee to be doing at his job. It

doesn't make sure that what you're doing is what your boss — and their boss's boss and their boss' boss — want you to be doing."

Bob went on to explain. "A performance system makes sure we're fair to our guys. They're getting paid what they're worth. They know what we want from them. They know what we think about what they're doing. In the long run, all of us in the company end up working toward the same thing. We're all pulling on the same rope. Maybe the biggest advantage is that we're talking to each other about what we're doing, if we're doing it right and if it's really what the company needs. Besides, we managers should have to earn our own keep around here, too. I want you to take part in our performance system, Sam. I'll help you."

### **Key Terms: Results, Measures and Standards**

Bob explains, "In the performance system, the first thing you do in figure out what results you want from the employee.

"Results are what you want Ed to produce so customers can do their jobs well. For example, Ed's internal customer, the Catalog Department, needs high-quality prints to do its job. Right?

"Measures are what you use to know if Ed is achieving the results or not. For example, how many prints is Ed making in an hour? Are Ed's prints smeared, are they torn?

"Standards are what you consider when thinking about how well Ed is doing at his good job. For example, the standard for "excellent" should be at least as many high-quality prints an hour as your best people are producing.

"After we've decided the results, measures and standards, we'll work together to track Ed's progress. We'll make sure that we're all exchanging feedback around here, including with the Catalog Department. That's the most important part.

"Any needs that Ed might have, we'll record on a development plan. That might include more training. This time, we'll make sure that teacher knows about performance management!

Sam heard everything Bob said. He was skeptical, but he decided to try the performance stuff anyway. Anyway, Bob was the boss.

### **Performance Problem: Vague Priorities**

Over the next month, Sam thought more about what he specifically wanted from Ed. He talked to Ed, too. They both decided that Ed would shoot for 500 high-quality prints an hour, 8 hours a day, Monday through Friday. High-quality would mean no smears or tears. In fact, the Director of the Catalog Department would judge whether Ed produced this result or not.

Sam was a little surprised at Ed's reaction. He thought Ed would be a little leery. Heck, Ed didn't seem concerned at all. He was actually excited! Sam actually felt better now, too.

Over the next week, Sam carefully considered the measurements for Ed's result. He realized that Ed really needed more training. "Thank goodness I found this out now," Sam thought. Sam realized this whole situation wasn't Ed's fault. He reminded himself that Ed was new, too. Sam talked to the Training Department. They suggested that Ed go to a workshop where he could actually get practice with the machine. Also, they helped

Ed find some free time on another machine during second shift. That way, Ed could get in some more practice.

Ed attended the workshop. He told Sam it was hard, but he learned a lot more about actually running the machine. He said the teacher showed him several things that he could be doing a lot better. Ed was eager to get back to work. Sam felt very relieved. This performance stuff seemed to be working out — and it wasn't nearly as hard as he'd imagined.

### **Weighting Results**

Several months later, Sam's boss, Bob, told all employees that he wanted them to take part in a Quality Circle. Sam told Ed all about it.

Ed complained to Sam that he just wanted to run his machine. That's why he accepted the job. That's what he wants to do.

Sam is now smart about results, measures and standards. He sends Ed to a seminar on Quality Circles. Maybe that'll get Ed going in the Circles. Ed took the seminar and, sure enough, came back all excited about Quality Circles. Now he spends a lot of time around the coffee machine, telling other employees how great Quality Circles are, where they started, etc.

Soon Sam tells Ed that he's not running his machine anymore. How's he going to produce his results? Ed explains that he's doing his part for his Quality Circle. Ed complains that Sam needs to make up his mind about what he wants Ed to do.

Sam goes back to Boss Bob, asking for advice. How can he get Ed to work the machine and be a good member of the Circle?

Bob explains that Sam needs Ed to run the machine and take part in the Quality Circle. Bob notices that Sam seems puzzled. Bob explains, "Ed can do both: run the machine and be a good Circle member. You just need to let him know what your priorities are. Let Ed know how much time he can spend on his machine and how much time in the Circle. Be as clear as you were before about his results and how you'd measure them. In the performance system, this is called weighting the results."

### **Measures: Some you can Count and Some you Describe**

Sam nods that he understands Bob. "But how can I measure what he does in Quality Circles?"

Bob explained, "Remember when we talked about measures? There are a couple of ways to look at measures. You can count them or you can describe them — hopefully you can do both. With the machine, you could count the number of prints Ed produced, right?. You noticed if the prints were high-quality or not. High-quality meant the images were clear and the paper was not torn. Right?"

Sam nodded.

Bob went on to explain, "About Ed's Quality Circle, though, it's really hard to count something — at least not without going crazy! Sure, you can count how many suggestions he makes. But if you do that, he'll be talking all the time and not saying anything! What other ways can you realistically measure what Ed is doing in his Circle"

Sam thought this for a minute. "Maybe I'm making this harder than it is. How about if I notice the attendance record for Ed, you know, you make sure he goes to meetings. I don't want to

write down everything that Ed says. Heck, Ed only talks in conclusions anyway!”

Bob responded that Sam seemed on the right track.

Sam explained the new situation to Ed. Ed seemed pleased. “That straightens things out. Sure, I’ll try it”.

### Performance Problem: Inconsistent Results Across the Organization

Over the next few months, Ed ran his machine just fine. His Quality Circle made lots of good suggestions to Sam and Sam’s boss, Bob. Soon, though, Ed and Sam notice that nothing was really being done about the suggestions.

Sam confronted his boss, Bob. “You’ve got plenty of ideas from us. How come nothing is being done about them?” Bob replied, “I know. I’m wondering about that myself. I’ll find out.”

Bob talked to his boss, Management Mike. Mike looked puzzled. Then he remembered, “Oh, that’s right! The Quality Circles! Yeah, those Circles are sure keeping people happy. Keep up the good work, Bob!”

Bob replied, “I thought the Circles were to improve quality, not to keep people happy. What am I missing here?”

Mike explained that he really couldn’t implement any of the suggestions from the Circle. “They’ll probably just cost more money. Right now the company needs to cut costs as much as possible.”

Now Bob was getting really irked. He said, “I thought our performance system was supposed to make sure that everyone was working toward the same goals. Why not have the Circle guys focus on cost-cutting ideas?”

Mike warned, “That could scare them big time! No, keep ‘em coming up with good ideas. They’re doing great!” Mike looked at his watch and said, “I’ve got to take off. Sorry. Keep up the good work, Bob!”

Bob left Mike’s office feeling very disappointed and sad. He thought, “We have a performance management system. Ed’s doing fine. Sam’s doing fine. I’m doing fine. Our department’s doing fine. We’re performing, right? Sure doesn’t feel like it, though.”

### So: All the Parts Are Doing Just Fine — Yet the Organization Isn’t Performing!

Employees, the department and management are all very committed and very busy. Sam’s focused on getting the most from his people, including Ed. So is Bob. They all know the results they want, how they’ll measure them and what they consider to be great work. Yet the organization really isn’t performing. It’s idling along.

This situation is not uncommon.

### Performance Consulting Practice Exercise

Identify an organization/department that would like to improve its performance in some area. Select a goal where there is a gap between desired outcome and actual outcome. These questions will help you identify possible solutions/interventions.

#### 1. Organizational Goal:

2a. Describe the gap between desired outcome and actual outcome to date.

Desired Outcome	Actual Results

2b. What are possible external factors that may be contributing to the problem?

2c. What is being done to address these factors?

3. Who are the people that are responsible for achieving this outcome? How is their actual performance different from the desired performance? How does the undesired performance impact achieving the goals?

Key job that impacts

performance: \_\_\_\_\_

Desired Performance	Actual Performance	Impact on Goals

4. What are possible causes of the performance that you want to change? Please check the appropriate box. Make notes to explain your ratings.

Yes No Unsure

- ☐ ☐ ☐ There is a clear department mission/vision.
- ☐ ☐ ☐ There is job description that identifies expectations.
- ☐ ☐ ☐ There are clear standards for acceptable performance.
- ☐ ☐ ☐ The standards are achievable.

- o o o Performers understand department priorities.
- o o o Performers have the tools they need to perform the job.
- o o o There is no interference for performing the tasks correctly.
- o o o There are enough trained performers to meet dept. goals.
- o o o Performers have received adequate training to perform the job.
- o o o Performers have demonstrated they know how to do the job.
- o o o Supervisors monitor performance to identify if performers need any help or feedback.

Yes No Unsure

- o o o Performers receive positive feedback and encouragement.
- o o o Performers receive feedback when they make mistakes.
- o o o Performers receive coaching and support from supervisors.
- o o o Performers enjoy their work.
- o o o Supervisors model/demonstrate the desired behaviors.
- o o o There are positive consequences for performing correctly.
- o o o There are no negative consequences for performing correctly.
- o o o Peers are supportive of people doing the job correctly.

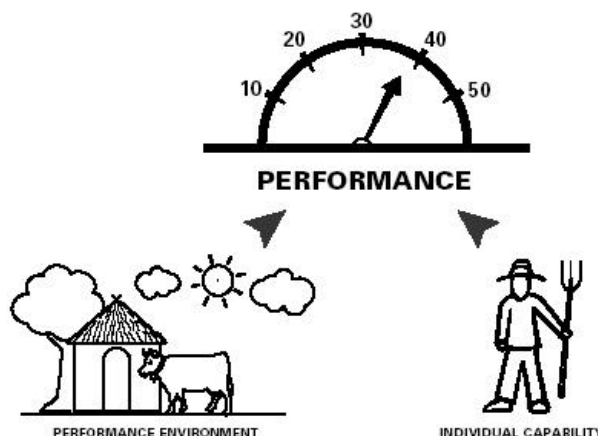
List below the primary causes for the unacceptable performance:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

For each cause explore possible solutions/interventions.

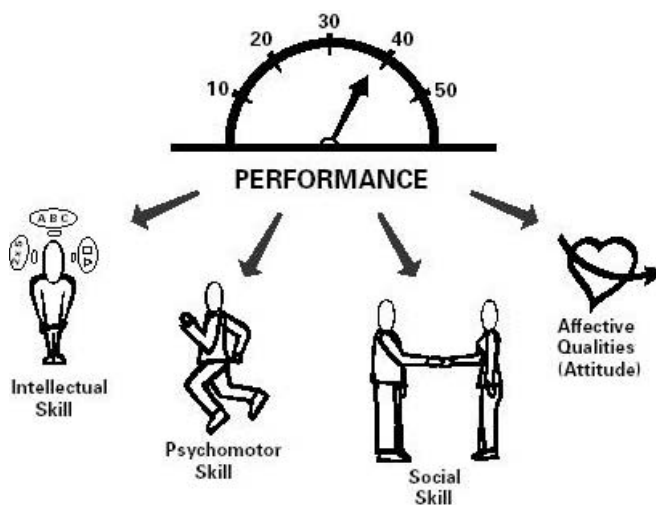
Cause	Tentative Solution/Intervention

## Training and Performance



Here the only concern is to look at the individual in the context of training. Training is intended to improve the individual trainee's capability to perform the expected job.

## Skills and Performance



## Activity and Assignment

I. Match the correct answer in column B with items in column A. Write only the letter of the correct answer on the space provided.

### Column A

1. performance evaluation

### Column B

- a. examines what is to be performed, what are the expected results of performance and what indicate performance is satisfactory or unsatisfactory

2. task analysis	b. individual capability and performance environment
3. intellectual skill	c. refers to the effectiveness of an individual's performance in a given social context
4. performance objective	d. will visualize all the steps and key elements needed to perform the job well
5. psychomotor skill	e. is a systematic process of obtaining relevant information and interpreting data to facilitate decision making
6. social skill	f. positive feelings towards one's job, clients, institution, principles, policies and activities of the organization
7. performance analysis	g. is a systematic process of observing, assessing and interpreting one's actual performance
8. dimension of job performance	h. refers to a person's subject-matter knowledge, understanding and ability to analyse, synthesize and make judgements related to the job
9. attitudes	i. knowledge, attitudes and skill
10. evaluation	j. refers to an individual's ability to drive a motor car k. specifies who is to perform the expected task, actual task to be performed, conditions of performance, expected results and criteria or standard l. needs coordinated movement of hand, body and muscles, mental abilities and intention to guide movement

1. Explain the purposes of evaluation.

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2. Name the requirements for the following:

2.1. Assessment of training effectiveness

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2.2. Observation of performance

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2.3. Systematic performance evaluation

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3. Give examples of the three different types of skill discussed in this lesson.

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## LESSON 13

### TRAINING ROOM DESIGN

Dear Friends,

After knowing the basic of what makes training success. To make training program effective and for smooth flow of training seating arrangements make a great difference now we will understand about seating arrangements.

#### Seating Arrangements

Even if the activities of the learning session do not require changing the seating rearrangements, there are several reasons to do so:

Learners are given a new perspective on the activity by sitting in a different part of the room.

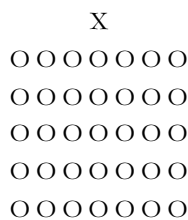
They get better acquainted with their peers.

Learners are not consistently “punished” by being at greater distances from the screen or speakers.

Small cliques do not arise - there is nothing wrong with cliques but in some cases they can become a problem by forcing their norms or agendas upon the entire group.

**Note: In the following seating arrangements, O = the learners, and x = the trainer.**

#### Traditional Seating

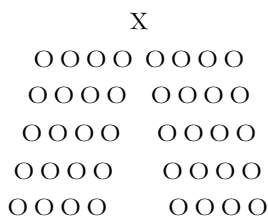


Best used for short lectures to large groups

Communication tends to be one way

Trainer cannot see the learners in the back

#### Modified Traditional



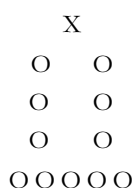
There is more participation

Allows the trainer to see all the learners

Reduces space between trainer and learners as trainer can move up aisle

Best used for short lectures to large groups

#### Horseshoe



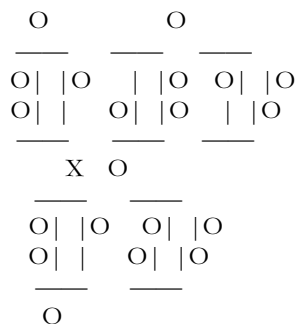
Nonverbally encourages participation by allowing eye contact between the trainer and all the learners

The trainer is able to move closer to each learner

Works well when all learners must be able to see a demonstration

Works good when learners will be involved in large group discussions

#### Modular



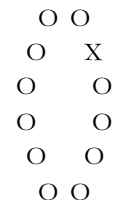
Learners can work in small groups on exercises and projects

Communication between trainer and learners is more difficult

Trainer must move between groups during lectures and activities

Good for courses that require a lot of group work

#### Circle



Most democratic and unencumbered with no status symbol

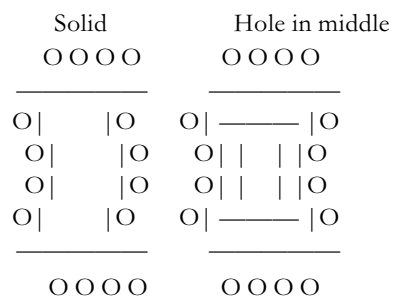
With no table each person is “totally revealed”

Subtle nonverbal communications are possible

Good for T-groups and sensitivity training

There will be conversations, shorter inputs, and more members will participate, when they sit at a round table rather than at a square table

#### Square



More formality than a circle

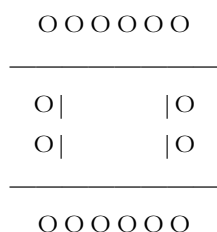
Nobody can see all the faces of the other participants

Depending where visual aids are placed, one side may become the "head of the table"

A solid table seems to encourage conversation

With a hole in the middle of the table, some people do not speak at all, and some who do speak tend to talk for longer periods of time

### Rectangle

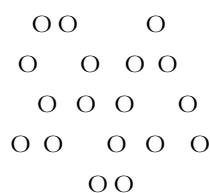


The seats at the short dimensions of the table are often seen as leadership positions (because the father sat at the head?)

If used, the learners should be forced to take distinctly different positions every now and then (i.e. randomly shift the name cards)

Fewer people can communicate face-to-face\*

### Scatter-Shot



Seems extremely haphazard but good for experiential training

Permits quick change of learner focus

Produces tremendous investments of learner energy

Works well with multiple role plays

Can quickly form into large groups

Bad for note taking

## Anxiety and Classroom Management

### Managing their Anxiety

The ideal environment for learning is one where all participants feel comfortable and free from anxiety. Most participants will experience a certain level of anxiety about attending a class where the material is unfamiliar. Adult learners in particular may experience levels of computer anxiety that are above normal.

It is a well-known fact that participant anxiety is highest at the start of the class and wanes as the morning progresses. Since participant anxiety is a well-known hindrance to learning, it is important that you do everything you can to quickly reduce the anxiety level of your participants. There are several anxiety-reducing techniques you can use to ensure that participant anxiety is reduced quickly after the class starts.

- Speak in a confident manner. Be enthused about the subject you are teaching. If you are enthusiastic about what you have

to say, the participants will sense that and focus on your enthusiasm instead of their own anxiety

- Keep the class at a pace that does not hinder learning. Don't go too fast or you will only reinforce participant anxiety.
- Be empathetic. If a participant is having problems at the start of the class, make an extra effort to help that individual before problems develop. Other participants will sense your concern and that will have a positive effect on reducing other's anxiety levels. Try not to say "I know what you feel like, I had the same experience once." Point is, no one knows how anyone else really feels and any attempt to do so makes it seem like you are patronizing. It is appropriate to say something like, "most people generally have high anxiety levels when a class begins, including the instructor!"
- Another anxiety-reducing technique is to draw attention to the fact that most class participants are on equal footing. One of the reasons for polling your participants for skill level in the beginning of the class is to let everyone know that most classes are basically homogenous in terms of participant skill level.
- Let your participants know that your teaching style is informal, that you are always ready to answer questions and that your job is to help them learn in any way you can
- Encourage participants to work together while doing exercises or labs by letting them know up front that working together is OK.

### Managing Your Anxiety

Even if you are a well-seasoned trainer, you are bound to experience a certain amount of anxiety before teaching a class. If this is the first time you are teaching a class, your anxiety level may be extremely high. Acknowledge this fact and don't wait until the day you teach to deal with your own anxiety. Listed below are several suggestions for reducing instructor anxiety.

- Prepare well for the class. If you really know your stuff, you will have less to worry about.
- The best thing that you can do before teaching is to get plenty of rest the night before. Eat a good breakfast so that you have the energy you need to make it through the day. Teaching can be exhausting and you will need to be well rested and nourished.
- If you drink coffee, try not to drink too much before class starts. It is best to drink water or other decaffeinated drinks.
- Dress comfortably. The day you teach a new class is not the day to break in a new pair of shoes.
- The night before you teach, make a checklist of things you need to do to set up the class. Arrive early to set up so that you are not rushed when the class starts. Stand at the door and greet people as they enter the classroom.
- If this is the first time you are teaching a particular class, use a teaching assistant or team-teach with someone else so you don't feel so overwhelmed.

### Classroom Management Techniques

Teaching adults does not mean that there will never be problems in the classroom. All participants bring a certain amount of psychological baggage to any class. Although it is true that

the likelihood for behavioral problems is less when teaching adults, there are some techniques for classroom management that will lessen the occurrence of problems.

- You will do well to prevent problems before they occur. Teaching a class puts the instructor in a leadership role so capitalize on that fact. Be assertive, but not aggressive, and be very specific about what you expect the participants to do.
  - If you sense that a participant is constantly straying off the topic, gently remind him or her that the time for addressing individual objectives is during breaks, lunch, or after class. You can even make yourself available after class by giving your email address to this type of participant.
  - Slightly raising the volume of your voice will do well to intervene when the class gets too noisy.
  - Use “I” messages when dealing with distractions or when changing the direction of the class.
  - The worst possible thing you can do when dealing with a difficult participant is to publicly admonish the behavior. At some point you may have to speak privately to the difficult participant about the negative affect of his or her behavior on the rest of the class. Before that occurs, try some of the following tactics when dealing with these “control issues”.
1. Use positive focus to bring attention to good behavior when it occurs and for pointing out examples of acceptable behavior. Say something like “I appreciate your holding off on asking questions until I was finished with my lecture”.
  2. Using gentle discipline means you remind them about something you said earlier in a matter-of-fact tone of voice.
  3. Actively ignore the participant who attempts to run the class by excessive questioning and interrupting.
  4. Use the concept of negative focus to draw unwanted attention to the problem participant. Sometimes the sheer act of walking over to the participant’s workstation will put them enough at ill-ease to stop the unwanted behavior.
  5. Address the whole group about a problem. If everyone receives the message that there is a problem, the need to draw attention to individuals will not be necessary.
  6. Direct confrontation may be necessary. Only use this technique after all other efforts have failed and do so in a private setting.

### Steps to Teaching a Class

**Assess the need** - You may want to do Needs Assessments and/or Skills Assessments before planning a class in order to find out exactly what topics need to be covered. If you don’t know what the participants want, how will you measure whether your training was effective? Knowing what skills and knowledge are required is essential to the development of any training event. Likewise, without knowing what skills and knowledge are possessed by the participants, an effective training event cannot be developed. Needs assessments may be conducted using surveys, interviews, focus groups and skills tests. A good source for skills tests are the Unit Tests found in the CBTWeb tutorials.

If you are determining the training needs of an organization, the process should evaluate

**Develop or buy training materials** - There is a lot to be said about not re-inventing the wheel. Depending on the topic you are teaching, there are lots of pre-developed training materials available, especially computer training materials. The common sources for pre-developed materials are vendors and publishing houses. Corporate Solutions at <http://www.corpsol.com> and Prentice Hall materials at <http://www.prenhall.com/index.html> for end-user topics can be ordered at the Cornell Campus Bookstore. Sources for technical training materials are Ziff-Davis at <http://www.zdeducation.com> and the New Riders Publishing series, which are also carried at the Cornell Campus Bookstore.

Customized training is nice, but using existing materials can save a lot of curriculum development time. Also, the people who write training materials are experts and that is their job. There is more to writing class materials than just spilling the contents of your brain about a subject onto pieces of paper.

If it is necessary to develop your own materials, use needs assessments, interviews or focus groups to get a list of topics for your event and place the topics in a logical order. Make sure you order concepts in a logical fashion especially when concepts build on other concepts. When determining the difficulty level of your training materials, address your materials to an eighth grade audience. Most word processing programs will assess any document in terms of these “readability statistics” and tell you what level audience your document is appropriate for.

Include illustrations and hands-on exercises with easy to follow instructions in your course manual. It is sometimes wise to produce a separate hands-on exercise book and a course manual and link the two by using a similar format for each with pointers to the other document.

**Pilot** - Course timing and flow can be effectively worked out by doing a pilot session before actually teaching the class. It is a good idea to practice your class with an audience that has a similar skill level to your participants. Testing each class exercise yourself is necessary to prevent problems or unexpected results in the class. Use a watch to time each part of the event so that your class is not too short or too long.

**Deliver the training** - Now comes the time when you actually deliver the training. Follow the suggestions discussed in the previous section of this manual entitled Basic Teaching and Presentation Skills. Sometimes it’s best to use a teaching assistant, especially when you teach a class for the first time

**Evaluate the training** - Participant evaluations or surveys are the most common source of determining whether or not the training event has met the objectives. Content for the participant survey can be partially based on the questions asked during the assessment phase. Course evaluations are based on the participants’ assessment of several factors that evaluate the effectiveness of the training. The factors evaluated usually include things like the content and organization of the training material, adherence to course objectives, the instructor skill level, clarity and organization of the instructor’s presentation,



relevance of the material to the participant job functions, and the training environment.

Questions are generally worded so that a numbered response is possible but there should be additional space for participant comments that are preceded by “open-ended” questions (that require a written response instead of a numerical rating) such as “Is there anything else that should have been included in the training event?” or “Are there any problems or concerns you have about the training event that were not addressed in previous evaluation questions.

Use an point system of 1 to 5 or 1 to 7, with 1 being a low score, for the participant responses to evaluation questions, rather than yes or no type questions. Including open-ended questions encourages participant openness. Sometimes the best feedback and suggestions come from candid responses to open-ended questions.

So, you evaluate the training at the end of the session by having the participants complete course evaluations, now what do you do with that information? Most training organizations track evaluation results in a spreadsheet or database to summarize participant reaction to the training. Overall results can be graphed to point out weakness in instructor delivery and techniques, course materials and content, negative training environment elements and the training’s relevance to the participant’s jobs.

Track your evaluation results so you can modify the training, staff assistance, training environment and instruction as necessary. Developing good training skills should be considered a process that improves over time and with experience. Taking an attitude of viewing effective training delivery with an eye toward continuous improvement will help you as a trainer.



**Notes -**

## Training Department

Hi Friends,

In previous few lessons you have understood the procedure followed for Training and Development.

After reading this lesson you will be able to plan and organize Training department in any organization wherever you will go for work.

Before understanding what will make an effective training department let us first understand role and activities done by HRD and training specialist department.

### Role and Activities of HRD and Training Specialist

HRD is based on the faith in the inherent potential in every human which can be manifested by giving right direction and orientation. At the same time human resource is unpredictable resource which has unlimited potential. These two statements gently hint that the organisational efficiency can be improved by optimising this resource as it is the only resource which can be adjusted and modified to meet the challenging technological and socio-economic environment.

This recognition of emphasis on human resource development has created a need for appraisal of present competence future demand and maintenance of resources for long term benefits.

HRD process maximise the use of human resource by way of optimising competence of available human resource, improving the competence for future challenges and utilising unemployed resource HRD, thus performs the role of personnel management as well as training and Development department and it therefore, needs to be studied, analysed minutely and accurately before deciding the real roles and activity of department

The roles and activities of HRD will mostly depend on the HRD mechanism being utilised, the HRD needs of the organisation and the facilities, opportunities provided

Thus the role of HRD starts from the analysis of organisational objectives/goals, in par with characteristics of available resources and desired specifications manpower planning recruitment, placement, appraisal reward, punishments and maintenance of resource is one aspect of HRD accountability, where as. organisational climate and opportunity are another.

### Role and Activities of HRD Deptt.

Accordingly the main roles of HRD can be listed as

1. Human resource planning
2. Human resource accounting
3. Human resource allocation and role planning Human resource training and development Human resource maintenance
4. Climate development of HRD

### T & D Department

The growth of organization depends on:

1. Strategic decisions taken by management and
2. Implementation of these decisions by employees.

The training and development activity is a vital link to facilitate the implementation process by imparting the required training to improve the competence of the employees & to effectively implement the management decisions.

Well trained people can be somewhat effective without well prepared strategic plans or land organizational culture but without strategic knowledge and skill every thing may collapse. Similarly good relations alone can always do good. A true competitive edge comes from the people who know what they are supposed to do and how exactly that is to be done. T & D helps the people to learn and develop this capability to bring dynamism in the organization.

## Managing A Small Training Department

### Making the Most of Your Resources

Today's organizations are expecting people to do more with less. Training departments are no exception. In fact, one fourth of all training departments in the United States consist of only one trainer. With small businesses on the rise, there are likely to be even more small training departments in the future. How can a training staff of only one to three people – with a broad range of responsibilities— ensure that it makes a significant contribution to its organization? This chapter explores strategies that trainers in small departments have used successfully by. Readers will learn keys to working with internal subject matter experts through a train-the-trainer process, as well as keys to working with external consultants and other external resources.

Successful strategies of small training departments are as varied as the individuals involved. Much more so than in large departments, trainers in small departments have a chance to place their unique stamp on an organization. The cases in this book illustrate the variety of approaches small departments use to ensure a big impact. The following key strategies are essential to the small training organization's success:

- Determining priority training needs
- Establishing your credibility and building a strong base of support for your efforts
- Determining the best resource strategy for using internal and external resources
- Maintaining your resilience and a positive attitude

This chapter briefly explores these strategies, which have been used successfully by the case authors and by other trainers in small departments. In addition, it will provide detailed guidance about establishing an effective “train-the-trainer” process for internal resources and selecting and working with external resources to expand your staff's capacity and capability.

### Determining Priority Training Needs

A thorough training needs assessment, identifying specific training needs that if met or unmet would impact the organization most, is the foundation for a successful small training department. In doing a needs assessment, it is essential to use a variety of methods, both formal and informal, to gain a clear, complete picture. The cases in this book illustrate the range of methods for conducting a needs assessment. Strategies may include using paper and pencil written surveys, interviewing employees and managers, analyzing problems encountered, or

doing research related to the problem or issue. A critical strategy in assessing needs and implementing performance-based training is conducting a thorough job and task analysis of performance requirements.

See Gettle's Monsanto case for an excellent introduction to developing performance-based training. Companies that are pursuing ISO quality certification can identify training needs by creating job profiles and training plans relating to ISO certification. For more information on ISO certification and how it relates to training needs, see Gettle's chapter on Monsanto; Balling's chapter on Collagen; Maxwell and Jost's chapter on Nortel; and

### **Monnin's Chapter on Strategies for the 90s.**

Another helpful approach to assessing needs and clarifying priorities is to create a training advisory board. The chapters by Arnold on Navistar, Taylor on LWCC, and McCoy on UNUM provide insights into how advisory boards can be help set your direction.

Other approaches to needs assessment are more informal. For example, personal intuition based on your experience working in the business to identify needs or training strategies is valuable. The cases on American Honda, Nortel, and Logitech all illustrate how the authors used their experience in the company to help them understand training needs. Listening to your internal customers also can help identify problems that might have training implications. Teaching or facilitating training allows the "lone trainer" to get a pulse of the organization and learn first hand about the issues facing employees. Tuning into the recommendations of employees who attend outside training programs provides clues about potential high-impact training interventions. Nancy Nunziati discovered a training program that ultimately helped to move Logitech's culture to one of increased accountability because she listened to employees who had attended a time management program and given it rave reviews,. (See Nunziati's Logitech case.)

In many instances, a small organization may not have the internal resources needed for a detailed needs assessment that can identify the best way for training to support the business objectives. Linda Taylor's chapter on LWCC is an excellent example of using a consultant, who already had the ear of the company president, to conduct a training needs assessment. Taylor shows that as a result of documenting needs, she was able to document the need and gain four additional training staff members. Katie O'Neill at Rock-Tenn and Millar Farewell of American Honda also relied on outside consultants to help them clarify a business need and determine the best approach to solving a training problem.

A key part of conducting a needs assessment is determining priorities because it will be important to focus training resources where they can do the most good. First, it is essential to examine business data that indicates the severity of problems or highlights potential opportunities and their potential impact on the business. Farewell's case on Honda is a good example of how to collect data to determine the impact of electrical trouble shooting skills on service to motorcycle owners.

A second aspect of clarifying priorities is to determine problems where training can actually have an impact and to identify all the

solutions needed to change performance. Sometimes the best solution is not a training program, but training along with other interventions — such as increasing the staff or providing appropriate incentives to perform in the desired way. Training often needs to be accompanied by other follow-up actions to change employee behavior. See McCoy's case on UNUM to learn how call monitoring by supervisors following telephone skills training can lead to improved customer relations.

A third part of identifying priorities is clarifying the priorities and expectations of senior sponsors who pay for training and champion its value. Assessing the receptivity of the organization's senior management to training is essential in determining whether or not training can have an impact. Monnin's chapter illustrates why it is so important to understand the real expectations of an organization's senior management—management's lack of commitment to training ultimately led to their eliminating the position of training director. Monnin was able to provide useful services to her previous employer as an outsourced director of training once she understood their real expectations. Furthermore, she learned to identify better customers for her services—companies where training could have a more significant impact because they had senior managers who recognized the requirements for meaningful training and were willing to support training more actively. Training advisory boards, which include key senior sponsors, or interviews with senior managers can be very helpful in determining senior management's priorities. For example, after reviewing company data, UNUM's training department was not sure whether to focus the initial leadership development efforts on current or aspiring managers as the primary target audience. After meeting with the senior sponsorship group, however, it became clear that current executives and people managers were the most critical audience.

Katie O'Neill's chapter on Rock-Tenn provides helpful insights in how she worked with senior management to clarify their priorities. For additional information on conducting a needs assessment, readers may refer to Allen (1990); Kaufman et al. (1993); McCoy (1993); Phillips et al. (1995); Zemke and Kramlinger (1989).

### **Establishing Your Credibility and Building Support for Training**

Building buy-in or ownership for your strategy is essential. The first step in building support is having a business perspective—being able to think like a business person, understanding the dynamics and performance indicators of your organization's business, speaking the language of your company's business, and showing how training and other performance interventions are critical to your businesses' success. A well planned and executed needs assessment is essential in developing this business perspective.

At first, unless you have had line experience in the industry or your company, you may have a steep learning curve and may need to immerse yourself in company documents, reports and industry publications to help gain a clear understanding of your organization's business. A key component of business understanding is talking to people throughout the organization and asking the right kinds of questions. All the cases illustrate

the importance of knowing the business. Buisman's case on Norway Savings Bank, for example, shows how the HRD manager learned about the business by being an active member of several critical bank committees.

An equally important step is planning a well-thought-out evaluation strategy so you can demonstrate the value of training and how training contributes to the business. There are some excellent resources to help you understand training evaluation. (See for example, Phillips and Holton, 1995.) In some cases, the business will want to see a training activity report showing the numbers of people who have been trained (as in LWCC), while in other cases, they will want to see more bottom-line data. Nourishing partnerships with critical players who need to support training or who are the target audience for training will create support for your training approach. For example, sponsors may or may not provide the budget needed to develop and deliver training; and managers may or may not allow their employees time to participate in training or take care to reinforce and reward the use of newly-learned skills and behavior on the job. For people to champion and support training they need to believe in its value. Mike Gettle's Monsanto case describes in detail his approach to building relationships at all levels throughout the Monsanto plant in Muscatine, Iowa. Because the technicians were essential to both program development as well as implementation, Mike took a bottoms-up approach to building support. Another good example of building ownership for training is Raquel Arnold's creation of a broad-based training advisory group, the "Progressive Education Council," at Navistar's Springfield Plant. This advisory group, which consisted of representatives of union and management, validated needs and even solved training related problems, such as improving the effectiveness of the Interactive Learning Center. At Rock-Tenn, Katie O'Neill did such a good job of creating officer involvement that they wanted to create their own vision of management development, rather than one proposed by an external consultant.

Becoming an expert at managing expectations and being clear about requirements for success are essential parts of maintaining credibility in a small training department. Peter Block's classic book, *Flawless Consulting* (1981) provides excellent guidance on the critical skill of contracting. It helps you to distinguish between what is good business that can succeed and make a contribution and what is bad business that is doomed to failure. In setting expectations or "contracting" with your training customers, it is essential that you be clear with people who request training about what you can and cannot do for them, about whether or not training is the right solution to their problem, and about what they need to do to supplement any training intervention with needed business actions to ensure that training has an impact.

Training alone will rarely improve performance. Frequently, it will be necessary to ensure that clear standards, appropriate tools and job aids, measures of performance and rewards and incentives are in place to encourage people to use the skills, knowledge and behaviors learned in training. Gettle's case on Monsanto illustrates well how to ensure that training is integrated with on-the-job performance by using job aids and

job procedures as the training tools. Rogovin's case on Kidder Peabody provides a wonderful example about the limits of ethics training in changing behavior when there are far too many incentives for people to behave unethically. Refer to Robinson and Robinson's (1996) *Performance Consulting: Moving Beyond Training* to help you in analyzing the business situation to ensure all the needed solutions in addition to training are applied to address any business problem.

### **Determining the Best Resource Strategy**

One thing is for sure—to be successful in a small training department, you can not do everything yourself. Finding and making the best use of resources that are not directly under your control is a critical competency. You will need to take advantage of internal resources as well as external resources. Internal resources include subject-matter-experts (the real workers), other Human Resource professionals, and other internal suppliers who can help you with everything from assessing needs, determining priorities, selecting vendors, designing and developing materials, borrowing training materials, delivering training, marketing training, providing follow-up coaching and reinforcement to arranging for training logistics, such as facilities or required technology to use alternative delivery.

Randy Maxwell and Karen Jost's case on Nortel is an excellent illustration of using internal partners to expand the technological capabilities of a training unit. While you may or may not be charged for using the services of employees in your organization, there is definitely a cost to using internal resources—lost production time while people are working on activities that are not part of their primary work accountabilities. You can use external resources for many or all of the same activities listed above, however, you normally have to pay an explicit fee for outside resources. How do you decide whether to use inside or outside resources? Several factors are important to consider in making the decision to use internal or external resources: time, budget, need for involvement, required expertise, need for outside perspective, resource availability, track record of success, and skepticism about work done by outsiders ("the not-invented-here-syndrome.") Often it is best to use a combination of internal and external resources in developing and instructing training programs. (See Table 1 to help you make your resource decisions.) The case studies in this book all provide examples of how to make the most effective use of your resources. The following sections describe in more detail how to work with internal resources (and train nontrainers to train) and how to work with external consultants..

Making Resource Choices	
<p><b>Use Internal Resources When</b></p> <ul style="list-style-type: none"> <li>• You have enough budget for training</li> <li>• You have time to guide subject-matter experts, develop and test materials</li> <li>• You need specific expertise found only inside your organization</li> <li>• Qualified credible resources are available and committed to the program</li> <li>• You want to build sponsorship and ownership through involvement</li> <li>• Your organization can produce high-quality materials clearly and interactively</li> <li>• The organization tends to maintain programs "in house" if it can</li> </ul>	<p><b>Use External Resources When</b></p> <ul style="list-style-type: none"> <li>• Budget is available</li> <li>• You have limited time to develop a program or materials</li> <li>• The expertise required is found only outside of your organization</li> <li>• Outside resources will have more credibility as authorities on the subject</li> <li>• You need a fresh, objective, experienced outside perspective</li> <li>• You lack the capacity to produce high-quality or technologically sophisticated materials required</li> <li>• A relevant program, tested, available program is readily available</li> </ul>

Most training managers think about their budgets the same way they think about going to the dentist—you've got to do it, but it's no fun and you want it to be over fast. But budget you must or you may lose face—and your funding for future training programs. The key to successful budget management is (a) understanding what senior management expects from you regarding training expenses; and (b) tracking your budget so you can produce information they need.

1. What numbers do I need to track? Most numbers people will want to know what you have projected in terms of spending for the month and how closely you've kept to that plan. Even if you don't control your training budget now, demonstrating that you understand budgeting requirements may win you control in the future, McCoy points out. Be prepared to translate your budget categories into those used by your company's finance department. It's also important to build a good relationship with your cohorts in the finance department so that they'll help you develop budget numbers that senior management wants and expects.
2. When do I need to produce reports? Some companies will want you to produce spending reports on a monthly or semi-monthly basis. Find out if and when you'll be expected to budget for the current year, next year, and further out. Does senior management want monthly, quarterly, semi-annual and annual expense projections? What about when you've over-or under budget? (Don't let this happen, MTD advises. It's crazy, but if you spend less you'll get less next year).
3. What information should you include in your reports? If spending for training programs varies from your projections, do you need to explain the variance in terms of the bottom line or in terms of specific budget categories? These might include: salaries and related expenses; computer and data processing expenses; travel and entertainment expenses; charge-backs for training, and so on. Even if you're not required to report this detail to senior management, you'll want to know how your department is performing in each of these categories, McCoy notes.

4. How much budget "slippage" is okay? If you're regularly running under budget, you may give your bosses the impression that you are short on finance savvy, McCoy warns. They may mistakenly conclude that you're unable to forecast when you really need to produce training programs, or that you're intentionally asking for more than you need, or that you're falling short in providing the programs you promised, all of which are impressions you don't want to make.
5. When will your budget be under scrutiny? Simply staying at or slightly under budget isn't enough, McCoy says. Some budget slippage is expected, say at the first of the year when there might be a delay in payment of bills.

As the year unfolds, however, you'll be expected to stay within your training budget or rework it to more accurately reflect increased demand for training and other programs. Since it's senior management's job to track your organization's overall economic performance, they need to be able to project with some accuracy how income and expenses will play out over the year.

"When you are under your budget plan," McCoy explains, "senior management wants to know whether this reflects 'real savings' or inaccurate prediction of expense timing. When you are over your budget plan, senior management wants to know if you can get back on track by saving on other expenses."

### Tracking your Training Budget

Once you have the answers to these five questions, you can create a tracking system that will produce the answers senior management wants. You can use something as simple as an Excel spreadsheet for this. In it, you will record your monthly budget projections and actual expenses. You can set up a simple formula to calculate variance from your budget plan on a monthly, quarterly, and year-to-date basis. (See Table for McCoy's sample budget tracking report). Each month you will simply update your actual expenses.

It's also helpful to keep a record of expenses for each training program you offer. This would include expenditures for consultants, materials, training facilities and equipment, food, travel, and of course, charge-backs to specific departments if you have that kind of arrangement in your organization. Tracking these expenses allows you to measure how accurately you were able to forecast expenses.

Caution: Do this on an ongoing basis, even if you feel pressured to do training, not run numbers. McCoy learned the hard way how difficult it is to unravel program expenses after the fact.

### How did you do?

It's important to measure how well you manage your training budget. Here are some effective criteria:

- Did you accomplish your training objectives to senior management's satisfaction? Even in an expense-controlled environment you are expected to produce results, McCoy notes. Be careful that you do not cut back on expenses so much that you jeopardize the value of your training department.

- Were your budget forecasts accurate and timely? Make sure that your monthly and quarterly forecasts are accurate and that you trend expenses within an acceptable limit. When you review your budget tracking reports, did you expect to see the numbers or did they often surprise you?
- Did you manage expenses well? Remember to negotiate the best possible prices from consultants and vendors. Try to make your budget come in on or close to your plan. If senior management asks you to cut back, make sure you limit spending wisely. If you exceed your budget, be ready with good business reasons why you overspent. Also warn management in advance that you expect to be over your budget.
- How did you handle problem resolution? This is where good working relationships with finance are important—so you can prevent problems and follow up quickly to resolve any problems that do occur.

### **Internal Resources: A Train the Trainer Strategy**

With a small training department and a large customer base, you can train a critical mass of people in time to meet business needs by training people who are not in the training department to deliver your programs. These “trainers” may be other Human Resource professionals, line managers, regular employees, or trainers who are dedicated to specific lines of business or functions. The cases by Gettle on Monsanto, Balling on Collagen, O’Neill on Rock-Tenn, Rogovin on Kidder Peabody, and McCoy on UNUM are all good examples of using non-trainers to train.

### **Benefits in Training Non-Trainers to Train.**

There are many advantages to developing the training skills of others outside your department. First, increasing resources who can deliver training allows you to reach more people faster. Second, resources who are close to the business have the credibility that comes with business expertise, and they can tailor the training material to real-life situations and deliver the training so that it meets the specific needs of that business. If the target audience works on different shifts from the training department, utilizing people who work on the shift to deliver the training meets a critical logistical need. In addition, people have an increased sense of ownership of training that is taught by one of their people versus someone from “an ivory tower.” Furthermore, training employees with subject-matter-expertise to deliver programs means that you don’t have to be an expert in everything. Mike Gettle’s case of the Monsanto Muscatine Plant is an excellent example of increasing effectiveness and ownership of training and overcoming logistical challenges of various work shifts by using technicians in the plant to deliver on-the-job training (OJT). Another excellent example of using a train-the-trainer strategy with an executive population is Carolyn Balling’s case where she used VPs to introduce ISO certification to all Collagen employees. Using the VPs as trainers ensured ownership, enhanced credibility, and helped achieve an aggressive implementation schedule.

An additional benefit of training others to train is that the newly developed trainers get to learn new skills. Developing training and facilitation skills can be a tremendous opportunity

for non-trainers. One of the best ways to learn about a subject is to teach someone else — people usually deepen their expertise in topics that they teach. As the UNUM case shows, the manager of UNUM’s 1-800 Phone Center learned to be a master trainer of Communico’s Magic of Customer Relations telephone skills program, and as a result she significantly sharpened her ability to satisfy customers as well as her ability to coach others on their phone skills. Also, improved facilitation and presentation skills can help improve people’s ability to lead and influence others outside of training situations.

### **Challenges in Training Non-Trainers to Train**

On the other hand, there are some major challenges to training people outside of the training department to become effective trainers. First, gaining organizational support for others to do training can be a challenge in itself. Non-trainers have other priorities besides training—their priority is to make products or provide support services for these products. It takes time for non trainers to learn new skills and then apply those skills in training situations. It may be difficult to persuade non-trainers to take on additional job responsibilities, especially in downsizing situations when people are already overloaded with the work of others whose jobs have been cut.

Second, it is difficult to assure the quality and effectiveness of programs that are taught by people who are not professional trainers. How do you go about identifying people who are willing to teach others and are likely to be effective trainers? In general, line managers have not learned to teach. To those who have never done it, training often looks deceptively easy. People may underestimate the required preparation, and consequently may not become sufficiently familiar with the training material or take enough time to practice to ensure an effective delivery. Also, subject-matter-experts may know so much that they fall into the trap of lecturing and answering all the questions themselves rather than acting as facilitators who draw on the expertise of the group.

Finally, getting administrative support for decentralized programs can be a big challenge. When training is offered by another area, the business unit may need to provide administrative support as well as instructors for the programs. Administrative assistants who are not in a training department are usually unfamiliar with the trials, demands, nuances, and detailed follow up required to ensure that training programs run smoothly. It takes time as well as specific knowledge to provide smooth logistical support to programs.

You need to train the administrative support people as well as the trainers.

### **Finding the Right People to Be Your Trainers.**

So, how do you go about finding people who would be successful trainers? First, you need to be clear about the criteria for an effective trainer for a specific program. While your specific requirements will vary somewhat, there are some standard criteria for selecting trainers. A critical requirement is knowing enough about a subject to have credibility with your target audience. For example, you want to make sure that anyone you choose to teach leadership skills is perceived to be an effective leader and that anyone who teaches customer service is known

for their skill with customers and their customer-orientation. Often you can ask the business sponsor or the Human Resource representative from a particular business to name the credible experts. Sometimes you can identify these people based on your own observations in and out of the classroom. In the classroom, look for people who demonstrate solid program understanding in training exercises and who show excellent presentation skills when they volunteer to share information or act as a spokesperson for a group after a break-out session activity. Stay attuned to the quality of information people share with you when you conduct a needs assessment interview or speak with them in a casual phone conversation.

Another important requirement is the trainer's enthusiasm about the subject and their desire to teach others about it. Are they willing to put the time and effort into learning how to teach a program about a particular subject? Often people will let you know that they would be interested in teaching a subject.

### **Keys to a Successful Train-the-Trainer Process**

Making trainers out of non trainers (subject-matter-experts or SMEs) is not easy. There are, however, a number of steps that can ensure that employees and managers who learn to teach your programs succeed in delivering effective training. First, it is essential that you have a selection process and criteria to help you choose the right people who have the credibility, talent, and interest in teaching a particular subject. Businesses are often reluctant to part with their real subject-matter-experts and may want you to be content with a "warm body" as a trainer versus the person who would do the best job. You'll need to convince managers that in the long run, having a qualified SME teach an effective program has a more positive impact on the business than having an unqualified person provide poorly delivered training, which ultimately leads to errors, ineffective business processes and costly rework.

Next, it is important to provide anyone who teaches training with the right tools and learning to ensure they succeed. An effective train-the-trainer process for SMEs might include the following steps:

1. Clarify the expectations of the training certification process with the SME and the SME's managers. Let SMEs know that it takes time, effort, skill, and practice to become an effective trainer. Let them know that not everyone participating in the certification process may succeed in being "certified as a trainer."
2. Ensure that the SME is exposed to the program prior to teaching it. It is helpful to require that the SME attend the program as a participant in order to understand the content, flow, learning dynamics and pitfalls of the program. This may not always be possible if the SME needs to teach the pilot program, however, the SME may learn about the program if they can play a significant role in program design.
3. Provide a clear, user-friendly instructor's manual or leader's guide that explains the learning objectives, key learning points, training materials, and training activities for all content. In some cases you can use job aids and job procedures if trainers are providing OJT.

4. Provide a train-the-trainer workshop that teaches the appropriate content and facilitation skills. Keys to a successful workshop include creating a safe and supportive learning environment; helping people to assess their own skill levels as trainers; providing many opportunities to practice and improve by videotaping practice segments and providing constructive feedback and improvement ideas.
5. Observe new trainers and provide coaching. One way to do this is to require new trainers to teach programs with an experienced co-trainer or co-facilitator who can provide on-the-spot coaching and assistance. Tracking the program evaluations to identify areas where new trainers need to improve is another method.
6. Create a certified trainer network that allows line trainers and SMEs to share ideas about what works and doesn't work in delivering training. Be sure to follow up with trainers to help them solve any problems they encounter.
7. Reward and recognize the contributions of SMEs who contribute to training either as designers or instructors.

### **Working Effectively with Outside Resources**

There are many resources outside of your organization who might help you with training. Outside resources could include consultants and vendors, graduate students seeking an internship in HRD, high school or undergraduate students who participate in work-study programs, and temporary help. You can obtain excellent services from students wishing to learn HRD in action as part of various study programs. At UNUM, we recently used a USM graduate student in HRD who wanted some real life company experience to develop a self-study writing skills module as part of an employee certification program—we could have never made the deadline or kept the budget without additional free help. Raquel Arnold of Navistar has used graduate students on several occasions to help with needs assessment and program development.

How can you find outside resources who can help? Keeping a network with other trainers and HR professionals within your company and other organizations is a helpful strategy. You can ask your colleagues for referrals for competent external resources. Joining the national American Society for Training and Development (ASTD<sup>1</sup>) and the local ASTD chapter can provide you with useful contacts. You may find consultants by attending national or local conferences. Frequently, training conferences will include expositions of vendors, who could be future resources for you. ASTD publishes an consultant directory, and also maintains an on-line service, ASTD On-Line, which can serve as another source for consultants. Once you've joined any professional training organization or attended a training conference, you will be added to a myriad of mailing lists. Take time to review the catalogues, fliers and "junk mail" that you receive because they may include precisely the resource you will need at a later time. Finally, the internet may be a possible source of consultants.

If you have the budget, and you know external consultants who have the credibility and skills to get the job done, consultants can be a good way to deliver training. Perhaps you can score a quick win with an off-the-shelf program. These programs can

be helpful in meeting generic skills, such as communicating effectively, managing time, preventing sexual harassment, managing others, etc. Nunziati's case on Logitech is a good example of using a generic time management program. Sometimes vendors offer special deals on their programs and allow some employees to attend their programs for free or a nominal fee in order to build interest.

### **Maintaining Resilience and a Positive Attitude**

Having a positive attitude is essential to your success—your attitude affects your ability to think of possibilities, to influence others, to build key partnerships inside and outside your organization. It also is a source of sustained momentum and energy you will need to overcome obstacles and the foundation for your mental and physical well-being. A key challenge in a small training department is facing all the demands and keeping up with the constant work pressures without being overwhelmed. Sometimes it is easier to notice all that you cannot do rather than what you can do. Given the size of the responsibilities you face, you can feel like “a tiny speck of dust in the universe” to quote the words of Ed Asner on the Mary Tyler Moore show. This pitfall of feeling of small, inconsequential and powerless can be particularly compelling if you have previously worked in a very large HRD department, or if your department has been downsized significantly.

A key part of resilience is taking care of yourself so that you have the energy to -work long hours. Carolyn Balling has written a book, *Fit to Train*, and offers seminars at various conferences that offer advice on eating and exercise habits that help maintain your physical and emotional health. Balling's case on Collagen shares some of her tips for maintaining her positive outlook. Keeping a sense of humor is key. In addition, finding time to do activities that restore you can go a long way in regenerating your spirit. Anne Monnin, for example, makes sure that she allows time to play tennis or ski, depending on the season. I find that working in my garden and watching or participating in sports is very restorative for me. If you travel as part of your job, take advantage of opportunities to learn about different cultures and take in local sights when you travel on business. For those of you who are open to it, polarity therapy can be a wonderful way to relax yourself, tap into your creativity, and focus your energy. This therapy involves a mixture of light massage, working with crystals and a variety of relaxation techniques. For more information on polarity therapy, write to the American Polarity Therapy Association.

### **(An Extract from Article)**

When you're in a small department, it is easy to get into a reactive mode in which you respond to urgent demands for your services and stay in a constant state of crisis.

Being in constant crisis can be very exhausting and discouraging—it can lead you to feel that you aren't making a meaningful contribution because you stay focused on short-term requests versus important longer-term priorities that are not so urgent. Having a longer-term focus not only helps the organization you serve, it also helps you stay true to your values and priorities. Staying focused on what you want to accomplish and how you can make a difference versus dwelling on what you cannot do makes a big difference in your attitude. On a personal

note, my entire outlook on my job at Chase changed when an executive in our business in Brazil told me that he valued my advice and that I would be much more effective if I focused on what I could do rather than what I could not do. This attitude shift not only helped increase my effectiveness as a consultant, it did a lot to bring my spirits and confidence as well.

Books and workshops can be wonderful ways to refocus yourself on important goals and to restore needed balance in your life. I've found that reading Robert Fritz, founder of DMA and author of *The Path of Least Resistance: Learning to Become the Creative Force in Your Own Life* (Fritz, 1989), and attending his workshops to be helpful in realizing my aspirations. You can learn to take actions and put supports in place that make it much easier for you to succeed. Fritz teaches the importance of visualizing your important goals on a daily basis, and taking actions that make it easier for you to focus on your goals. For example, I was having a hard time working on my previous book partly because I felt tired and my environment distracted me from writing—my computer was set up at an uncomfortable desk and chair next to my very comfortable bed. Not unlike many writers who experience “writer's block,” I wasted time berating myself for procrastinating.

After taking one of Fritz' workshops, I took mental and physical steps to help redirect myself back to my goal. First, I visualized the book being completed and how pleased I would be: visualizing success made me feel happy and energized. Next I bought an ergonomic chair and desk and learned to take breaks to restore my energy. After those changes and learning to respect my own natural working cycle, I was able to work for much longer periods. This same principle helped me in my business work as well.

Stephen Covey's books, audio tapes, and workshops also encourage people to make choices to respond to what's really important in their lives versus what is merely most urgent (see for example, Covey, 1990). Learning by listening to audio tapes is a great way to change your perspective or learn new skills while traveling. Personally, I was very inspired by listening to Covey's audio tape on *First Things First* as I drove to work in the morning. It was a much better way to start the day than listening to the news disasters of the day and the latest country hits.

Participating in learning activities of all types helps to build your skills and give you a new perspective. Stephanie Burns, author of *Artistry in Training* (Burns, ), advocates the value of learning a completely different skill unrelated to your job, such as learning how to play a musical instrument or how to sky dive, to keep your mind sharp, to build your own flexibility, and to enhance your awareness of what's involved in the learning process itself.

One excellent way to build your skills, increase your personal network with others who have common interests, and refresh your enthusiasm is to speak at various training conferences, present courses or workshops at a local university, and author books and articles. Since writing *Managing a Small HRD Department* (McCoy), I have spoken about that topic and other topics at local and national ASTD conferences, at an International Quality and Productivity Conference and at a local



conference, “Women in Management,” sponsored by the University of Southern Maine in Portland. In addition, I teach Managing Training and Development at the University of Southern Maine’s School of Continuing Education. It’s very rewarding for me to share what I know and to learn from others in the HRD profession. Connecting with people outside of my current organization keeps me plugged into organizational and business trends, and also gives me a broader context for my work. Publishing can be a wonderful way to share knowledge and learn at the same time. I’ve enjoyed interviewing and working with other trainers as part of writing and editing books. Finally, I’ve found it enlightening to work with publishing companies as an HRD expert who reviews potential manuscripts.

### Summary

In conclusion, there are several strategies to keep in mind so you can thrive in a small training department. First, you need to ensure that you have identified the priority training needs and that you focus on these priorities. Second, you need to take steps to establish your credibility and build a strong base of support for your efforts by getting to know the business and creating partnerships with key players inside your organization. Third, have a resource strategy, that takes advantage of all potential resources inside and outside of your organization. This will greatly expand your capacity and effectiveness in providing training support. Finally, you will get much more done in your work life and feel much more satisfied and healthy if you find ways to keep your outlook balanced and positive, and your activities focused on your important goals.

### Articles

How to work with consultants. Important steps in selecting a consultant to develop a program include the following actions:

1. Locate potential resources and create a candidate list. Having more than one consultant provides options, a better chance to get the most cost-effective solution, the potential to gain ideas from more than one source, and a back-up strategy in case your first choice falls through for any reason.
2. Create a vendor selection committee. Sharing the responsibility for selecting the right vendor with the business not only improves your selection, but it also creates a sense of business ownership for the training.
3. Create selection criteria to help you choose the most appropriate consultant. Criteria might include expertise, familiarity with your industry, proven track record, capacity of the company to produce high-quality training materials using a variety of delivery mechanisms, capacity to produce training quickly, solvency of the vendor (to ensure that they last throughout a long program development time), the quality of their instructors, and your gut feel about how it would be to work with them, etc.
4. Create a request for proposal (often referred to as an RFP), which includes design specifications that detail your requirements. (See McCoy, 1993; and Abella, 1986 for more information on design “specs.”)
5. Review proposals and work samples. Make sure that you review written proposals, and sample training materials to

get a feel for the consultant’s style, approach, and competence.

6. Check references. It is amazing what you can learn by speaking with other people who have worked with the vendor. It can help you avoid a disastrous decision or learn how to work most effectively with the consultant that you hire.
7. Meet with the finalists, and make sure that you speak with the people who will actually do the work, not just with the sales person. If you are selecting a consultant to deliver training, make sure that you observe the instructor to ensure that they are competent and that there is a fit with your organization. If you cannot observe them teach a live program, you can usually observe them on video tape.
8. Negotiate with the consultant to ensure that you get the best deal before making your decision. In one instance I had a consultant reduce his fee by \$40,000 in order to beat out a competitor’s bid.

Hiring the right consultant is only half the battle. When you are short of resources, it is tempting to think that a consultant will do all the work for you. With customized programs, consider the time and effort required to manage consultants. While consultants have expertise, they require guidance and monitoring. Unless they understand your business, the consultant’s programs won’t truly meet your business’ needs. Farewell in the American Honda case mentions that he selected a consultant who rode a motorcycle, and that ongoing communication with this consultant helped contribute to his project’s success. The consultant’s contribution varies tremendously depending on how you manage them. Even though consultants are outside your organization, they should not appear to be external or out of touch with your organization’s issues and culture. This may require considerable coaching from you. You should not let consultants run loose throughout your organization. If you have hired them, they represent you.

Some keys to working well with consultants include the following steps. First, make sure that you create a well-thought-out contract that clearly specifies the roles and responsibilities of the consultant and your organization. Next, it is important to build a project plan with regular milestones, and clarify expectations of how you and the consultant will work together. It is essential that you provide an orientation and introduction to your organization. For a program to be effective, it is important that the consultant understand and fit within your organization’s culture. See Nunziati’s case on Logitech and O’Neill on Rock-Tenn. Be sure that you follow up at significant milestones to ensure that the consultant is progressing on schedule. Finally, it is helpful to have a safety valve and a back up plan in case the consultant fails to meet dead lines or does not work out as planned.

### Avoiding Common Pitfalls in Managing a Small Training Department

Inevitably in a small training department there are common pitfalls, which can drain you of energy and undermine your effectiveness. Learning to identify, avoid, or overcome the following dangerous traps helps to ensure your success:

## Trying to Do Too Much

First, don't try to do too much or you will become overwhelmed. When starting up a training department, you may be flooded with requests for all the training that people wished they had had when there was no training department. With all the pressure, it is easy to get into a reactive mode. Being in continuous crisis can exhaust and discourage you, and burden you with short-term requests so you neglect longer-term priorities. Avoid a fire-fighting mentality by having a strategy and mission, by assessing needs in order to understand expectations and priorities, and by creating a business-focused plan. Having a longer-term focus not only helps the organization you serve, it also helps you stay true to your values and priorities. Learn to make choices to respond to what's really important versus what is merely most urgent.

You can become more focused, motivated, and organized by visualizing your goals and taking actions that make it easier for you to accomplish them. For example, I learned to overcome writer's block by visualizing my completed book and how pleased I would be once it was finished. Then I bought more comfortable office equipment and took regular replenishing breaks. By respecting my own natural working cycle, I was able to work for much longer periods. This same principle helped me overcome obstacles in my business work as well.

Learning to say no to bad business enables you to avoid wasting money and to focus training where it will do some good. While saying no can feel risky, proposing a better solution helps to build your credibility. A previous employer asked me to provide telephone skills training for the entire company in order to solve some service problems. After some research, I learned that the primary service problem was customers not being able to reach the right person and being stuck in an endless loop of phone mail. This was caused by operators referring customers to wrong departments and by customers having no option to "pound out of phone mail" to reach an actual employee. I recommended that management take a hard line on providing phone coverage rather than providing telephone skills training to everyone. The company saved a lot of money and improved service when operators began directing customers to the right departments and senior management told employees that they needed to have a live person on call in case people needed to reach someone immediately.

## Doing Everything Yourself

Some people who are new to training feel that they must design, develop, and teach everything themselves. This pitfall is particularly tempting if you especially enjoy designing and teaching training. Doing everything yourself not only leads to early burn-out, but it also limits your capacity and creativity to meet business needs. Avoid trying to do it all yourself by taking advantage of other resources inside and outside your organization. Once you've conducted some train-the-trainer programs with internal resources, you will have a ready network of trainers to help you in the future. Consider implementing a learning discussion network to build skills of prospective trainers. Building relationships with trusted external vendors will also

save you time—eventually they will learn to know your business and how to work effectively with your company.

Be sure to garner administrative support to help you with program logistics. Create simple to-do lists to help your administrative assistant accomplish important tasks in a timely manner without needing to bother you. The lists will help you in managing yourself as well as any assistant. Even if you cannot obtain a full-time administrative assistant, find ways to borrow support from a nearby department, or hire temporary help. At one point when McCoy's administrative assistant was laid off, she was able to find administrative support by dividing up the work between other administrative assistants in the human resources department. Adding these responsibilities to other people's roles enabled them to master program requirements, simplify program logistics and gain credit for doing the work.

## Choosing Overly Complicated Solutions

As a training professional who may have been used to a large budget and more resources, you may be tempted to look for sophisticated training solutions when lower-cost, simpler solutions will do. In some cases you may be able to teach straightforward skills through a fairly inexpensive job-aid that may take the place of a training workshop. If you are introducing CBT, be sure to start simple and build the needed relationships with senior management and the technology department so that they will support your efforts in e-learning. Remember, when you have a very long development time, your CBT may be outdated before it is even launched.

Don't assume that the company needs the latest and greatest technology in order for training to be effective. Look to PowerPoint as an effective, simple, inexpensive CBT solution. Also keep in mind that custom CBT solution may not be required. There is an abundance of technology-related management and soft skill courses available in the e-learning market. Be sure to preview the available courses for quality, and negotiate a pricing and licensing option with the e-learning vendor that provides the optimum solution for your organization.

Make sure that your solution matches the sophistication of your organization. For organizations that have not been exposed to competency models and other development tools, it's best to start out with a simple approach.

## Neglecting your Well-Being

Fourth, don't ignore your own personal needs and health. In a one-person department, when you are sick, the whole department is down. Take care of yourself so that you have the energy to think and work long hours. Keeping a sense of humor is key. Follow sensible eating and exercise habits that help maintain your physical and emotional health. If your job entails air travel, make sure you plan appropriately to allow for adequate rest and also be sure to drink plenty of fluids and avoid alcohol. Being dehydrated, hung-over and jet-lagged do not help your credibility or your health. Participating in enjoyable activities helps to regenerate your spirit. If you travel as part of your job, take advantage of local opportunities when you are on the road. For example, I combine genealogical research with business whenever possible.

## Pessimism and Cynicism

Given all your responsibilities, you may feel inconsequential and powerless especially if you are used to being in a large department. Don't get discouraged by obsessing about what you cannot do. This can be incapacitating and lead to inertia. Cultivate a sense of optimism by looking for opportunities to improve things versus dwelling on losses and possible dangers. Optimism enhances your ability to think of possibilities, to influence others, to build partnerships, and to overcome obstacles. Learn to focus on what you want to accomplish and how you can make a difference instead of on your limitations. My entire outlook changed when an executive told me that I would be much more effective if I focused on what I could do rather than what I could not do. This attitude shift increased my effectiveness and buoyed my spirits and confidence as well. Don't wait for change to happen, instead anticipate change and be part of making it happen.

## Postponing your Own Development

With all the pressure it is easy to neglect your own learning. Putting off your own development is costly—you miss opportunities to enhance training's effectiveness, connect with useful resources, prepare yourself for the future, and maintain your motivation. Participating in learning activities builds your skills and gives you a new perspective. Listen to audiotapes, read books and articles, research the web, and attend workshops to refocus yourself and to restore needed balance in your life. Learning a new skill unrelated to your job, such as playing the piano, painting or sky diving, keeps your mind sharp, builds your flexibility, and enhances your awareness of what's involved in the learning process itself.

An excellent way to build relevant skills, increase your network, keep up with current trends, and refresh your enthusiasm is to share your expertise with others. Seize opportunities to speak at training conferences, instruct courses at a local college, or write articles. Publishing is a wonderful way to deepen your knowledge, hone your writing skills, and build your credibility inside and outside your organization.

## Small Training Department—Big Impact: Having the Right Skills

Carol P. McCoy, Ph.D.

In a specialized training role, you need to have specialized competencies, such as design, needs assessment, or facilitation. But what if you are a one- or two-person training department and are responsible for all aspects of training? What do you need to be good at to have an impact on your organization? Successfully managing a small training department requires a broad base of competencies.

- Business knowledge
- Knowledge of training and performance
- Organizational and management skills
- Intellectual skills
- Relational skills
- Technical skills
- Resourcefulness
- Resilience

## Business Knowledge

Having a basic understanding of business dynamics, and of your organization's goals, performance and key success factors is essential. Make sure that you have a good understanding of business basics and of your industry. Take time to read industry publications to keep on top of current trends. Understanding your organization's budgeting system will be helpful since you will need to project and report the training budget in language that the organization understands.



## Knowledge of Training and Performance

### Consulting

Having a basic understanding of needs assessment methods, adult learning theory, writing learning objectives, training design, facilitation skills, and performance consulting is critical for a one-person training shop. You will need these skills to perform tasks, such as needs assessment, design, and delivery. In addition, you will need this knowledge to review training plans or programs that are developed or purchased.

### Organization and Management Skills

Since a key to success is focus and careful management, you need to create some system to organize yourself. Whether you use a simple to-do list or complex project planning software, you need to keep yourself on track. Be sure that you create a checklist to help you manage program logistics. Knowing when to follow up can prevent costly mistakes and wastefulness. When managing budget expenses, you need to ensure that vendors are paid in a timely way or you may encounter problems. For example, without your follow up on invoices that are submitted late in the calendar year, vendors may not be paid in the current year. If this happens, you may be under budget in the current year and over budget for the upcoming year.

### Intellectual Skills

Having solid cognitive skills goes a long way in enhancing your effectiveness in a small training department. Critical intellectual skills are observing, identifying problems and priorities, asking thoughtful questions, analyzing data, and taking a systems approach to problems. You'll need these skills when assessing needs, establishing your business savvy, uncovering the real causes of problems and proposing realistic solutions that can work in your organization.

### Relational Skills

A key part of being successful is building relationships with people throughout your organization and the broader community. You need to be able to create a positive impression, identify people's needs and expectations, and attend to verbal and non-verbal clues. Other essential communication skills include giving feedback, coaching, and influencing others. You need to give effective feedback and coaching to sponsors as well as trainees, and



The more flexible you can be in your influence style, the better. Don't assume that a training need or problem is obvious to others. Be patient in clarifying the benefits and requirements of training in everyday language that your customers can understand.

Being able to use the web, create presentations, and manage a budget on a computer are critical in a small training department. At the very least, you need to know how to use a word program and some presentation program, such as PowerPoint. Knowing Excel or some other type of spreadsheet program to create and track a budget and to evaluate programs is helpful. Become familiar with the advantages, requirements, and constraints of various e-learning options.



Find out about your organization's intranet and email capabilities so that you can take advantage of them as delivery systems.

Thinking of a variety of options is essential to your success. Tunnel vision and rigidity can be your demise in a small department. A broad base of potential internal and external resources can help you leap into action and meet a tight deadline. The more flexible your solutions, the more likely you will find the best approach for your organization. As training dollars shrink, you'll need to cut back on training. Don't assume that because a program is shorter than ideal that it is of no value. People can be motivated to try out new skills when they have participated in an inspiring "lunch and learn" program.

Resilience—bouncing back from stress and change—may be the most important competency for anyone today. A major challenge is keeping up with constant change and pressure without being overwhelmed. Resilient people tend to have an opportunity orientation, focus, flexibility, organization in the face of ambiguity, and a proactive approach. Learn to find the opportunity in any change and look for ways to actively support the success of organizational change. Also, be sure to take care of your physical and mental health. Remember, when you are sick it impacts the entire department.

One of the best ways to ensure that you develop the necessary knowledge, skills, and personal attributes is to create a developmental plan and then do it! Make your development part of your performance plan. Be sure to review your developmental plan with your manager and allocate



Look for a variety of ways to enhance your skills by selecting cost-effective learning activities, which meet both your and your organization's needs. Attend local and national training conferences to build skills and increase your network of resources. Perhaps you can job shadow people in different roles in the company. Find a mentor who can provide feedback and coaching and be a support when you are feeling discouraged. Remember you are the department's primary asset. As your knowledge and skills increase, so does the capability and effectiveness of the training department.

1. If you are training manager of a software company employing 500 people. How will organize the training department.
2. Prepare a Organisation chart of Training Department in larges scale manufacturing organization.
3. Explain the role played by training and development department in the organization.

[illegible]

## LESSON 14

### DESIGNING TRAINING PLAN

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Dear Friends,

Now we know that clarity of learning objectives is very first and crucial step in training program. It helps in conducting the entire program successfully. After reading this lesson you will be able to

1. Design training programs
2. Write learning objectives
3. Practice systematic method in designing training process

#### **Basic Guidelines (and Examples) for Writing Learning Objectives**

##### **Description of Learning Objectives and Their Purpose**

Training programs should be designed by trainers and/or learners to achieve certain overall goals for the learner. Programs should also include various learning objectives that when reached culminate in the learner achieving the overall goals of the training program. Learners implement one or more learning strategies/methods/activities to reach learning objectives.

When designing a training plan, each learning objective should be designed and worded to the extent that others can clearly detect if the objective has been achieved or not. From reading the learning objective, readers should be able to answer the question: “What will the learner be able to do as a result of the learning activities/methods/strategies?”

As much as possible, learning objectives should also be written to be SMART (an acronym for **s**pecific, **m**easurable, **a**ceptable to you, **r**ealistic to achieve and **t**ime-bound with a deadline).

Examples to Convey Nature of Well-Written Learning Objectives

To help learners understand how to design learning objectives, the following examples are offered to convey the nature of learning objectives. The examples are not meant to be offered as examples to be adopted word-for-word as learning objectives. Trainers and/or learners should design their own learning objectives to meet their overall training goals and to match their preferred strategies for learning.

Here are some examples for you to understand how to write learning objectives.

The topic of the learning objective is included in bolding and italics. Learning objectives are numbered directly below.

##### **Topic: Communication**

1. explain four basic principles of communication (verbal and non-verbal) and active, empathetic listening.
2. outline four barriers and bridges to communication
3. list at least four ways communication skills which encourage staff involvement will help create a positive work environment.

##### **Topic: Mentoring**

1. explain basic job duties and standards from job description to staff
2. outline at least five specific learning goals with staff by comparing performance with job duties
3. develop a yearly plan with staff to accomplish learning needs, supervision plan and rewards

##### **Topic: Effective coaching**

1. state at least three job expectations for staff that focusing on meeting resident's needs
2. plan five strategies to give frequent verbal and non-verbal encouragement and rewards
3. identify specific performance concerns with staff asking for possible solutions and decide together methods of measuring successful outcomes

##### **Topic : Cultural Diversity**

1. plan workable strategies for incorporating new staff into the work team
2. select their own means to exhibit an appreciation of how values and perceptions affect communication
3. make available for staff a series of learning opportunities for increased world knowledge and cultural information

##### **Topic: Time Management**

1. list job expectations of staff
2. provide tools to use in prioritizing tasks of resident care
3. create with staff a tentative schedule for cares based on these facts

##### **Topic: Conflict resolution**

1. explain at least five basic principles of empathetic communication to handle conflict
2. develop policy that gives current front-line leaders the permission and expectation to work with other staff on conflict resolution
3. develop policy for progressive discipline and explain how this works to current front line leaders

##### **Topic: Stress Management**

1. list and recognize major symptoms and behaviors related to too much stress
2. outline three to five stress management strategies
3. list quick strategies staff can use during work shift as well as at home to reduce stress level
4. educate staff about basic guidelines to build support work teams

### Topic: Communication skills/Cultural Approaches

1. teach each other and staff about different cultural approaches and living styles
2. identify three steps to foster a climate where differences in cultures are reviewed as positive and additive
3. learn at least three methods of problem solving when cultural differences and practices interfere with necessary resident care.

### Topic: Job expectation/Coordination including authority and responsibility

1. learn three approaches to problem solving which includes identification of the underlying problem
2. make staff assignments based on input from staff
3. evaluate approaches and make corrections based on outcomes

### Topic: Team work/Positive work environment/Positive Rewards

1. identify characteristics of an effective team
2. describe four skills leaders can use to foster commitment and collaboration
3. develop at least five guidelines to treating staff with respect and helping staff learn from each other

### Topic: Goal Setting/Performance Reviews

1. develop guidelines to set specific goals with staff and help them plan to meet these goals
2. develop policy that encourages staff to seek education goals through career ladders
3. develop guidelines for effective observation and feedback toward goal achievement (by staff)

### Topic: Constructive Criticism/Consequences

1. establish clear standards of behavior, and that recognize and reward staff when they meet the standards
2. list ways to approach staff whose performance is a concern (with a win-win frame of mind)
3. describe how learning empathetic communication will help front line leaders handle conflict/constructive communication and help plan for solutions

## Designing Training Plan

Dear Friends,

After reading this lesson you will be able to will understand what are major factors of designing training plan and design a training plan with its minute details and.

Self-directed learners can use these guidelines to develop their own training plan. Whether their training goals involve learning certain topics and/or skills, learners can start their learning by starting their planning.

**Note:** Do not be intimidated by the length of this framework. If you looked at a list of all of the steps necessary to go grocery shopping, you'd likely stay at home! You can complete these guidelines without being an expert. All you need is to make a commitment and take a few hours of your time — time during which you'll be learning, too!

### To understand training plan you need to understand following categories of information :

1. Directions to Use “Complete Guidelines ...”
2. Preparation for Designing Your Training Plan
3. Determining Your Overall Goals in Training
4. Determining Your Learning Objectives and Activities
5. Developing Any Materials You May Need
6. Planning Implementation of Your Training Plan
7. Planning Quality Control and Evaluation of Your Training Plan and Experiences
8. Follow-Up After Completion of Your Plan

### 1. Directions to Use “Complete Guidelines ...”

If you are designing a training plan to enhance introductory understanding and/or skills in management, leadership or supervision, then follow the directions in the appropriate topics Management Development, Leadership Development or Supervisor Development.

In this document, the term “supervisor” is used to refer to the position to whom the learner directly reports, for example, a chief executive reports to a board of directors.

### Design your training plan by

1. Proceeding through each of the following numbered steps in this document and
2. You will be guided to write your training plan by writing certain information in the Framework to Design Your Training Plan.

### Framework to Design Your Training Plan

(Directions for Learners to Complete This Training Plan)

Complete this training plan by following the guidelines in the document Complete Guidelines to Design Your Training Plan. Learners may modify this framework to suit their nature and needs.

### Name of Learner

Approval (if applicable) \_\_\_\_\_

### Time Frame

This plan will be started on the following date

The plan will be implemented by the following date \_\_\_\_\_

### Funding Requirements

(See budget at the end of the training plan)

Comments: \_\_\_\_\_

### General Comments

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### Overall Training Goals

What do you want to be able to do as a result of learning achieved from implementing this training plan? As much as possible, design your goals to be “SMARTER”.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

### How Were These Training Goals Selected?

Results of performance review?  
Result of self-assessment?  
Reference to current job description?  
Reference to strategic or other organizational goals?  
Other(s)?

### Learning Objectives

What new capabilities do you want to have? What do you want to be able to do as a result of your new knowledge, skills and/or abilities?

You may need several learning objectives for each of your overall training goals. As much as possible, design your learning objectives to be “SMARTER”.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

### How Were These Learning Objectives Selected?

Results of performance review?  
Result of self-assessment?  
Reference to current job description?  
Reference to strategic or other organizational goals?  
Other(s)?

### Learning Activities/Strategies/Methods

What activities will you undertake to reach the learning objectives?

Learning activities may not match learning objectives on a one-for-one basis..

- 1.
- 2.
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- 6.
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- 11.
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- 13.
- 14.
- 15.

### Documentation/Evidence and Evaluation of Learning

Documentation/ Evidence of Learning	Who Will Evaluate It?	How Will They Evaluate It?

### Budget for Training Plan

The following budget depicts the costs expected to implement this training plan.

Expected Expense	Dollars

## 2. Preparation for Designing Your Training Plan

### Don't Worry About Whether your Plan is Perfect or Not — the Plan is Guide, Not Law

Don't worry about whether you completely understand key terms in training or whether your plan is “perfect” or not. The key is to get started. Start simple, but start. Do the best that you can for now. There is no perfect plan. You're doing the plan according to your own nature and needs.

Also, it's not important to stick to the plan for the sake of the plan. The plan will likely change as you go along. That's fine, as long as you've notice that it's been changed and why.

### Remember that Training and Development is a Process

So often when we design a plan, the plan becomes the end rather than the means. The plan is a general guide — the real treasure found from implementing your plan is the learning you achieve. Learning is an ongoing process. Look at learning as a process and you enjoy the long time during the journey rather than the short time at the destination.

### Get Some Sense of These Basic Terms

You don't have to be expert at the following terms — just get a general sense about them.

training goal	learning objectives	learning methods/ activities	documentation/ evidence of learning	evaluation
overall results/capabilities you hope to attain by implementing your training plan, eg, 1. pass supervisor qualification test	what you will be able to do as a result of the learning activities in this plan, eg, 1. exhibit required skills in problem solving and decision making 2. exhibit required skills in delegation	what you will do in order to achieve the learning objectives, eg, 1. complete a course in basic supervision 2. address a major problem that includes making major decisions 3. delegate to a certain employee for one month 4. etc.	evidence produced during your learning activities -- these are results that someone can see, hear, feel, read, smell, eg, 1. course grade 2. your written evaluation of your problem solving and decision making approaches 3. etc.	assessment and judgment on quality of evidence in order to conclude whether you achieved the learning objectives or not

## Basic Requirements of Learners in Training and Development

### Must Be Willing to Grow, to Experience

Learning often involves new skills, developing new behaviors. After many years of classroom education, it's easy for us to take a course where all we must do is attend each meeting, take notes and pass tests — and call this learning. One can complete a Masters in Business Administration (MBA), but unless they're willing to actually apply new information, they'll most likely end up with an office full of unreferenced textbooks and a head full of data, but little knowledge and wisdom. For the learning process to succeed, the individual must be willing to take risks. Stick your neck out, including by telling the instructor when you're confused or disappointed in the course. Don't wait until the course is over when nothing can be done about it.

### Growth Involves the Entire Learner

If learning is to be more than collecting new information, then we must involve ourselves completely in our learning experiences. Unfortunately, too many development programs still operate from the assumption that the learner can somehow separate personal development from professional development. So we end up getting a great deal of information about finance and sales, but little help with stress and time management. Then, after schooling, when we enter the hectic world of management, we struggle to keep perspective and we're plagued with self doubts. True learning involves looking at every aspect of our lives, not just what's in our heads. So include courses, e.g., in Stress Management and Emotional Intelligence, in your training and development plans.

## Growth Requires Seeking Ongoing Feedback

Many of us don't know what we need to learn — we don't know what we don't know. Therefore, feedback from others is critical to understanding ourselves and our jobs. Feedback is useful in more ways than telling us what we don't know. Feedback also deepens and enriches what we do know. Research indicates that adults learn new information and methods best when they a) actually apply the information and methods, and b) exchange feedback around those experiences. However, we're often reluctant to seek advice and impressions from others, particularly fellow workers. We're sometimes reluctant to share feedback with others, as well. The Giving and Receiving Feedback might be useful to you.

The courage to overcome our reluctance and fears is often the first step toward achieving true meaning in our lives and our jobs.

### Trust your Instincts to Learn

Learning doesn't come only from other people telling you what you need to know and how you need to learn it! The highly motivated, self-directed learner can make a "classroom of life". Everything becomes an experience from which to learn. You can design your own learning experiences! Think about what you want to learn, how you might learn it and how you'll know if you've learned it.

### Suggestions to Enrich

## Any Training and Development Plans

This includes following steps:

- Introduction
- Planning — Some Considerations for Developing the Training and Development Plan
- Goals — Selecting the Training and Development Goals
- Methods — Remembering Some Basic Principles About Adult Learning When Selecting Methods
- Methods — Some Basic Mistakes to Avoid When Selecting Methods
- General Suggestions for Building More Learning into the Plan
- General Suggestions for Building More Learning into Our Lives
- Summary of Above Suggestions to Enrich Training and Development

### Introduction

The following considerations are meant to round out the vast advice offered in the section Overview of Training and Development. These considerations do **not** replace information in that section. This framework should not be used without having first read that section.

As previously noted, training and development can be initiated to address a "performance gap" (learning needed to meet performance standards for a current task or job), "growth gap" (learning needed to achieve career goals) or "opportunity gap" (learning needed to qualify for an identified new job or role). The following considerations apply to any of these situations.



The information frequently references supervisors and employees/learners. However, information also applies to learners wanting to develop their own training and development plan. The terms “employee” and “learner” are used interchangeably in the following.

## **Planning - Some Considerations When Developing the Plan**

### **Be Sure to Document a Training and Development Plan (Goals, Methods and Evaluation)**

Carefully consider using some form of a training and development plan, even if thinking about informal means of training and development. Sketching out a plan with goals, intended methods and evaluation, will at least give you a sense of what you want and how you’ll recognize if you’ve gotten it or not. Don’t expect perfection in the plan or the learner. Start simple, but start. Then update the plan as you go along.

### **Don’t Worry About Whether Your Plan is Perfect or Not — The Plan is Guide, Not Law**

The key is to get started. Start simple, but start. Do the best that you can for now. There is no perfect plan. You’re doing the plan according to your nature and needs.

Also, it’s not important to stick to the plan for the sake of the plan. Deviations from the plan are to be expected. It’s important that deviations are recognized and explained.

### **Remember that Development is a Process**

Often, the ongoing reflection and discussions between supervisor and learner are far more important than results produced by learners during the training and development process. Appreciate this interaction as much as reaching any objectives in the plan.

## **Goals - Selecting Training and Development Goals**

### **Select 2-4 Goals to Get Started**

Each of these goals will be associated with, e.g., 2-4, learning objectives that when reached by the learner will result in the learner reaching the overall training goal. (More about learning objectives later in a basic framework for developing a training and development plan.)

### **Determine the Goals Yourself — Don’t Adopt Them from Another Program, Writer, etc.**

It’s very tempting to get a copy of a formal training program’s goals and make them your own. It’s very tempting to read a writer’s suggestions about what a leader should be and adopt those suggestions as requirements in your program. Almost everyone wants to have more character, be charismatic, be more visionary, work well with groups, be more communicative, support followers, etc.

But you may very well have already have met those goals! Because writer’s suggestions sounds very virtuous, e.g., to have more character, does not mean that you don’t already have a great deal of character that already incorporates the values needed for strong and effective leadership in your organization.

Therefore, give careful thought to your training and development goals. Ultimately, you and your supervisor are the best judges of what you should aim to learn.

## **Set Realistic Expectations**

As explained in previous information about Training Analysis, learning goals should be established based on needed areas of knowledge and skills. These needs are established by referencing relevant strategic goals, competencies lists, job descriptions, job analysis, tasks analysis, etc. Be sure these goals are realistic.

There is a vast amount of management literature today, much of it asserting the need for continued change among organizations and employees. Often, we’re expected to achieve total quality and total integrity. We’re encouraged to transform ourselves and our organizations. These expectations can serve as powerful visions to provide direction and purpose. However, as these expectations become strong requirements in the workplace, they must be carefully considered and planned. Otherwise, they can spawn a great deal of despair and cynicism.. Consequently, be realistic about training and development plans. Particularly regarding development efforts such as leadership development, it can be very seductive to have goals such as “total integrity”. If you want “total integrity” as a goal, know what behaviors will depict total integrity and then identify those behaviors in your training and development plan.

### **Don’t Forget the Most Important Sources of Suggestions Supervisors and Subordinates**

When selecting training and development goals, ask your supervisor for feedback. For example, if you’re planning a leadership development program for yourself, ask your supervisor for suggestions about how you could improve. He or she may be the best person to give you ideas for goals and methods. He or she has had to develop leadership skills and also has watched you over the years. Also, don’t forget to ask your subordinates for suggestions. They often have impressions about you that you’ll never find out about, unless you ask for them.

### **Integrate Results Expected from the Learner with Goals in the Performance Plan**

Include the training and development goals in the performance review planning and discussions. This affords ongoing tracking and discussion to ensure that training and development results are actually carried over into the results in the workplace. If the supervisor and employee have been conducting the employee performance management process and perceived a “performance gap”, then the performance review process already includes the goals needed by the training and development plan. “Growth gap” and “opportunity gap” training goals should also be included in the performance review process as career development goals to ensure ongoing tracking and discussion. However, be very careful about evaluating the employee on whether they achieved career goals or not. Many variables can occur which hamper the employee from achieving career goals. Instead, focus performance evaluations on achievement of performance standards.

## **Methods - Remember Basic Principles About Adult Learning**

### **Adults Learn Best by Applying Information to Current, Real-World Needs**

Therefore, select training and development methods that include the learner's actually applying new information and methods in the workplace to a real-life problem. It's often difficult for learners to translate discussion about simulated situations (e.g., case studies) back to the workplace. On-the-job training can be very powerful when complemented with new information and methods, and time for reflection.

### **Adults Learn Best by Exchanging Feedback About Experiences**

Learners benefit a great deal from ongoing feedback around their experiences when applying new information and materials. Ideally, training and development experiences afford learners the opportunity to describe the results of applying new information and methods, what they thought would happen, what actually happened and why, and what the learner gained from the experience.

### **Methods - Some Basic Mistakes to Avoid When**

Particularly after 12 to 16 years of classroom education, we tend to fall prey to several common myths about training and development. The following advice is geared to help learners avoid those myths.

#### **1. Don't mistake data and information for knowledge and wisdom**

Too often, when we want to learn something, we take a course, carefully analyze the material and consider ourselves as having learned the information. Yet how much of the material from our courses have we really practiced? Paulo Freire, who is probably responsible for educating more human beings than anyone in history, asserts that "without practice, there is no knowledge".

#### **2. Don't mistake entertainment for enlightenment**

Go to your library, look at the hundreds, maybe thousands of books there. How many did you really need? How much of the authors' advice did you actually follow? How many books met the strong promise you felt when you first read the title?

#### **3. Don't mistake analysis for learning**

Assignments over the years ask us to "analyze the content and then write a paper". Yet, Eastern philosophies that have existed thousands of years before ours, remind us of the role of intuition, and of the role of reflection on our experiences (on our practices). Use more than your brain, use your intuition and your heart.

#### **4. Don't mistake education to occur only in classrooms**

Yet research indicates that adults learn best when they apply information to meet current, real needs in their lives, that is, when they ground their theories in practice. And they learn best when exchanging ongoing feedback around these practices.

### **General Suggestions to Build More Learning into the Plan**

#### **1. For every learning method, answer "How will this learning effect the real world?"**

Have your supervisor or best friend hold you accountable to answer that question. It may be the most important question in your plan and its answer may leave you feeling the most fulfilled when the plan has been implemented.

#### **2. Include learning activities that go well beyond the safety of reading and writing papers**

Take some risks. Have your spouse or close friends suggest what you most need to learn and how. Ultimately, ensure that you're not engaged in extended arguments about "How many angels will fit on the head of a pin — come the New Millennium?"

#### **3. Take advantage of real-life learning opportunities in the workplace**

Your life and job afford you numerous opportunities from which to learn. For example, if you're designing a plan to develop leadership skills, then select learning methods that involve leading efforts in your community. Volunteer to a local nonprofit or professional organization.

#### **4. Practice principles of unconventional educators, such as Paulo Freire and Myles Horton**

Freire and Horton taught people to read, not just for the sake of learning, but to meet real and current needs in the lives of their learners. Horton, who didn't write any scholarly papers in his life, started the Highlander Folk School. The school had no classrooms, no expert lecturers. Yet, Martin Luther King said that Highlander probably had more to do with addressing desegregation than he did. In another case, after leaving Highlander, a young black learner refused to go to the back of the bus — Rosa Parks.

### **General Considerations to Build More Learning into Our Lives**

Many of us give far more attention to the learning we glean from our classrooms than we do from the rest of our lives. Many of us come to realize this situation only after we've graduated. Again, some suggestions:

#### **1. Write Down Ten Most Important Things You've Learned — How Did You Learn Them?**

It's ironic that, considering the thousands of exercises we've been assigned in our lives, this exercise is never among them! Yet it's probably one of the most important. Next to each thing you learned, note what you did to learn it. Do you know? Did it occur in a classroom? What theory spawned that learning?

#### **2. Once a Week, Write Down a Key Learning Experience — What Did You Learn?**

You will learn far more from your real-world experiences (or practices), including from your intimate relationships with others, than you will from all of the classrooms and all of the books in the world!

#### **3. Involve Yourself in Community Service — Great "Classroom" in Life!**

These services are powerful "practices" that soon spawn rich, deep learning in our lives!

#### **4. For One Minute, Stare At Yourself in the Mirror: Ask "How Do I Feel About Myself?"**

Update your training and development plan to address any concerns you have about the person staring back at you in the mirror. As with any successful therapy or managing or teaching, you must first start with yourself.

## **Summary of Above Suggestions to Enrich Training and Development**

### **Some Basic Requirements of Learners**

Learners Must Be Willing to Grow, to Experience

Growth Involves the Entire Learner

Growth Requires Seeking Ongoing Feedback

### **Some Basic Requirements of Supervisors**

Include Learners in Development of Training and Development Plan

If Available, Have Human Resources Representative Play Major Role

Provide Ongoing Feedback and Support

When Assessing Results of Learning, Maximize Feedback About Performance

Budget Necessary Funds for Resources Learner Will Need

Set Aside Regular Times for Supervisor and Learner to Meeting

### **Developing the Training and Development Plan**

Document a Training and Development Plan (Goals, Methods and Evaluation)

Don't Worry About Whether Your Plan is Perfect or Not — The Plan is Guide, Not Law

Remember that Development is a Process

### **Selecting Training and Development Goals**

Select 2-4 Goals to Get Started

Determine the Goals Yourself — Don't Adopt Them from Another Program

Set Realistic Expectations

Don't Forget the Most Important Sources of Suggestions: Supervisors and Subordinates

Integrate Results Expected from the Learner with Goals in the Performance Plan

### **Basic Principles About Adult Learning When Selecting Methods**

Adults Learn Best by Applying Information to Current, Real-World Needs

Adults Learn Best by Exchanging Feedback About Experiences

### **Basic Mistakes to Avoid When Selecting Methods**

Don't Mistake Data and Information for Knowledge and Wisdom

Don't Mistake Entertainment to Be Enlightenment

Don't Mistake Analysis to be Learning

Don't Mistake Education to Occur Only in Classrooms

### **Basic Considerations to Build More Learning into the Training and Development Plan**

For Every Method in Your Plan, Ask "How Will This Learning Effect the Real World?"

Go Well Beyond the Safety of Reading and Writing Papers  
Take Advantage of Real-Life Learning Opportunities in the Workplace.

Consider Principles of Unconventional Educators, Such as Paulo Freire and Myles Horton

### **Basic Considerations to Build More Learning into Our Lives**

Write Down Ten Most Important Things You've Learned — How Did You Learn Them?

Once a Week, Write Down the Key Experiences Over Past Week and What You Learned

Involve Yourself in Community Service — Great "Classroom" in Life!

Finally, Take Five Minutes to Stare in the Mirror. Ask "How Do I Feel About Myself?"

**Might any of the following topics be useful to you at this point in designing your training plan?**

### **Determining Your Overall Goals in Training**

This section helps you identify what you want to be able to do as a result of implementing your training plan, for example, qualify for a certain job, overcome a performance problem, meet a goal in your career development plan, etc. Learners are often better off to work towards at most two to four goals at a time.

**1. Optional: You may want to re-review some of the following information:**

Goals — Selecting the Training and Development Goals ( refer to the above suggestions to enrich training and development plan)

**2. Are there any time lines that you should consider in your plan?**

Do you have to accomplish any certain areas of knowledge or skills by a certain time? If so, this may influence your choice of learning objectives and learning activities to achieve the objectives. (Record your time lines in the Framework to Design Your Training Plan.) ( refer to the above matter)

**3. Are you pursuing training and development in order to address a performance gap?**

A performance gap is usually indicated from the performance appraisal process. The performance appraisal document should already include careful description of the areas of knowledge and skills that you must learn in order to improve your performance. To understand performance gaps, Know more about Employee Performance Management

**4. Or, is your plan to address a growth gap?**

If so, carefully identify what areas of knowledge and skills are needed to reach your goals in your career. Consider referencing job descriptions, lists of competencies or even networking with others already in the positions that you want to reach in the near future. The following more information will help you  
Job Descriptions | Competencies | Networking | Career Planning | Job Searching

**5. Or, is your plan to address an opportunity gap?**

If so, carefully identify what areas of knowledge and skills are needed to perform the job or role that soon might be available to you. Again, consider job descriptions, lists of competencies or even interviewing someone already in the job or role that may soon be available to you.

The following more information will help you.

## 6. Get feedback from others

Ask for advice from friends, peers, your supervisors and others. They can be a real treasure for real-world feedback about you! For example, you (and your supervisor, is applicable) could work together to conduct a SWOT (an acronym) analysis, including identifying the your strengths, weaknesses, opportunities and any threats to reaching the your desired goals.

## 7. Should you conduct a self-assessment?

For example, you (and your supervisor, is applicable) could work together to conduct a SWOT (an acronym) analysis, including identifying the your strengths, weaknesses, opportunities and any threats to reaching the your desired goals.

## 8. Is a list of competencies, job descriptions or job analysis available to help you identify your training and development goals?

A competencies list is a list of the abilities needed to carry out a certain role. The list can be very useful to you when identifying your learning objectives in your training and development plan.

## 9. Begin thinking about how much money you will need to fund your plan.

You might need money, e.g., to pay trainers, obtain facilities and materials for training methods, pay wages or salaries for employees during attendance to training events, etc. Begin recording your expected expenses in the “Budget”

## 10. Identify your training goals.

By now, you should have a strong sense of what your training goals are, after having considered each of the above steps. It's important that goals be designed and worded to be “SMARTER” (an acronym), that is, specific, measurable, acceptable to you, realistic to achieve, time-bound with a deadline, extending your capabilities and rewarding to you.

## Determining Your Learning Objectives and Activities

The purpose of this part of your planning is to design learning objectives that ultimately accomplish your reaching your overall training and development goals. You will also identify the learning activities (or methods) you'll need to conduct to achieve your learning objectives and overall training goals.

### 1. You may want to re-review information in the sections:

Designing Training (identifying learning objectives, methods to use, etc.)

Methods — Remembering Some Basic Principles About Adult Learning

Methods — Some Basic Mistakes to Avoid When Selecting

MethodsMethods — Building More Learning into the Training and Development Plan

Various Ideas for Ways to Learn

### 2. Identify some preliminary learning objectives for each new area of knowledge or skills that you need to learn.

Carefully consider each of your training goals. What specifically must be accomplished (that is, what objectives must be reached) in order for you to reach those goals? Which of these objectives require learning new areas of knowledge or skills? These objectives are likely to become learning objectives in your

training plan. Similar to the nature of training goals, learning objectives should be designed and worded to be “SMARTER”.

### 3. In what sequence should the learning objectives be attained?

Usually, learning builds on learning. It may be useful to learn certain areas of knowledge and skills before learning new areas.

### 4. Carefully consider — When you have achieved all of your learning objectives, will you indeed have achieved all of your overall training goals?

Now you're read to write down your learning objectives in the

### 5. What are the best learning activities (methods) for you to achieve your learning objectives?

Do the methods match your particular learning style, e.g., reading, doing or listening? Do the methods stretch your styles, too? Are the methods readily accessible to you? Do the methods take advantage of real-life learning opportunities, e.g., use on-the-job training opportunities, real-life problems that occur at work, use of projects and programs at work? Note that learning activities do always match learning objectives on a one-for-one basis.

### 6. Do your learning activities include your ongoing reflections about your learning?

You (and your supervisor, if applicable) will benefit from regularly taking time to stand back and inquire about what is going on in your training, what are you learning and how, if anything should be changed, etc. Skills in reflection are critical for ongoing learning in your life and work.

### 7. What observable results, or evidence of learning, will you produce from your learning activities that can be reviewed for verification of learning?

For ideas about what results to design into your plan, Now you're ready to write down your evidence of learning in the Framework to Design Your Training Plan.

### 8. Who will verify that each of your learning objectives were reached?

Ideally, your learning is evaluated by someone who has strong expertise in the areas of knowledge and skills required to achieve your training goals. Now you're ready to write down your evaluator in the Framework to Design Your Training Plan.

### 9. Now that you know what activities that will be conducted, think again about any costs that will be needed, e.g., for materials, facilities, etc.

You may want to update the “Budget” section in the Framework to Design Your Training Plan.

### 10. How will you handle any ongoing time and stress management issues while implementing your plan?

Professional development inherently includes the need for self-development, as well. Therefore, you must know about Stress Management | Time Management | Work-Life Balance | Self-Confidence | Emotional Intelligence | Maintaining a Positive Attitude

## Developing Any Materials You May Need

The goal of this phase of your planning is to obtain or develop any resources you need to conduct the activities you selected in the previous phase of the plan.

### 1. You must be able to

Developing Training Materials (developing facilities, documents, graphics, etc.)

**2. Consider if you need to obtain, or start:**

Enrolling in courses, buying books, scheduling time with experts, getting a mentor, scheduling time with your supervisor, etc.

**3. Now that you've thought more closely about learning methods and associated materials, think again about any costs that will be needed, e.g., for materials, facilities, etc.**

**4. Should any of your planned learning methods be pretested?**

Should you have anyone else use the methods and share their impressions about the methods with you? Have you briefly reviewed the methods, e.g., documentation, overheads, etc? Did you experience any difficulties understanding the methods?

**Planning Implementation of Your Training Plan**

The goal of this phase of your planning is to ensure there are no surprises during the implementation phase of your training.

**1. You must be able to implement the training plan.**

**2. During your training, how will you be sure that you understand the new information and materials?**

Periodically conduct a short test, e.g., everyone once in a while, try recall the main points of what you have just learned, test yourself, etc. If you are confused, tell your trainer now.

**3. Will your learning be engaging and enjoyable?**

**4. Are you sure that you'll receive the necessary ongoing feedback, coaching, mentoring, etc., during your training and development activities?**

Information on following will help you Sharing Feedback | Coaching | Mentoring | Motivating Employees | Counseling | Sustaining Morale |

**5. Where will you get necessary administrative support and materials?**

**6. During implementation, if any changes should be made to your plan, how will they be tracked? How will the plan be redesigned? How will it be communicated and to the right people?**

**Planning Quality Control and Evaluation of Your Training Plan and Experiences**

The goal of this phase of your planning is to ensure your plan will indeed meet your training goals in a realistic and efficient fashion.

**1. You Must know about evaluation of training process and results**

**2. Who's in charge of implementing and tracking your overall plan?**

How will you know if the plan is on track or needs to be changed?

**3. Consider having a local training expert review the plan.**

The expert can review, in particular, whether

- your training goals will provide the results desired by you (and your organization, if applicable),
- learning objectives are specific and aligned with your overall training goals,

- the best methods are selected for reaching your learning objectives, and
- your approach to evaluation is valid and practical..

**4. Are approaches to evaluation included in all phases of your plan?**

For example, are your methods being pretested before being applied? Do you understand the methods as they're being applied? Are regularly providing feedback about how well you understand the materials? How will the you (and your supervisor, if applicable) know if implementation of the plan achieves the training goals identified in the plan? Are there any plans for follow-up evaluation, including assessing your results several months after you completed your plan?

**Follow-Up After Completion of Your Plan**

This is often the part of the plan that gets neglected. In our society, we're often so focused on identifying the next problem to solve, that few of us have the ability to acknowledge successful accomplishments and then celebrate. The design and of this plan has probably been a very enlightening experience for you — an experience that brought a perspective on learning you can apply in a great many other arenas of your life. Congratulations!

**1. Are follow-up evaluation methods being carried out?**

**2. Did you (and your supervisor, if applicable) complete a successful experience to develop and implement a training and development plan? Is this accomplishment being fully recognized?**

Consider information in the section

**Various Ideas for Learning Activities and Documentation of Results**

There are numerous types of activities which learners can conduct to reach their learning objectives — arguably the best activity is life itself. The learner can conduct one type of activity below or several. The list actually comprises what might be called types, modes and methods of learning and even some learning aids.

Note that conducting any of the following activities (or types of activities) will not by themselves necessarily generate learning. Ideally, the following are selecting during the systematic design of a training and development experience, whether self-directed or other-directed.

**Information includes**

Some Typical Ways of Learning

Some New Ways of Learning in the Workplace

Some Tangible Results that Can Be Used to "Document" Learning

On-Line Learning

Continuous Learning

Distance Education

**Some Typical Ways of Learning**

Training methods are either on-the-job, implemented outside the organization or a combination of both. The following is a brief overview of rather typical methods of development (in alphabetical order):

### **Apprenticeships**

For centuries, apprenticeships were the major approach to learning a craft. The apprentice worked with a recognized mastercraftsperson. Particularly during times of low unemployment, businesses are eager to get any kind of help they can find. Seeking an apprenticeship may be a very useful and effective way to eventually develop a new skill.

### **Career Counseling**

Hopefully, learners have the opportunity to work with their supervisors to develop career plans which identify areas for improvement or advancement, how those areas can be addressed and when.

### **Coaching**

Coaching is becoming a very popular means of development, and often includes working one-on-one with the learner to conduct a needs assessment, set major goals to accomplish, develop an action plan, and support the learner to accomplish the plan. The learner drives these activities and the coach provides continuing feedback and support.

### **Continuing Professional Development**

Many professions require verification of ongoing training to retain certification, e.g., social workers, some fields of law, nurses, etc. Professionals must stay up-to-date in the views and practices necessary to lead and manage in today's organizations. There seems to be an increasing number of universities, colleges and training centers associating continuing education units (CEU's) with their courses and workshops.

### **Courses**

Universities, colleges and training centers often have a large number of courses in management, professional and personal development. If the learner is looking to build a skill, then he or she must actually apply new information from these courses — otherwise, the learner is collecting information (hopefully, knowledge), rather than building skills.

### **Distance Learning**

This typically includes learning by getting information and / or guidance from people who are not face-to-face with the learner, e.g., learning via satellite broadcast, broadcast over the Internet, e-mail or postal mail correspondence, etc. Some people consider on-line learning (e.g., information, tutorials, etc., available on diskette, CD-ROM, over the Internet, etc.) to be distance learning, as well.

### **Internships**

Internships are offered usually by organizations to college students wanting to find work experience during the summer months. The internships offer precious, real-life job experience and the organizations often get skilled, highly dedicated service. Many times, interns go on to be hired by the organizations, as well.

### **Job Assignments**

Job assignments are wonderful opportunities from which to learn. We just aren't used to thinking of them that way. To cultivate learning, consider having employees write short reports, including an overview of what they did, why they did it, what areas of knowledge and skills were used, how the job

might have been done better, and what areas of knowledge and skills would be needed to improve the job.

### **Job Rotations**

This can be one of the most powerful forms of development, allowing learners to experience a broad range of managerial settings, cultures and challenges.

### **Lectures**

Lectures, or focused presentations by experts on subject matter, are held in a wide variety of locations, not just in classrooms. Professional associations often bring in speakers. Guest lectures are often sponsored by local universities, colleges and training centers, and announced to the public. Many times, the lectures are repeated over local radio and television.

### **Management Development Programs**

Local universities, colleges and training centers usually offer these programs. Carefully review their program content and design to ensure that training includes real-life learning activities during which learners can develop skills for the workplace.

### **Mentoring**

Hopefully, learners find experienced managers in the workplace who are willing to take learners "under their wing" and provide ongoing coaching and mentoring.

### **On-Line Training**

There are now numerous sources of on-line training (learning information from computer diskette, CD-ROM, the Internet, etc.. This form of learning is sometimes called Web-based-training. Various forms of distance learning involve learning over the Internet as well.

### **On-the-Job Training**

This form helps particularly to develop the occupational skills necessary to manage an organization, e.g., to fully understand the organization's products and services and how they are developed and carried out.

### **Other-Directed Learning**

This includes having someone other than the learner identify the training goal, methods to achieve the goal, and approaches to evaluating the training and progress toward achieving the training goal.

### **Orientation to New Jobs or Roles**

A carefully developed procedure for orienting new employees is very helpful for getting employees "off on the right foot" when starting their jobs.

### **Peer-Based Methods**

This includes formats where peers focus on helping each other learn, e.g., by exchanging ongoing feedback, questions, supportive challenges, materials, etc. Perhaps the best example is the action learning process, originated by Reginald Revans.

### **Professional Organizations**

A wide variety of professional organizations often offer courses, seminars, workshops and sessions from conventions.

### **Self-Directed Learning**

Highly motivated learners can usually gain a great deal of knowledge and skills by identifying their own learning objectives, how to meet those objectives and how to verify they've met the objectives, as well.

## Television

Various television networks often have a wide variety of very enlightening shows about basic job skills, such as computer basics, business writing, etc.

## Tutorials

Tutorials includes guidance to proceed through learning some technique or procedure, e.g., a tutorial on using a computer software package. There are an increasing number of on-line tutorials (tutorials available on diskette, CD-ROM, over the Internet, etc.).

## Training Courses and Workshops

Workshops, seminars, convention sessions, etc. are useful, in particular, for highly focused overviews of a particular subject or training about particular procedures.

## University and College Programs

It seems there is an exponential number of management development programs in universities and colleges.

## Workshops

Workshops typically include some hands-on practice by the learner, and can be very practical means to learn a certain technique or procedure.

## Some Tangible Results that Can Be Used to "Document" Learning

If you or others are seeking to verify results from your training and development, it helps to produce tangible items that can be evaluated to discern if you've achieved your training goals and objectives. The following list comes courtesy of The Union Institute, which suggests the list to learners when developing their own learning agreements.

- annotated bibliographies
- audio recordings
- case study analyses
- certificates of achievement
- commendations from employers
- computer software
- conducting a series of peer days
- conducting Socratic dialogues
- conducting workshops
- creating course handouts
- creating works of art
- designing a questionnaire
- developing training manuals
- dialoguing with committee members
- formal written papers
- gallery exhibitions of one's work
- giving a lecture
- grades received for courses completed at other institutions
- journal entries
- notebooks validated by adjunct professors
- notes prepared regarding non-UGS sponsored seminars
- others yet to be identified

- performance in the creative arts
- photography
- poems written
- preparing testing protocols
- presentations
- receiving professional verification
- results of literature searches
- sculptures
- teaching a course
- transcribed learning from other institutions of higher learning
- video productions
- written and oral examination by committee members, mentors or consultants
- written notes from museum visits

## On-Line Learning

There are an increasing number of approaches to on-line learning. www plays a crucial role in this.

## Continuous Learning

Continuous learning is learning how to learn. Typically, this involves developing skills in reflection, which is the ability to continually inquire and think about experience to draw conclusions and insights. It also involves the ability to conceptualize the learning process. Continuous learning is often associated with the concepts of systems thinking and organizational learning. See

## Activity and Assignment

1. Design a training plan/orientation program for 8 Receptionists working in various shifts in a software company.
2. Design a training plan for Marketing executives in a FMCG.

## Case

### Psychological Problems in Training

Mr. Vijay Kant joined the S.C.Railway five years back when he was 21 years old. He proved himself as an efficient steam engine driver. He bagged the Railway Minister's Best Driver's Award this year. He was asked to undergo training in diesel engine driving due to massive dieselisation in South Central Railway. But he was reluctant to take up training. The head of the loco staff was quite surprised to know

the reluctance of Mr. Vijay Kant when a number of drivers of steam engines have volunteered themselves to undergo training in diesel engine driving.

## Question

1. As an industrial psychologist identify important psychological problems in this case.

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## LESSON 15

### COMPETENCY BASED HRM/TRAINING

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Friends,

After reading previous lessons of this unit now you have understood the various steps in systematic training process and Training needs Identification process.

The modern Industry practices of HRM and HRD Competency based HRM plays a crucial role.

After reading this lesson you will be able to

1. Explain you what is Competencies,
2. What is competency based HRM,
3. How is helps in HRD and Training process.
4. Have knowledge of overview of Development and Application to Public and Private Sectors.

#### Competencies

Competencies and competency-based human resources management (CBHRM) are in common practice in many private sector areas and on the rise in many Canadian federal government departments and agencies. While organizations have used the idea of competencies for over fifty years, the expansion of the competency movement within the private sector and, now, into the public one, has resulted in a proliferation of definitions, tools, models and applications. All of which are not universally understood and applied.

This paper is a review of the competency literature and an attempt to shed some additional light on the field. It addresses some of the issues associated with the validity and quality of CBHRM implementation. It outlines the pros and cons of competency use through a discussion of the efficacy of competency models and the advantages and disadvantages of CBHRM.

The findings of the paper suggest CBHRM is most effective when competencies are linked closely to proven strategic planning processes and measurable organizational performance standards. In the current planning environment of the public sector, there is a concern that CBHRM may reinforce inappropriate HRM approaches and, therefore, not support the broader objectives of the government of Canada in the areas of globalization, social diversity, governance, and the knowledge economy. More work remains to be done to validate competency utilization in the Canadian federal public sector.

#### Introduction

This paper examines competencies and competency use in competency-based human resource management (CBHRM). Considerable confusion has arisen with respect to the use of competencies in both the private and public sectors. Several researchers (Antonacopoulou & Fitzgerald, 1997; Austin et al., 1996; Lado & Wilson, 1994) have expressed concern about the lack of clarity with respect to specific competency issues. What follows is a discussion of these issues and an exploration and

clarification of their respective roles in the strategic management of human resources in the public sector.

The paper is intended to be a general inquiry into the competency movement, assessing current and historical practices and theoretical underpinnings, ultimately identifying key issues in the use of competency-based models in the public sector. Given the problematic nature of strategic human resources management in a rapidly changing environment, researching this paper, not surprisingly, uncovered as many questions as it sought to answer.

#### Competency Definition and Terminology - The Challenge

In studying the competency area, one is immediately struck by the lack of uniform definitions, terminology, and the resulting misunderstanding. The difficulty appears to stem from drawing very fine lines of definition distinction with terms such as competence, competency, competencies, and competences. For example, the New Oxford Shorter Dictionary defines competence as the “power, ability, capacity to do, for a, task”, whereas Merriam Webster defines it as “a sufficiency of means for the necessities and conveniences of life.” Oxford further states that competence and competency are synonymous as are competences and competencies. It becomes readily apparent that if these too great dictionaries differ with respect to defining competencies then common parlance can’t be far behind.

Dubois (1993), a leading expert in the applied competency field, defines competence as “the employee’s capacity to meet (or exceed) a job’s requirements by producing the job outputs at an expected level of quality within the constraints of the organization’s internal and external environments.” He goes on to adapt Boyatzis’ (1982) definition of competency and states that “a job competency is an underlying characteristic of an employee—i.e., motive, trait, skill, aspects of one’s self-image, social role, or a body of knowledge— which results in effective and/or superior performance in a job.”

Competency-based human resource management on the other hand takes the broad term of competence and breaks it into its component parts. CBHRM identifies and assesses different competencies that make up an individual’s overall competence and matches them with required job and/or organization competencies. Knowing which competencies are required as compared to which competencies are available to an organization can help inform and direct HRM interventions related to compensation, recruitment, promotion, **training**, and organizational culture.

Zemke (1982) interviewed several experts in the field to determine “precisely what makes a competency” and he captured his findings thusly:

“Competency, competencies, competency models, and competency-based **training** are all Humpty Dumpty words meaning



only what the definer wants them to mean. The problem comes not from malice, stupidity or marketing avarice, but instead from some basic procedural and philosophical differences among those racing to define the concept and to set the model for the way the rest of us will use competencies.”

The American Compensation Association defines competencies as “. . . individual performance behaviours that are observable, measurable and critical to successful individual or corporate performance” (Canadian HR Reporter-Press Release, 1996).

Defining competency fully is not as simple as addressing the individual application. Other terms such as organizational competence and core competency emerge which potentially permit improved strategic human resource management but require defining nonetheless. Organizational competence and core competency link an organization’s essential values and business to those of its employees. Core competency can refer to either an organization or an individual and resource-based analysis (Lado and Wilson, 1994) suggests a tight link between individual and organization core competencies is a good way to achieve sustained competitive advantage. One definition of employee core competency, for example, suggests “(it is) a principal or critically essential competency for successful job performance for a given job at a given level in an organization hierarchy” (Dubois, 1993).

Fogg (1994) defines organization core competency as “those few internal competencies at which you are very, very good, better than your competition, and that you will build on and use to beat the competition and to achieve your strategic objectives.”

The present study is concerned more with establishing the linkages between organizational (core) competencies, individual (core) competencies, and job-specific competencies as these relate to organizational effectiveness and executive control of the human resources (HR) function.

Differences in definitions notwithstanding, Hendry and Maggio (1996) suggest that when competencies are linked to the broader goals of an organization, the following common elements emerge as outcomes of a comprehensive competency model:

- Identification of characteristics and behaviours that differentiate top performers from others in relation to their contribution to strategic objectives;
- Clarification, communication, assessment, and development of characteristics that focus individuals on core organization goals;
- Practical observation help prescribe and validate behavioural descriptions that achieve the desired results;
- Description of skills, attitudes, traits, and behaviours that can be attached to pay, performance measurement, hiring criteria, **training**, organizational staffing, career development, and succession planning.

### Origin of Competency Profiling

Furnham (1990) states that “the term competence is new and fashionable, but the concept is old. Psychologists interested in personality and individual differences, organizational behaviour

and psychometrics have long debated these questions of personality traits, intelligence and other abilities.”

Competency-based methodology was pioneered by Hay-McBer company founder David McClelland, a Harvard University psychologist in the late 1960’s and early 1970’s (Czarnecki, 1995). McClelland set out to define competency variables that could be used in predicting job performance and that were not biased by race, gender, or socioeconomic factors. His research helped identify performance aspects not attributable to a worker’s intelligence or degree of knowledge and skill. McClelland’s article, appearing in *American Psychologist* in 1973, entitled “Testing for Competence Rather Than for Intelligence,” was a key point of development of the competency movement as an alternative to the intelligence testing movement.

McClelland’s (1973) competency methodology can be summed up in two factors: “Use of Criterion Samples” or systematically comparing superior performing persons with less successful persons to identify successful characteristics and “Identification of Operative Thoughts and Behaviours that are Causally Related to Successful Outcomes” or the best predictor of what persons can and will do in present and future situations is what they have actually done in similar past situations.

### Competency Profiling

A competency profile is generally composed of five to ten competencies but can include as many or as few as are required to accurately reflect performance variations in the position. For example, a competency model for a public servant might include initiative, cooperation, analytical thinking, and a desire to help the client. Competency-based models are used to recruit, select, train, and develop employees. Unfortunately, the aforementioned lack of rigour in terminology can lead to loosely defined and improperly implemented CBHRM.

Competency profile development can be handled in a number of ways, two of which are the top-down and bottom-up approaches. The top-down approach generally involves picking, based on a strategic analysis of the organization’s performance objectives, an array of competencies from a dictionary of competencies and assessing those for a particular position or class of positions. The shortcoming associated with this approach is that the competencies survey is carried out as an additional step separate from the creation of the profile. The top-down process has the potential to reduce the applied face validity of the profile and, subsequently, reduce employee buy-in.

The bottom-up approach on the other hand involves exploratory checklist surveys and subsequent confirmatory interviews to derive the competencies from employees, thereby increasing the face-validity and simultaneously developing the assessment questions to tap into them. In addition to these potential benefits, bottom-up approaches may result in employees being directly involved in the development of competency profiles that will describe behaviours that are relevant to their tasks. This is useful for gaining employee understanding of, input to, buy-in, and loyalty to the process (North, 1993).

## Competency-Based HRM Models

### Defining Models in General

Typically, a model is defined as “an imitation or an abstraction from reality that is intended to order and simplify our view of that reality while still capturing its essential characteristics” (Forcese & Richer, 1973). It is a logical structure. Models can be either implicit or explicit. Implicit models do not clearly specify the interrelationships involved in the model but merely assume or imply their presence and, to this extent, are based on intuition. By contrast, an explicit model forces the individual to think clearly about and account for all the important interrelationships involved in a problem.

In good model design it is crucial that both the model and the individual relationships involved be tested or validated. This objective is not met when there is complete reliance on intuition and this has the potential of building a model with poorly specified or, in some cases, erroneously specified relationships. As a result, explicit models are preferred to implicit ones (Pindyck and Rubinfeld, 1976).

### Defining Competency Models

Dubois (1993) in defining competency models states that they “provide the adhesion or “glue” that is necessary among the elements of an organization’s human resource management system. By this I mean that competency models help organizations take a unified and coordinated approach to designing the human resource management system, including job design, hiring, performance improvement, employee development, career planning or pathing, succession planning, performance appraisals, and the selection and compensation systems for a job. Therefore, any investment an organization makes in competency model development work has benefits beyond the usefulness of the results for HRD purposes.”

He further describes a competency model as being able to capture “those competencies that are required for satisfactory or exemplary job performance within the context of a person’s job roles, responsibilities, and relationships in an organization and its internal and external environments” and is “. . . generally very detailed and might include, for example, a description of the job setting, the job tasks and activities, the job outputs, the employee competencies that are required the job tasks, and the quality standards for outputs . . . the contents of the competency model (models) are then converted, in a highly systematic manner, to a curriculum plan.”

Dubois (1996) suggests the following minimum standards needed to be established and maintained when competency modelling research and development methods are adopted and practiced:

1. Competency models that result from the research and development processes must be aligned with the organisations’s strategic goals and business objectives.
2. Research and development methods used should produce valid and reliable competency models.
3. Organization leaders must consistently endorse and support the use of a competency-driven approach as a key ingredient to the organization’s strategic success.

4. Competency models must be sufficiently comprehensive to identify the competencies that distinguish exemplary employee performance.
5. Outputs from the competency model must be technically reliable and valid and acceptable to the client.

### Competency-Based HRM - Advantages

Valid and reliable competency-based HRM models can produce a number of positive outcomes. For example, CBHRM models can:

- directly link individual competencies to organizational strategies and goals
- develop competencies profiles for specific positions or roles, matching the correct individuals to task sets and responsibilities
- enable continual monitoring and refinement of competency profiles
- facilitate employee selection, evaluation, **training**, and development
- assist employers in hiring individuals with rare or unique competencies that are difficult and costly to develop
- assist organizations in ranking competencies for compensation and performance management

### Competency-based HRM - Disadvantages

However, less valid and reliable competency-based HRM models can result in negative outcomes. For example, they can:

- develop less meaningful competencies in organizations without clear visions of their goals or strategies
- be quite expensive and time-consuming to administer
- reduce core organizational competencies understanding as a result of poor employee buy-in
- preserve the organizational status quo and in adequately address soft, integrative and/or innovative competencies such as intercultural or cross-cultural competency
- add nothing in organizations that have difficulty in differentiating between successful and unsuccessful performance and when the competencies are too “generic”

### Competency Experience - General

The American Compensation Association (1996) conducted a major survey of 217 mid to large size organizations to determine their use and experience with competencies. The survey pointed to wide use of competencies, but to varying degrees of rigour and application. The survey found organizations using competencies for:

- Communicating valued behaviours and organizational culture (75% agreed competencies have a positive effect)
- “Raising the bar” of performance for all employees (59% agreed)
- Emphasizing people (rather than job) capabilities as a way to gain competitive advantage (42% agreed)
- Encouraging cross-functional and team behaviour (34% agreed)

The survey authors cautioned that “for many of these goals, however, the jury is still out as to whether competency-based

HR applications are doing what senior HR practitioners would like.”

Close to 60% of responding organizations with competency-based applications for staffing, **training**, and performance management had the programs in place for less than a year when the survey was conducted in 1996. Sixty-nine percent of competency-based compensation systems were in development or still in their first year of implementation. The report points out that competency-based HR applications are evolutionary rather than revolutionary, in that they are treated as add-ons to existing HR practices. “They are clearly not throwing away their existing systems, they are using competencies as a way to clarify what performance matters.”

Respondents in the research study listed senior management, high performers, and functional experts as the top three sources of information to develop competencies. The study also noted that competencies tended to highlight organizational behaviours rather than job-related skills. Zeroing in on those competencies which add real value to the business is key. “If you get the competency model wrong you do not add value . . . organizations must ask themselves if they’re being as rigorous as they need to be” (American Compensation Association, 1996).

### **Competency Experience - Private Sector**

Recent surveys indicate widespread use of competency-based human resource models by banks, insurance companies, management consulting firms, technology companies, transportation companies, utility companies, delivery companies, retail eating outlets, manufacturing industries, and mining companies. Industry publications suggest ongoing use of competencies in the private sector, but the extent of use remains uncertain.

For example, North American Life (NAL) used the Hay system in 1995 (Orr, 1995) to link competency, performance management, and pay. They came up with a short list of 10 competencies — analytical thinking, conceptual thinking, customer focus, developing people, flexibility, information seeking, listening and understanding and responding, performance excellence, team leadership, and teamwork — specific to NAL using a standardized menu of competencies to survey employees and identify proficiencies relevant to each job

Other private sector initiatives reported by Czarnecki (1995) include the finance department of McDonald’s Canada which introduced competency modelling for its 50 employees and Purolator Courier which used a project team to identify 10 to 30 technical competencies (e.g. keyboard, software skills) and five to eight behavioural competencies (e.g. time planning, initiative, telephone presence).

Winter (1996) has described how Guardian Insurance uses competencies to assess and reward individual performance in terms of core competencies that reflect the company’s strategic focus and priorities and how Bell Sygma applies the notion of competencies to all aspects of human resources management, starting with the HR plan. In the latter case, gap analysis provides the basis for behavioural-based interviews to select candidates who fit with their core competencies, for an indi-

vidual development process, for succession planning, and for job definition determined by the competencies an employee applies.

### **Competency Experience - Public Sector**

#### **Current Prospects for the Competency Movement in the Public Sector**

A wide variety of generic competency models are available for performance improvement when driven by a strategic planning process in both the private and public sectors (Bryson, 1995; Dror, 1997; Dubois, 1996; Lado and Wilson, 1994; Snell & Youndt, 1995). These models typically link organizational core competencies with employee core competencies, as distinguished from employee job-specific competencies, in order to establish a direct linkage between the organization’s priorities and employee behaviours. Creating effective linkages can be problematic and the above mentioned potential advantages and disadvantages of the competency approach also apply to competency programs in the public sector. For example, the British civil service designed a competence checklist to replace its traditional, centrally-controlled selection criteria and it resulted in a pattern of strengths and weaknesses similar to those reported in the North American literature on competencies (North, 1993).

Bryson (1995) describes several methods by which public sector and nonprofit organizations can identify their organizational core competencies as a significant output of the strategic planning process. For example, a strategic consideration of a public sector organization’s strengths and weaknesses can identify its organizational core competencies in concrete terms. Improvement of organizational core competencies can then be achieved through coordinated adjustment of HRM administrative policies and practices covering all, or selected, personnel functions. In some cases even in public sector settings, it may be important to ensure that an organization’s competency model be explicitly future oriented, rather than implicitly historic, and that it identify levels of superior strategic performance rather than levels of threshold, or minimum, operational performance (Jacobs, 1989). For example, entry level recruitment to government based on the assessment of potential could include future oriented expectations in the priority assigned to different competencies, and in the design of competency assessment instruments.

Using a top-down approach, Dror’s (1997) generic strategic analysis of the alternative roles of senior civil services links the core capacities of the organization with the attributes of its individual members. These are equivalent to organizational core competencies and employee core competencies, respectively. Dror’s recommended future-oriented core capacities (organizational core competencies) include: intervening in history, energizing, adjusting social architecture, risk-taking, handling complexity, making harsh tragic choices, and mobilizing support for constructive destruction.

A similar typology of functions unique to the public sector provided by Carroll (1997) includes: reconciling differences, achieving agreement, and using legitimate authority to carry agreements into effect. Dror suggest that these core capacities

can be actualized through utilization of six attributes — super-professionalism, innovation-creativity, merit-elitist but society reflecting, virtuous, autonomous but subordinated, and mission-oriented — (employee core competencies) of the senior executive cadre. Dror believes that these executive core competencies are required to carry out higher order tasks which have strategic importance in determining the relative success of government in an era of globalization and rapid change.

Another, complementary, description of competencies which distinguishes the public sector from the private sector is provided by Sherwood (1997) — acceptance of the legitimacy of the democratic process and elected officials, an ethic of responsibility to the public at large, and respect for the expertise of other professionals. Taken together and extended, these competencies provide an alternative to the simple emulation of private sector competency models and profiles.

To evaluate the potential for success of the competency movement in the public sector, it is necessary to relate inputs to outputs. At the current juncture in the history of governance, the relationship between elected officials and their bureaucracies is severely strained, resulting in serious constraints on the strategic planning process (Carroll, 1997; Sherwood, 1997). The competency movement in the public sector will probably be less connected to an effective strategic planning process, and thus will be less effective than it may be in the private sector.

Exceptions to this pessimistic forecast may occur in public sector organizations which enjoy both a strong mandate and an effective, ongoing consultation process among all its key stakeholders (Bryson, 1995; Austin et al, 1996).

#### **Public Sector HRM Administrative Practices on Competencies**

One of the main criticisms of the current HRM system in the federal public sector is the lack of effective internal integration among the sub-disciplines of the personnel function. Another main criticism is the uneven quality of strategic flexibility of the sub-disciplines (e.g., **training** is flexible, compensation is inflexible). Internal integration of HRM occurs when all of the personnel specialty functions work in a seamless fashion in the explicit pursuit of corporate strategy. Competency-based systems operate effectively at the level of individual employees without regard to their future career within the organization.

Career-based HRM, on the other hand, is more effective when individuals spend most of their career with the same organization, such as the military, police forces, religious organizations, and, to a lesser extent, the foreign service. To date, most successful applications of competency-based approaches have been in the area of human resources development—i.e., staff **training**—oriented to organizational performance improvement.

Some authors suggest caution in the application of competency-based approaches to other HRM practices—e.g., Dubois, 1996, p. 66. Others note the limited diffusion, even in the private sector, of economically viable changes to compensation-related employment practices which result in high performance (Pfeffer, 1996). Nonetheless, the competency-based approach currently is the main available alternative to centralized military-style career management systems for the pursuit of an eventual

internal integration of HRM strategies and practices (Miles & Snow, 1984).

In addition to the limited evaluation of competency-based approaches to HRM, there are other barriers to implementation at the level of individual HRM sub-systems and practices. Senior managers are frequently under pressure to imitate practices in other organizations, without being sufficiently familiar with contextual differences and tacit aspects of implementation methods. At the same time, HRM managers are often poorly positioned within the organization to ensure the strategic linkages that are required for success (Pfeffer, 1996; Johns, 1993). This means that the transfer of high performance technologies from one organization to another is a non-trivial affair. Successful implementation demands considerable management attention, expertise, and local contextual confirmation, even when the competency-based approach has been well validated in the original organization. Strategic crisis, regulatory and social policy initiatives, and broad access to detailed contextual information all promote successful innovation (Bryson, 1995, p. 234; Johns, 1993) of competency-based HRM administrative practices.

#### **The Competency Movement and Staffing in the Public Sector**

Many public sector organizations are experiencing, or have experienced, major changes in their strategic orientations. Snow and Snell (1993) illustrate how staffing plays a key role in the realization and consolidation of major shifts in strategy and structure, ranging from a job-person match function, to a strategy implementation function, through to a strategy formation function. An effective competency-based staffing model in the public sector will require improved methods for designing and maintaining managerial assessment and selection tools appropriate to its function or transitional state. Consultative methods (e.g. joint consultation), effective documentation, and active strategic monitoring and maintenance is essential for the attainment and long-term viability of functionally appropriate competency-based staffing models in the public sector (Austin et al 1996).

Austin, Klimoski, and Hunt (1996) have recently designed a micro-level framework that uses stakeholder participation to develop and implement selection systems in the public sector. Their framework is based on the values of fairness, technical adequacy, and feasibility as viewed individually and collectively by political entities, management, labour unions, system designers, and human resource managers. A comparable analysis of key values of different groups of stakeholders could also be optimized for agency or ministry strategic orientation—e.g., (Braithwaite, 1994) to reflect the globalization effects noted by Dror (1997). Social diversity issues affecting merit could be resolved through this methodology, and could result in the identification of new competencies that support diversity while addressing the need to recognize and measure ‘soft’ competencies (Donnellon & Kolb, 1994).

The operationalization of a new staffing model can be illustrated by Dror’s (1997, p. 12) employee core competency of super-professionalism. The particular assessment and developmental opportunities available in each government’s historical

context are taken as a point of departure for a new competency-based model. The essence of Dror's super-professionalism is based on practical intelligence and tacit knowledge, thus taking the middle ground mapped out by Sternberg (1995) in a recent theoretical debate on competencies. In the Canadian context at least one researcher has attempted to validate a measure of managerial practical intelligence in relation to candidate performance on a managerial assessment centre (Kerr, 1995). This kind of research and policy-based development of new competency frameworks for staffing is not yet widespread in public sector organizations, due in part to some of the constraints on strategic planning previously noted.

Another reason for the lag in development of competency-based staffing is the difficulty of assessing non-managerial and work group contributions to organizational core competencies in public sector organizations. This problem arises in part from the relative difficulty in measuring results and performance and in attributing improvements to changes in competencies, as opposed to other factors. Even if the causal role of competencies in performance can be logically argued, there may be a major time lag and other factors that mediate the relationship between competencies and organizational performance, especially given the increasing and differential impacts of globalization on performance expectations (Bryson, 1995, p.294; Maor & Stevens, 1997; Suedfeld, 1992).

Joint consultative approaches could be used for developing competency models and assessment methods, as an immediate proxy for quantitative, objective measures of results, pending improvements in criterion measurement for performance at individual, team and organizational levels of analysis (Austin & Villanova, 1992). For example, staff union input, among others, to the development of competency-based assessment processes has been shown to be effective in optimizing conflicting goals for the design of a public sector selection system in the United States (Austin et al, 1996).

### Theoretical Issues in Competencies

Recent resource-based economic analysis of the theoretical underpinning of CBHRM programs has raised a number of troubling questions (Lado and Wilson, 1994). For example, most competency programs in the private sector have been developed around the notion of a firm developing a sustainable or durable competitive advantage—as manifested by larger profit margins or market share—over its competitors. One characteristic of the competencies associated with this competitive advantage is that they must not lend themselves to easy duplication. Therefore, simple imitation of another organization's successful program is no guarantee of sustained competitive advantage unless the new HR system attributes are unique, causally ambiguous, and synergistic. Competency programs lacking these characteristics are easy for other organizations to imitate exactly and thus obtain the same competitive position (Pfeffer, 1996). Most approaches to competency program design do not deal explicitly and thoroughly with these issues, making their long term success largely a matter of chance, even in the private sector.

Further analytical work is required to adapt these competitive concepts to the values production and governance functions of

public sector institutions (e.g., Austin, James & Hunt, 1996; Denhart, 1993; and Dror, 1997) and to the articulation of methods of transferring competency approaches across governmental functions and levels. Standard capitalistic economy theory is premised on the assumption that firms are in business to maximize, or at least make, a profit. Unlike the typical objectives of a public sector organization public sector, this objective is unambiguous. In a rational, economic environment, the competencies that position a firm to reach this objective will be embraced and those that do not will be rejected. Moreover, certain precision tools, such as human resources accounting, can be applied to measure the extent to which this objective is being accomplished. Thus, consideration has to be given to the cost-benefit of extensive competency assessment for a given job versus reliance on generic competency definition. Equivalent accounting and accountability models have not been established for public sector HR activities.

As noted previously, the professional literature is quite persuasive in suggesting that any CBHRM approach should be tied to strategic objectives. The difficulty arises from the reality that while the CBHRM approach is well-founded, its applicability to government is somewhat questionable as governments exist to make private and social valuations coincide. In other words, governments in a democracy do not exist to maximize profits. Instead, they maximize the social welfare function that includes not only measurable monetary benefits but some benefits that are intangible and cannot be easily measured. These benefits are accounted for by an imputed value. The government may, therefore, engage in activities for other than financial gains. Hence, there is a requirement to link CBHRM to the social welfare function mentioned above as well as to the corporate strategic objectives. As previously suggested, the difficulties of reliably embedding organizational and individual competencies within strategy apply equally to public sector organizations.

A final theoretical and professional consideration in the area of industrial and organizational psychology is the resurfacing of the debate between the competency movement and the standardized testing movement. This renewed debate was published in the journal, *American Psychologist*, over twenty years after the publication of McClelland's original article on testing for competence instead of intelligence (Cowan, 1994; McClelland, 1994; Barrett, 1994; Boyatzis, 1994). The essence of this debate revolves around the professional standards required to ensure that a rigorous valid methodology in defining competencies, in designing the methods for their measurement, and for their use in decision-making. This debate has parallels in other areas of applied psychology related to HRM (Lowe, 1993) and its implications should be carefully considered in designing and implementing any competency-based program.

### Conclusion

This paper provides a broad overview of the concept of competencies, its origins, and application in human resource management. A prime issue with CBHRM is that the approach, being relatively recent in the public sector, has not yet been assessed. Empirical data are, as yet, not available to measure program success and to validate underlying models, implicit or explicit. Some desirable characteristics of such programs,

however, would be the establishment of clear linkages to strategic corporate objectives, the specification of the models in use, and the anticipation of the on-going need for self-correcting.

Coming part of this lesson will explain you application of competency Mapping.

### **Competency Mapping**

Previous part of this lesson has given you insight towards What is competency based HRM/ Training.

After reading this lesson you will be able to apply competency based HRM and design Competency Mapping for your organization.

### **Getting Competent on Competencies**

Now I'm turning my attention to a topic that is increasingly popular within organizations - competency modeling. Interestingly, unlike areas such as training, performance appraisal and personnel selection, there is a distinct lack of academic research on what makes for effective competency models. Even in more practitioner-geared publications, the information on competency models is far from definitive. This ambiguity can be problematic, given that competencies often serve as the foundation for an organization's entire HR strategy.

Let's take a closer look at competencies...

#### **What are competencies and competency models?**

No common definition of competencies exists, although the idea that certain competencies are critical for successful job performance is a central concept. For example, competencies for managers in a jet engine manufacturing plant that I worked with included communication, financial acumen and customer focus. Many definitions of competencies include "knowledge, skills, abilities and other characteristics (KSAO's)." KSAO's are the typical output of a process known as job analysis - the breaking down of a job into its component activities and requirements. Competencies often extend traditional job analysis by including some or all of the following: traits, motivations, drives, personality characteristics, values and behaviors. Competencies also differ from traditional job analysis techniques because they often are specifically linked to a department's and/or organization's goals and strategic objectives, as opposed to being focused on the individual employee. Lastly, whereas traditional job analysis focuses primarily on the present - how the job is defined now, competency modeling often focuses on both current and future demands.

#### **Why would an organization use competencies?**

The jet engine manufacturer mentioned above used competency models because it believed that they encouraged accurate employee-job matching, the development of employees relative to clear performance standards, the provision of ongoing performance feedback and coaching, and the differentiation of superior performers from the "pack." Executives at a large chemical company that I worked with primarily viewed competency models as a way of increasing and improving communication. When organizations create competency models, they essentially recognize and communicate that certain behaviors, skills, traits, etc. are more important than others.

This "common language" helps to communicate expectations about a company's goals and performance standards, reducing confusion both within and across departments.

#### **How are competencies selected?**

There are a number of tools and techniques that HR professionals can use to determine competencies for a given job. Praendex's PRO tool is an extremely useful way to identify the personality characteristics and behavioral competencies predictive of success in any job. The PI can also be easily integrated with an existing competency framework. For example, a software development project manager may have "finds innovative solutions" as a competency. A candidate with a high A pattern, such as a "Venturer", would be stronger on that competency than would someone with a low A.

Reviewing existing job descriptions yields useful information. Interviews with job incumbents can be used to determine what it takes to be successful in a job. Interviews with senior managers involved in strategic planning can be useful to ensure that competencies are connected to organizational goals and objectives. Remember that different constituencies within the organization will prefer different methods of building competency models. It has been my experience that senior managers often prefer qualitative methods (such as the PRO or interviews) rather than quantitative methods, because they want to make sure that the competencies "make sense" for their organization.

#### **What are the features of good competency models?**

The following checklist is not meant to be exhaustive, but to be ultimately useful, a set of competencies should be:

- Manageable: Too many competencies will become confusing and inefficient, clouding rather than clarifying an organization's priorities.
- Defined Behaviorally: Competencies should be described in terms of specific, observable behaviors.
- Independent: Important behaviors should be included in just one, not multiple, competencies.
- Comprehensive: No important behaviors should be excluded.
- Accessible: Competencies should be written and communicated in a way that is clear, understandable and useful to those outside of the HR world.
- Current: Competencies should be up-to-date, and reviewed regularly to keep pace with industry and company changes.
- Compatible: Competencies should "fit in" with a company's vision, values and culture.

#### **What is Competency Mapping?**

It is about identifying preferred behaviors and personal skills which distinguish excellent and outstanding performance from the average.

A Competency is something that describes how a job might be done, excellently; a Competence only describes what has to be done, not how. So the Competences might describe the duties of a Sales Manager for example, such as manage the sales office and its staff, prepare quotations and sales order processing,

manage Key Accounts and supervise and motivate the field sales force. The Competencies which might determine excellence in this role could include Problem Solving and Judgment; Drive and Determination; Commercial Awareness; Inter-personal skills etc, all of which might be described further by Behavioural Indicators relating specifically to that post in that organisation.

The broad concept might be said to be based on the frequently quoted adage: people get hired for what they know but fired for how they behave!

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#### **When should they be used**

The use of Competencies can include: assessment during recruitment, through specific work-based exercises and relevant, validated, psychometric tests; assessment during further development; as a profile during assessment to guide future development needs; succession planning and promotion; organisational development analysis.

Techniques used to map Competencies include Critical Incident Analysis and Repertory Grid.

Competency mapping is an approach that has the objective of helping an organization align individual development with the strategic objectives of the company. I recommend the following step-by-step process for competency mapping.

#### **Step 1. Development of Core Competencies**

In this step, the leadership of the organization meets to brainstorm which core competencies the organization requires in order to achieve its objectives, goals, and vision. Examples of core competencies that are usually essential in organizations are problem solving, teambuilding, decision-making, and communication skills.

#### **Step 2. Assessing Competency Levels Required Across Positions**

After the leadership decides which competencies are essential, it's necessary to determine the degree to which, and manner in which, these competencies are required in each type of position (i.e., Sales Manager, Receptionist, and CEO). This assessment can be made through interviews with incumbents of sample positions, using a Position Information Questionnaire (PIQ). A sample is attached.

#### **Step 3. Developing Competency-Based Job Descriptions**

Following the interview process, job descriptions can be developed that include not only duties and reporting relationships but the core competency descriptions that are tailored to each position. The same competencies are included in each employee's performance appraisal instrument so that he/she is evaluated on the same criteria that are specified in the job description.

#### **Step 4. Competency-Based Matrix**

For career development purposes, new employees (or potential employees) will be interested in career progression options available once they master different competency levels. As career options become more complex and sophisticated, the core competencies are elevated in terms of sophistication as well.

#### **Step 5. Individual Development Planning**

Using the job descriptions and the performance appraisal process as a foundation, Human Resources can provide coaching for individuals based on their unique developmental needs. For example, if a sales representative is interested in a position as Sales Manager, Human Resources professional can counsel this person about current strengths and areas for improvement and point out the competency levels required for the higher level position. Then the employee and the HR person can jointly map out a plan for the employee's development (courses, workshops, mentoring, etc.)

### **31 Core Competencies Explained**

Major competencies for which employers look, along with some of the behaviors associated with each.

The following is a summarized list of the 31 competencies listed by "cluster" (similar competencies related to a common skill set). Each competency includes a definition and the observable behaviors that may indicate the existence of a competency in a person.

#### **I. Competencies Dealing with People**

##### **The Leading Others Cluster**

1. **Establishing Focus:** The ability to develop and communicate goals in support of the business' mission.
  - Acts to align own unit's goals with the strategic direction of the business.
  - Ensures that people in the unit understand how their work relates to the business' mission.
  - Ensures that everyone understands and identifies with the unit's mission.
  - Ensures that the unit develops goals and a plan to help fulfill the business' mission.
2. **Providing Motivational Support:** The ability to enhance others' commitment to their work.
  - Recognizes and rewards people for their achievements.
  - Acknowledges and thanks people for their contributions.
  - Expresses pride in the group and encourages people to feel good about their accomplishments.
  - Finds creative ways to make people's work rewarding.

- Signals own commitment to a process by being personally present and involved at key events.
  - Identifies and promptly tackles morale problems.
  - Gives talks or presentations that energize groups.
3. **Fostering Teamwork:** As a team member, the ability and desire to work cooperatively with others on a team; as a team leader, the ability to demonstrate interest, skill, and success in getting groups to learn to work together.

#### **Behaviors for Team Members**

- Listens and responds constructively to other team members' ideas.
- Offers support for others' ideas and proposals.
- Is open with other team members about his/her concerns.
- Expresses disagreement constructively (e.g., by emphasizing points of agreement, suggesting alternatives that may be acceptable to the group).
- Reinforces team members for their contributions.
- Gives honest and constructive feedback to other team members.
- Provides assistance to others when they need it.
- Works for solutions that all team members can support.
- Shares his/her expertise with others.
- Seeks opportunities to work on teams as a means to develop experience, and knowledge.
- Provides assistance, information, or other support to others, to build or maintain relationships with them.

#### **Behaviors for Team Leaders**

- Provides opportunities for people to learn to work together as a team.
  - Enlists the active participation of everyone.
  - Promotes cooperation with other work units.
  - Ensures that all team members are treated fairly.
  - Recognizes and encourages the behaviors that contribute to teamwork.
4. **Empowering Others:** The ability to convey confidence in employees' ability to be successful, especially at challenging new tasks; delegating significant responsibility and authority; allowing employees freedom to decide how they will accomplish their goals and resolve issues.
- Gives people latitude to make decisions in their own sphere of work.
  - Is able to let others make decisions and take charge.
  - Encourages individuals and groups to set their own goals, consistent with business goals.
  - Expresses confidence in the ability of others to be successful.
  - Encourages groups to resolve problems on their own; avoids prescribing a solution.
5. **Managing Change:** The ability to demonstrate support for innovation and for organizational changes needed to improve the organization's effectiveness; initiating,

sponsoring, and implementing organizational change; helping others to successfully manage organizational change.

#### **Employee Behaviors**

- Personally develops a new method or approach.
- Proposes new approaches, methods, or technologies.
- Develops better, faster, or less expensive ways to do things.

#### **Manager/Leader Behaviors**

- Works cooperatively with others to produce innovative solutions.
  - Takes the lead in setting new business directions, partnerships, policies or procedures.
  - Seizes opportunities to influence the future direction of an organizational unit or the overall business.
  - Helps employees to develop a clear understanding of what they will need to do differently, as a result of changes in the organization.
  - Implements or supports various change management activities (e.g., communications, education, team development, coaching).
  - Establishes structures and processes to plan and manage the orderly implementation of change.
  - Helps individuals and groups manage the anxiety associated with significant change.
  - Facilitates groups or teams through the problem-solving and creative-thinking processes leading to the development and implementation of new approaches, systems, structures, and methods.
6. **Developing Others:** The ability to delegate responsibility and to work with others and coach them to develop their capabilities.
- Provides helpful, behaviorally specific feedback to others.
  - Shares information, advice, and suggestions to help others to be more successful; provides effective coaching.
  - Gives people assignments that will help develop their abilities.
  - Regularly meets with employees to review their development progress.
  - Recognizes and reinforces people's developmental efforts and improvements.
  - Expresses confidence in others' ability to be successful.
7. **Managing Performance:** The ability to take responsibility for one's own or one's employees' performance, by setting clear goals and expectations, tracking progress against the goals, ensuring feedback, and addressing performance problems and issues promptly.

#### **Behaviors for employees**

- With his/her manager, sets specific, measurable goals that are realistic but challenging, with dates for accomplishment.
- With his/her manager, clarifies expectations about what will be done and how.



- Enlists his/her manager's support in obtaining the information, resources, and training needed to accomplish his/her work effectively.
- Promptly notifies his/her manager about any problems that affect his/her ability to accomplish planned goals.
- Seeks performance feedback from his/her manager and from others with whom he/she interacts on the job.
- Prepares a personal development plan with specific goals and a timeline for their accomplishment.
- Takes significant action to develop skills needed for effectiveness in current or future job.

#### **Behaviors for managers**

- Ensures that employees have clear goals and responsibilities.
- Works with employees to set and communicate performance standards that are specific and measurable.
- Supports employees in their efforts to achieve job goals (e.g., by providing resources, removing obstacles, acting as a buffer).
- Stays informed about employees' progress and performance through both formal methods (e.g., status reports) and informal methods (e.g., management by walking around).
- Provides specific performance feedback, both positive and corrective, as soon as possible after an event.
- Deals firmly and promptly with performance problems; lets people know what is expected of them and when.

#### **Communication and Influencing Cluster**

- 8. Attention to Communication:** The ability to ensure that information is passed on to others who should be kept informed.
  - Ensures that others involved in a project or effort are kept informed about developments and plans.
  - Ensures that important information from his/her management is shared with his/her employees and others as appropriate.
  - Shares ideas and information with others who might find them useful.
  - Uses multiple channels or means to communicate important messages (e.g., memos, newsletters, meetings, electronic mail).
  - Keeps his/her manager informed about progress and problems; avoids surprises.
  - Ensures that regular, consistent communication takes place.
- 9. Oral Communication:** The ability to express oneself clearly in conversations and interactions with others.
  - Speaks clearly and can be easily understood.
  - Tailors the content of speech to the level and experience of the audience.
  - Uses appropriate grammar and choice of words in oral speech.
  - Organizes ideas clearly in oral speech.
  - Expresses ideas concisely in oral speech.
  - Maintains eye contact when speaking with others.
- 10. Written Communication:** The ability to express oneself clearly in business writing.
  - Expresses ideas clearly and concisely in writing.
  - Organizes written ideas clearly and signals the organization to the reader (e.g., through an introductory paragraph or through use of headings).
  - Tailors written communications to effectively reach an audience.
  - Uses graphics and other aids to clarify complex or technical information.
  - Spells correctly.
  - Writes using concrete, specific language.
  - Uses punctuation correctly.
  - Writes grammatically.
  - Uses an appropriate business writing style.
- 11. Persuasive Communication:** The ability to plan and deliver oral and written communications that make an impact and persuade their intended audiences.
  - Identifies and presents information or data that will have a strong effect on others.
  - Selects language and examples tailored to the level and experience of the audience.
  - Selects stories, analogies, or examples to illustrate a point.
  - Creates graphics, overheads, or slides that display information clearly and with high impact.
  - Presents several different arguments in support of a position.
- 12. Interpersonal Awareness:** The ability to notice, interpret, and anticipate others' concerns and feelings, and to communicate this awareness empathetically to others.
  - Understands the interests and important concerns of others.
  - Notices and accurately interprets what others are feeling, based on their choice of words, tone of voice, expressions, and other nonverbal behavior.
  - Anticipates how others will react to a situation.
  - Listens attentively to people's ideas and concerns.
  - Understands both the strengths and weaknesses of others.
  - Understands the unspoken meaning in a situation.
  - Says or does things to address others' concerns.
  - Finds non-threatening ways to approach others about sensitive issues.
  - Makes others feel comfortable by responding in ways that convey interest in what they have to say.
- 13. Influencing Others:** The ability to gain others' support for ideas, proposals, projects, and solutions.
  - Presents arguments that address others' most important concerns and issues and looks for win-win solutions.

- Involves others in a process or decision to ensure their support.
  - Offers trade-offs or exchanges to gain commitment.
  - Identifies and proposes solutions that benefit all parties involved in a situation.
  - Enlists experts or third parties to influence others.
  - Develops other indirect strategies to influence others.
  - Knows when to escalate critical issues to own or others' management, if own efforts to enlist support have not succeeded.
  - Structures situations (e.g., the setting, persons present, sequence of events) to create a desired impact and to maximize the chances of a favorable outcome.
  - Works to make a particular impression on others.
  - Identifies and targets influence efforts at the real decision makers and those who can influence them.
  - Seeks out and builds relationships with others who can provide information, intelligence, career support, potential business, and other forms of help.
  - Takes a personal interest in others (e.g., by asking about their concerns, interests, family, friends, hobbies) to develop relationships.
  - Accurately anticipates the implications of events or decisions for various stakeholders in the organization and plans strategy accordingly.
14. **Building Collaborative Relationships:** The ability to develop, maintain, and strengthen partnerships with others inside or outside the organization who can provide information, assistance, and support.
- Asks about the other person's personal experiences, interests, and family.
  - Asks questions to identify shared interest, experiences, or other common ground.
  - Shows an interest in what others have to say; acknowledges their perspectives and ideas.
  - Recognizes the business concerns and perspectives of others.
  - Expresses gratitude and appreciation to others who have provided information, assistance, or support.
  - Takes time to get to know coworkers, to build rapport and establish a common bond.
  - Tries to build relationships with people whose assistance, cooperation, and support may be needed.
  - Provides assistance, information, and support to others to build a basis for future reciprocity.
15. **Customer Orientation:** The ability to demonstrate concern for satisfying one's external and/or internal customers.
- Quickly and effectively solves customer problems.
  - Talks to customers (internal or external) to find out what they want and how satisfied they are with what they are getting.
  - Lets customers know he/she is willing to work with them to meet their needs.

- Finds ways to measure and track customer satisfaction.
- Presents a cheerful, positive manner with customers.

## II. Competencies Dealing with Business

### The Preventing and Solving Problems Cluster

16. **Diagnostic Information Gathering:** The ability to identify the information needed to clarify a situation, seek that information from appropriate sources, and use skillful questioning to draw out the information, when others are reluctant to disclose it
- Identifies the specific information needed to clarify a situation or to make a decision.
  - Gets more complete and accurate information by checking multiple sources.
  - Probes skillfully to get at the facts, when others are reluctant to provide full, detailed information.
  - Routinely walks around to see how people are doing and to hear about any problems they are encountering.
  - Questions others to assess whether they have thought through a plan of action.
  - Questions others to assess their confidence in solving a problem or tackling a situation.
  - Asks questions to clarify a situation.
  - Seeks the perspective of everyone involved in a situation.
  - Seeks out knowledgeable people to obtain information or clarify a problem.
17. **Analytical Thinking:** The ability to tackle a problem by using a logical, systematic, sequential approach.
- Makes a systematic comparison of two or more alternatives.
  - Notices discrepancies and inconsistencies in available information.
  - Identifies a set of features, parameters, or considerations to take into account, in analyzing a situation or making a decision.
  - Approaches a complex task or problem by breaking it down into its component parts and considering each part in detail.
  - Weighs the costs, benefits, risks, and chances for success, in making a decision.
  - Identifies many possible causes for a problem.
  - Carefully weighs the priority of things to be done.
18. **Forward Thinking:** The ability to anticipate the implications and consequences of situations and take appropriate action to be prepared for possible contingencies.
- Anticipates possible problems and develops contingency plans in advance.
  - Notices trends in the industry or marketplace and develops plans to prepare for opportunities or problems.
  - Anticipates the consequences of situations and plans accordingly.
  - Anticipates how individuals and groups will react to situations and information and plans accordingly.

19. **Conceptual Thinking:** The ability to find effective solutions by taking a holistic, abstract, or theoretical perspective.
  - Notices similarities between different and apparently unrelated situations.
  - Quickly identifies the central or underlying issues in a complex situation.
  - Creates a graphic diagram showing a systems view of a situation.
  - Develops analogies or metaphors to explain a situation.
  - Applies a theoretical framework to understand a specific situation.
20. **Strategic Thinking:** The ability to analyze the organization's competitive position by considering market and industry trends, existing and potential customers (internal and external), and strengths and weaknesses as compared to competitors.
  - Understands the organization's strengths and weaknesses as compared to competitors.
  - Understands industry and market trends affecting the organization's competitiveness.
  - Has an in-depth understanding of competitive products and services within the marketplace.
  - Develops and proposes a long-term (3-5 year) strategy for the organization based on an analysis of the industry and marketplace and the organization's current and potential capabilities as compared to competitors.
21. **Technical Expertise:** The ability to demonstrate depth of knowledge and skill in a technical area.
  - Effectively applies technical knowledge to solve a range of problems.
  - Possesses an in-depth knowledge and skill in a technical area.
  - Develops technical solutions to new or highly complex problems that cannot be solved using existing methods or approaches.
  - Is sought out as an expert to provide advice or solutions in his/her technical area.
  - Keeps informed about cutting-edge technology in his/her technical area.
22. **Initiative:** Identifying what needs to be done and doing it before being asked or before the situation requires it.
  - Identifying what needs to be done and takes action before being asked or the situation requires it.
  - Does more than what is normally required in a situation.
  - Seeks out others involved in a situation to learn their perspectives.
  - Takes independent action to change the direction of events.
23. **Entrepreneurial Orientation:** The ability to look for and seize profitable business opportunities; willingness to take calculated risks to achieve business goals.
  - Notices and seizes profitable business opportunities.
  - Stays abreast of business, industry, and market information that may reveal business opportunities.
  - Demonstrates willingness to take calculated risks to achieve business goals.
  - Proposes innovative business deals to potential customers, suppliers, and business partners.
  - Encourages and supports entrepreneurial behavior in others.
24. **Fostering Innovation:** The ability to develop, sponsor, or support the introduction of new and improved method, products, procedures, or technologies.
  - Personally develops a new product or service.
  - Personally develops a new method or approach.
  - Sponsors the development of new products, services, methods, or procedures.
  - Proposes new approaches, methods, or technologies.
  - Develops better, faster, or less expensive ways to do things.
  - Works cooperatively with others to produce innovative solutions.
25. **Results Orientation:** The ability to focus on the desired result of one's own or one's unit's work, setting challenging goals, focusing effort on the goals, and meeting or exceeding them.
  - Develops challenging but achievable goals.
  - Develops clear goals for meetings and projects.
  - Maintains commitment to goals in the face of obstacles and frustrations.
  - Finds or creates ways to measure performance against goals.
  - Exerts unusual effort over time to achieve a goal.
  - Has a strong sense of urgency about solving problems and getting work done.
26. **Thoroughness:** Ensuring that one's own and others' work and information are complete and accurate; carefully preparing for meetings and presentations; following up with others to ensure that agreements and commitments have been fulfilled.
  - Sets up procedures to ensure high quality of work (e.g., review meetings).
  - Monitors the quality of work.
  - Verifies information.
  - Checks the accuracy of own and others' work.
  - Develops and uses systems to organize and keep track of information or work progress.
  - Carefully prepares for meetings and presentations.
  - Organizes information or materials for others.
  - Carefully reviews and checks the accuracy of information in work reports (e.g., production, sales, financial performance) provided by management, management information systems, or other individuals and groups.
27. **Decisiveness:** The ability to make difficult decisions in a timely manner.

- Is willing to make decisions in difficult or ambiguous situations, when time is critical.
- Takes charge of a group when it is necessary to facilitate change, overcome an impasse, face issues, or ensure that decisions are made.
- Makes tough decisions (e.g., closing a facility, reducing staff, accepting or rejecting a high-stakes deal).

### III. Self-Management Competencies

28. **Self Confidence:** Faith in one's own ideas and capability to be successful; willingness to take an independent position in the face of opposition.

- Is confident of own ability to accomplish goals.
- Presents self crisply and impressively.
- Is willing to speak up to the right person or group at the right time, when he/she disagrees with a decision or strategy.
- Approaches challenging tasks with a "can-do" attitude.

29. **Stress Management:** The ability to keep functioning effectively when under pressure and maintain self control in the face of hostility or provocation.

- Remains calm under stress.
- Can effectively handle several problems or tasks at once.
- Controls his/her response when criticized, attacked or provoked.
- Maintains a sense of humor under difficult circumstances.
- Manages own behavior to prevent or reduce feelings of stress.

30. **Personal Credibility:** Demonstrated concern that one be perceived as responsible, reliable, and trustworthy.

- Does what he/she commits to doing.
- Respects the confidentiality of information or concerns shared by others.
- Is honest and forthright with people.
- Carries his/her fair share of the workload.
- Takes responsibility for own mistakes; does not blame others.
- Conveys a command of the relevant facts and information.

31. **Flexibility:** Openness to different and new ways of doing things; willingness to modify one's preferred way of doing things.

- Is able to see the merits of perspectives other than his/her own.
- Demonstrates openness to new organizational structures, procedures, and technology.
- Switches to a different strategy when an initially selected one is unsuccessful.
- Demonstrates willingness to modify a strongly held position in the face of contrary evidence.

### Notes -

## LESSON 16

### COMPETENCY PSYCHOLOGY

#### Competency Methodology

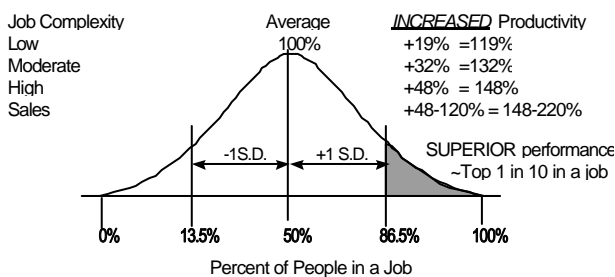
##### Definition of A Competency

A competency is defined as “a relatively enduring characteristic of an individual which statistically predicts effective or superior (one standard deviation above the mean) performance in a job”

The superior performance definition of competence, performance one standard deviation above the mean (the top 14%, or roughly the top one out of 10 performers in a job) is preferred for two reasons

1. Known economic value. As shown in Figure 1. Hunter, Schmidt and Judiesch (1990) found that, depending on the complexity of the job, performance one standard deviation above the mean is worth between 19% and 48% economic value-added in non-sales jobs, and 48-120% increased productivity in sales jobs.

**Figure 1. Economic Value Added by Superior Performance**



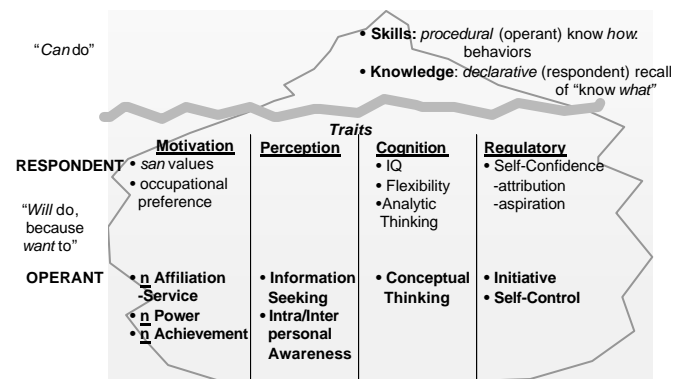
A study of sales in 44 firms by Sloan and Spencer (1991) found that for salespeople earning an average of \$41,777, superior performers sold an average \$6.7 million where typical performers sold \$3 million. Superior salespeople sold 123% more than average salespeople. These data suggest the practical economic value of a competency model which enables an organization to find or train even one additional Superior salesperson: \$3.7 million in additional revenues—a benefit that can cost-justify a considerable investment in competency research. Hunter, et.al.'s global estimation methodology and findings provide powerful tools for estimating and evaluating the economic value of competency-based human resource applications (see “Applications” below).

2. Benchmarks and direction for ADDING value. As with any “best practice” benchmark, competence defined as the best a job can be done drives human resource applications to add value—do better than individuals’ or firms’ present average level of performance. Any human resource approach that does not use an explicit benchmark superior to its present performance risks staffing, training and managing to mediocrity—it will be unlikely to improve on its existing (average) performance level.

A competency is any individual characteristic which can be measured reliably and which distinguishes superior from average performers, or between effective and ineffective performers, at statistical levels of significance. “Differentiating” competencies distinguish superior from average performers. “Threshold” or “essential” competencies are required for minimally adequate or average performance. The threshold and differentiating competencies for a given job provide a template for personnel selection, succession planning, performance appraisal, and development.

Competency characteristics are usually classified as operant or respondent traits e.g. motives, self-concepts, attitudes, values, or occupational preference, declarative (content “know that”) knowledge, or procedural (know “how”) cognitive or behavioral skills, as shown in the Figure 2. “Iceberg” levels of competencies.

**Figure 2. “Iceberg” Levels of Competencies**



Traits are general dispositions to attend to certain categories of stimuli and/or behave or respond in certain ways. Traits can be categorized as operant or respondent, as shown in Table 1. Operant traits are intrinsic drives to act in the absence of environmental pressures or rewards. These traits are formed early in life by association of thoughts and behaviors with pleasurable experience, and satisfied by intrinsic pleasure of engaging in the thought or activity itself.

Respondent traits are conscious beliefs or values drives formed by early social reinforcement. These traits are satisfied by external reinforcement praise, symbolic or monetary rewards.

The distinction between operant and respondent traits is important because these are measured in different ways and predict different behaviors in different situations (McClelland et al., 1990). Operant and respondent measures of the same trait show low or no correlation. For example, a person who spontaneously takes risks may or may not agree with a respondent test item “I enjoy taking calculated risks.” Conversely, a

person who “very much agrees” with this item may or may not actually engage in risk taking.

Measurement of traits thus obeys an “uncertainty principle” analogous to that in physics, which states that act and method of measurement affects the variable measured.

Operant measures and unstructured situations predict what people will do spontaneously when “left on their own” in unstructured situations. Respondent trait measures predict what people will do when asked to respond to similar stimuli presented by tests or in work situations e.g. when influenced by appeal to their values, ordered to do something by a boss, offered a reward or threatened with punishment.

The practical rule is “operants predict operants, and respondents predict respondents.” For example, if a firm wants to select a manager to start a new business in China, where the manager will have great discretion and few influences from headquarters, it should choose a person high in operant need for achievement, which predicts sustained entrepreneurial activity. If the firm can closely supervise and “motivate” an employee given an entrepreneurial task, it might select a person who shows he or she highly values achievement on a respondent personality test.

**Table 1. Operant and Respondent Trait Characteristics**

TRAIT	OPERANT -non-conscious concerns -n motives	RESPONDENT -conscious beliefs -san values
ORIGIN	-early pleasurable experiences	-early social reinforcement
MEASURE	-unstructured situations in which a person <b>generates</b> behavior e.g. TAT, Behavioral Event Interview (BEI), leaderless group assessment center exercises	-respondent tests in which a person <b>chooses from options given</b> e.g. “multiple guess” IQ and personality inventories
SATISFIED BY	<i>Intrinsic</i> engaging in the activity itself	<i>External</i> reinforcement symbols, rewards
PREDICTS	Long term <i>proactive</i> behavior in absence of situational press	Short term <i>reactive</i> behavior in presence of situational press

- N (need) Motive traits are “affectively toned associative networks”, intrinsically pleasurable spontaneous thoughts, measured by operant tests, which drive, direct and select perception and behavior. For example, if a person is high in achievement motivation (n Ach), he or she will tend to see opportunities for entrepreneurship and/or innovation and engage in behaviors related to these goals. A person high in Affiliation motivation (n Aff), will see opportunities to befriend others, and engage in social behaviors. Motivated “selective attention” is critical in competency studies. Superior performers pay attention to, see and seek different kinds of information than average performers do. “Chance favors the prepared mind:” this ‘preparedness’ is largely a function of n motives.
- Disposition traits are general tendencies to attend to certain categories of stimuli and/or behave or respond in certain ways. An important “emotional intelligence” is interpersonal awareness, the spontaneous tendency to attend to how others are feeling and responding. A related intra-personal trait is access to one’s own feelings and “accurate self-assessment:” objective understanding of one’s strengths and weaknesses. Initiative (“bias for action”), self-control (the

ability to inhibit impulses) and stress resistance or hardiness (Kobasa et al., 1982) are disposition trait competencies.

Operant cognitive traits include Information Seeking, spontaneous curiosity interest in novelty, and search for data and ideas; and Conceptual Thinking, pattern recognition and creativity (concept or theory creation).

Respondent traits are self-concept, attitudes or values measured by respondent tests which ask people what they value, think they do or are interested in doing; e.g., occupational preference inventories like the Strong-Campbell Vocational Inventory, psychological tests like the Jackson, Edwards or California Personality Inventories. Respondent cognitive traits include IQ and aptitude as measured by paper and pencil tests like the Wonderlic or College Board SAT.

**Content knowledge:** declarative knowledge (what one knows) of facts or procedures, either technical (how to trouble-shoot a defective computer) or interpersonal (the five rules of effective feedback), as measured by respondent tests.

A consistent finding of competency research is that declarative content knowledge, especially as measured by respondent tests, rarely distinguishes superior from average performers. Explanations for this finding include

1. Content knowledge is a threshold competency, necessary but not sufficient for performance, and a given for people in many professions who have had to pass Medical, Bar or other exams to be allowed to do the job.
2. Content knowledge and respondent competencies at best predict what a person can do, but operant motives predict what he or she will do because he or she wants to.
3. Declarative content knowledge, what one knows and can recall if asked, and procedural knowledge, what one can do, involve fundamentally different processes and structures in the brain (see Neuroscience, below).

**Skills:** procedural knowledge (what one can do), either covert (e.g., deductive or inductive reasoning) or observable e.g. “active listening” skill in an interview.

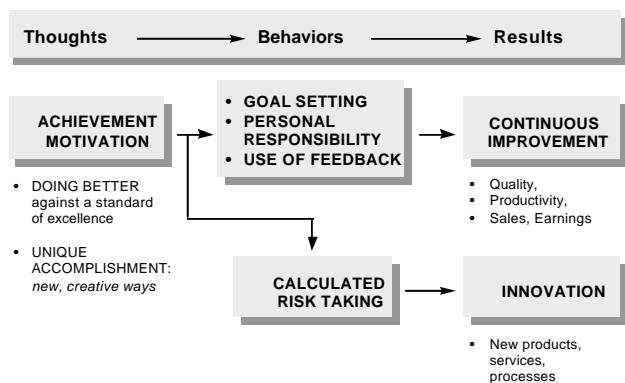
Trait, knowledge and skill competencies are often shown in the Figure 2 “iceberg” diagram to illustrate the difference between easily visible skill and knowledge competencies from less easily seen “below the water line” self concept and motive trait competencies.

The “iceberg” model has implications for design of competency-based human resource applications. Competencies differ in the extent to which they can be taught. Content knowledge and behavioral skills are easiest to teach. Altering attitudes and values is harder. While changing motives and traits is possible (McClelland & Winter, 1971), the process is lengthy, difficult and expensive. From a cost-effectiveness standpoint, the rule is “hire for core motivation and traits characteristics, and develop knowledge and skills.” Most organizations do the reverse: they hire on the basis of educational credentials (MBAs from good schools) and assume that candidates come with or can be indoctrinated with the appropriate motives and traits. It is more cost-effective to hire people with the “right stuff” (motive and traits) and train them in knowledge and skills needed to do specific jobs. Or, in the words of one personnel manager, “you

can teach a turkey to climb a tree, but it's easier to hire a squirrel."

Single competencies can be related to job performance the simple causal flow model shown in Figure 3 .

Figure 3. Achievement Motivation=>Behavior=>Results Causal Flow Model



Motive, trait, self-concept and knowledge competencies predict skilled behaviors, which in turn predict job performance. Competencies include an intention, action, and outcome. For example, achievement motivation (a strong concern with doing better against an internal standard of excellence, and for unique accomplishment) predicts entrepreneurial behaviors: goal setting, taking personal responsibility for outcomes, calculated risk taking. In organizations, these behaviors lead to continuous improvement in quality, productivity, sales and other economic results, and to innovation in the development of new products and services. Causal models provide managers with a simple way to do risk assessment in evaluating candidates for a job. The risk of hiring a person without achievement motivation is "less improvement in performance, less entrepreneurial behavior and fewer ideas for new products or services."

Toward a standard language of competence

Initial competency models were "one offs:" each model and the competencies which described it were unique. Researchers quickly realized, however, that some "core" competencies e.g. achievement motivation or accurate empathy appeared again and again in models for many job families. But because no standard "language" or dictionary for competence existed, these competencies were called many different names by researchers in different organizations and countries. For example, achievement motivation was known by 20 different labels: "Concern for Results," "Performance Orientation," et.al. To create competency dictionaries from meta-analyses of many competency models, a "lowest common denominator" language which could capture in similar terms data in all competency models and translate any competency definition into any other. This realization led to the development of an "atomic" approach to competency classification.

**Atoms** in philosophy are the smallest, indivisible units of matter or ideas, e.g. protons, neutrons and elections (currently quarks) in physics. In psychology an atom is perhaps best defined as "the smallest useful unit of observation." This unit

differs by the type of psychological analysis. For example, for competency research, an atom is a behavioral indicator e.g. "wants to do better," an atom in the "element" achievement motivation. For a perceptual or human factors psychologist, the serif on the 's' in "wants" may be the "smallest useful unit of observation."

**"Quanta:"** measures of competency strength: frequencies and Just-Noticeable-Difference Scales. "Quanta" in physics are discrete, whole number units of energy (orbital levels of electrons; higher orbits equal higher energy.)

Frequency. The strength or "energy" of psychological variables, measured by the sum of item scores (e.g. Likert 1= low to 5 = high), or items correctly answered e.g. vocabulary words or analogies on an intelligence test, or the number of times a competency is coded in an interview transcript), is usually expressed in deciles on a normal curve where 50% is the norm.

Just-noticeable-difference (JND) scales. A second measure of competency strength is "just noticeably different" (JND) intervals on a behavioral (indicator) anchored rating scale (BARS, Smith & Kendall, 1963).

An important finding of the research reported in Competence at Work was significant variation in the weight or strength of examples of the same competency drawn from different models. Some "Achievement" stories seemed much stronger than others, some examples of Analytical Thinking were much more complex than others.

When verbatim examples of each competency were collected from a variety of jobs and Q-sorted by a number of judges according to the extent to which they indicated more or less of the competency in question, competency examples were found to have scaling properties: a clear progression from lower to higher levels on four dimensions:

- Intensity of the intention (or personal characteristic) involved or completeness of actions taken to carry out an intention.
- Complexity: taking more things, people, data, concepts or causes into account..
- Time horizon: seeing further into the future, and planning or taking action based on anticipation of future situations; e.g., acting now to head off problems or create future opportunities.
- Breadth of impact: number and position of people impacted, e.g., on a scale from a subordinate or a peer to the CEO of the organization, to national or international leaders; or the size of the problem addressed, e.g., from something affecting part of one person's performance to something affecting the entire organization.
- Achievement Orientation Scale

Figure 4. Achievement Orientation (ACH) JND Scale

**Achievement Orientation:** A concern for working well or for surpassing a standard of excellence. The standard may be one's own past performance (striving for improvement); an objective measure (results orientation); outperforming others (competitiveness); challenging goals one has set; or even what anyone has ever done (innovation). Unique accomplishment also indicates ACH.

This Person:

1. **Wants to Do Job Well:** Tries to do the job well or right, or meet objectives set by others e.g. make a sales quota or budget. May express frustration at waste or inefficiency (e.g., gripes about wasted time and wants to do better) but does not cause specific improvements.
2. **Creates Own Measures of Excellence:** Develops specific methods of measuring outcomes against a standard of excellence not imposed by others. May focus on new or more precise ways of meeting goals set by management. (Code specifically for spontaneous interest in measuring outcomes or performance excellence).
3. **Improves Performance:** Makes specific changes in the system or in own work methods to improve performance (e.g., does something better, faster, at lower cost, more efficiently; improves quality, customer satisfaction, morale, revenues), without setting any specific goal. (The improvement must be noticeable and could be measurable. Code even if outcome is still unknown, or if it is less successful than hoped).
4. **Sets and Works to Meet Challenging Goals:** “Challenging” means there is about a 50-50 chance of actually achieving the goal—it is a definite stretch, but not unrealistic or impossible. OR refers to specific measures of baseline performance compared with better performance at a later point in time: e.g., “When I took over, efficiency was 20%—now it is up to 85%.” (Goals which are not clearly both challenging and achievable should, however, be coded at level 2 – as evidence of competing against a standard of excellence. If scoring for level 4, don’t score for 3 for the same actions or activity in story).
5. **Makes Cost-Benefit Analyses:** Makes decisions, sets priorities or chooses goals on the basis of calculated inputs and outputs: makes explicit considerations of potential profit, Return-on-Investment or cost-benefit analysis. Analyzes for business outcomes. (To code, the person must show: 1) specific mention of costs and 2) specific benefits and 3) a decision based on the balance between them.
6. **Takes Calculated Entrepreneurial Risks:** Commits significant resources and/or time (in the face of uncertainty) to increase benefits, (i.e., improve performance, reach a challenging goal, etc.). In scoring for level 6, you should also code for evidence of lower levels as they occur to capture the richness and depth of ACH thinking.

For example, Figure 4 shows a JND scale for the Achievement Orientation competency, scored from BEI transcripts rather than from Thematic Apperception Test data.

In low-complexity jobs, average employees are usually found to want to do their jobs “right” or “well” (Level 1 on the Achievement scale). Superior performers, even in simple jobs, are usually found to take initiatives to do their jobs **better**, to **improve** performance - e.g., to do their job **more** efficiently, faster, with fewer resources (Levels 3 and 4 on the Achievement scale).

At higher managerial levels, average managers act to meet objectives and goals required of them, e.g., stay within their

departments budgets (Level 1 on the Achievement scale).

Superior senior managers act to **improve** their organizations - at the highest level, by taking entrepreneurial risks and innovating (Levels 6 on the Achievement scale).

### New: Achievement Motivation in Executives

JND scaling of achievement competencies provides new information about the impact of achievement motivation on managerial performance. The traditional finding (McClelland and Boyatzis, 1982) is that Thematic Apperception Test Exercise measures of achievement motivation do not predict success in higher-level managers. Rather, in managerial jobs that require getting others to achieve rather than achieving individually, it is (socialized) power motivation which predicts superior performance. Current competency model data show that more successful executives are qualitatively higher on the Achievement scale than either middle managers or less effective executives. That is, they are more likely to take and persist in actions to improve overall organizational quality and productivity and/or to lead their organizations into new markets, behaviors which score at levels 5-6 on the Achievement scale. The frequency of achievement-motivated concerns does not increase for superior managers as they move up the corporate ladder, while the frequency of socialized power, impact and influence-related concerns does increase, but the intensity of their achievement actions is higher than that of average executives.

### Complex Thinking Scale

Figure 5. Conceptual Thinking (CT) JND Scale

**Conceptual Thinking:** The ability to identify patterns or connections between situations that are not obviously related, and to identify key or underlying issues in complex situations. It includes using creative, conceptual or inductive reasoning.

This Person:

1. **Uses Basic Rules:** Uses simple rules (“rules of thumb”), common sense, and past experiences to identify problems. Recognizes when a current situation is exactly the same as a past situation.
2. **Sees Patterns:** When looking at information, sees patterns, trends, or missing pieces. Notices when a current situation is similar to a past situation, and identifies the similarities.
3. **Applies Complex Concepts:** Uses knowledge of theory or of different past trends or situations to look at current situations. Applies and modifies complex learned concepts or methods appropriately; e.g., statistical process control, TQM, demographic analysis, managerial styles, organizational climate, etc. This is evidence of more sophisticated pattern recognition.
4. **Clarifies Complex Data or Situations:** Makes complex ideas or situations clear, simple, and/or understandable. Assembles ideas, issues, and observations into a clear and useful explanation. Restates existing observations or knowledge in a simpler fashion. (The coder should look for evidence of the ability to see a simpler pattern within complex information).
5. **Creates New Concepts:** Creates new concepts that are not obvious to others and not learned from previous education



or experience to explain situations or resolve problems. (To score level 5, the coder should be convinced that the concept is new and should be able to cite specific evidence. Do not also score for Innovation).

Complex Thinking (Analytical and/or Conceptual Thinking competencies) measures practical or applied intelligence: the degree to which a person does not accept a critical situation or problem at face value or as defined by others comment but comes to his/her own understanding at a deeper or more complex level. Observation and/or information seeking are necessary prerequisites. The basic level of Complex Thinking (see Figure 5) which distinguishes superior performance involves recognizing a match or a discrepancy (not obvious to most other people) between the current situation and a known standards (i.e., previous experience, learned concepts or “usual expectations”).

#### Examples:

Captain, US Navy: I’ve got his number! He (commanding officer of opposing ship in naval war game) is pulling the same trick we pulled on (another ship) during (previous combat exercise). Is he in for a surprise! [Pattern recognition (identity): opposing ship’s behavior = known strategy]

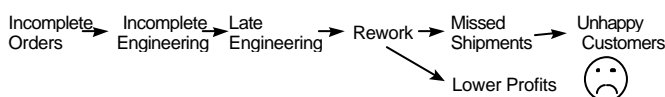
Research manager: “It just struck me as odd... the way the numbers were coming out. So I hauled out my runs from a year earlier and took a look at them. I realize there had to be some extraneous variable in their accounting for these differences. [Pattern recognition (discrepancy): data runs equal previous experience]

At higher levels, superior performers use long causal inference chains, see. relationships among complex data from unrelated areas, or create concepts or models that explain a complex situation or reconcile discrepant data (cf. Fisher et al., 1984; Winter & McClelland, 1978).

**Example:** Sees relationships in complex data

...everything I heard led to another aspect of the overall problem. Salespeople were turning in unclear sales orders **and that’s why** the engineering was not complete, **and that’s why** we were engineering the same day we were shipping the product **and why** we were spending so much time on rework. **And that’s why** our profit picture did not look good and why we were missing shipments. **And that’s why** our customers were unhappy. So, the solution to our shipping, customer satisfaction and profit problems was to train the sales people how to get clear specs when they wrote the order.”

Figure 5. Complex Thinking and Problem Solving



**Example:** creates new concept

“I knew what was needed for this application area, and I knew what kind of a product competitors were promoting.. It was hazardous. I knew of this other material (from a different division), and I realized that it didn’t have any of the deficiencies of our competitors’ stuff—it wasn’t flammable, for example. It was quite obvious to me that **we ought to just**

**take our material and put it into this application area. I tried it and it worked!** [Makes connections between data from different domains].

JND scales can have a “0” neutral , absent or not-applicable score, or negative levels which describe behaviors shown by poor performers and likely to predict poor performance in a job.

New Development: validity of JND Scales

When published in Competence at Work in 1993, too few competency studies had used JND scales to establish the validity of the scales. CAW has been

widely misunderstood as asserting the scales were ordinal and “higher” on a scale was “better” i.e. more likely to predict superior performance. In fact, CAW explicitly states (p. 24) that JND levels described

- were differences highly trained coders could reliably distinguish in the 286 models summarized in the research and agree scaled from lower to higher on the four meta-dimensions: complexity, intensity/completeness of action, time horizon and breadth of influence.
- were a tool to help future analysts make sense of thematic data, but not a “right answer” because scale levels
- might not be ordinal
- might not predict differences in job performance; and
- “higher” probably would not prove to be “better”.

CAW researchers predicted that the scales would prove to be curvilinear: an optimum level would predict job performance, with performance falling at both higher and lower levels on the scale, analogous to Weber’s Law applied to JND differences in sound. In the middle of a range of perception, 1 JND louder or softer may not have any practical significance. At the low end of the range, 1 JND softer might make the sound inaudible, where at the high end of the range, 1 JND louder might cross the pain threshold and cause permanent hearing loss.

In the four years since publication of CAW, the JND scales have been used in hundreds of competency studies and found to be ordinal and valid—and “higher” is “better.” The JND scales in CAW “Dictionary 1993” statistically significantly distinguished superior from average performers in 187 of 217 cases (86%, Chi Square = 47,  $p < 10^{-10}$ ). JND scales in McClelland’s revised and more parsimonious Dictionary 1996 distinguished superior from average performers in 159 of 177 cases (89%, Chi Square = 27,  $p < 10^{-7}$ ).

The validity of the JND scales is actually higher because, while approximately 50% of “reversals”—cases in which average performers scored significantly higher than superiors on a JND scale—appear to be random error, the other 50% represent consistent and valid findings in specific jobs and environments. For example:

- Self Control predicts superior performance in large, bureaucratic organizations where following the rules is important, but is negatively correlated with success in entrepreneurial and creative jobs. Jacobs & McClelland (1994) found in a reanalysis of the (Bray, et.al.,1974) “Formative Years in Business” sample of AT&T executives that the most competent women left AT&T to start their

own businesses or to move to smaller firms where they would be freer to use their competence—and these women were scored significantly lower in Self-Control than executives who remained with AT&T.

- Internal v. External attribution of reasons for failure, a subscale of Self-Confidence derived from Seligman’s depressive explanatory style research, shows significant reversals for managers. Depressive explanatory style has three subscales which are coded when subjects are asked to describe a time they failed:
  - Global (“I fail at everything”) v. Situation-Specific (“I failed at this”)
  - Enduring (“I always fail”) v. Time- Specific (“I failed this time”).
  - Internal (“It’s me—I’m no good”) v. External (“It’s them—the prospect was too stupid to see the benefits of my product, the economy was lousy”, etc.)

Internal attribution of failure is “depressed” where external attribution “paranoid.” Internal attribution distinguishes superior managers because managers must take responsibility for and learn from mistakes: “the buck stops here: I made the call, I was wrong, I take full responsibility—and I’ll never make that mistake again.” This statement codes for Self-Confidence and Integrity v. “depressive explanatory style.”

Salespeople, who must maintain self-confidence and self-esteem in the face of constant rejection, are better off feeling “paranoid” than “depressed.” As shown in Figure 6, poor performing salespeople do exhibit Seligman’s “depressive” explanatory style; superior salespeople either feel nothing (are “psychopathic”) or blame external factors for failures.

**Figure 6. Depressive Cognition and Affect in Salespeople**

Criterion Sample	Stimulus	Affect	Cognition	Behavior
Average Salesperson	Rejection: “Secretary wouldn’t let me talk to the buyer.”	Internal: depression	Self-deprecation: “I’m no good”	Flight: go home early, abandon task
SUPERIOR Salesperson	Rejection	[none] or external: “That *%/#\$!—“	Problem solving: “I could call back and try a, b, c...”	a,b,c actions

As will be seen in Applications below, the predictive power of individual competencies and competency “molecules” can be further increased by creating weighted measures e.g. frequency (raw or decile score, beta weight in a regression or discriminant function analysis) x JND level.

**Elements** are combinations of atoms which describe a stable unit of matter or concept e.g. hydrogen or oxygen in physics and chemistry. In psychology, an element is a factor composed of discrete data items which “hang together” in content or statistical factor analysis. Core competencies achievement motivation or empathy are elements in competency research.

## Competency Dictionaries

Research reported in Competency at Work identified about 350 “generic” behavioral indicator “atoms.” (Another 350 “unique”

indicators which appear in only a few models have also been identified e.g. “assesses accurately the dye absorption qualities of Pakistani denim” for blue jeans manufacturer fabric buyers). The generic behavioral indicators describe 20 core competencies (shown in Column II of Table II) which account for 85% of the variance in most competency models. Table II compares the four principle competency dictionaries developed over the past 25 years:

**Table II. Competency Dictionaries**

CLUSTER	McBer Boyatzis 1982, 1993	Hay Competence Work, 1993	McBer Hay at Dictionary 1996	McBer Fetzter (Goleman, 1997-	Consortium Gowing)
ACHIEVEMENT	Efficiency Orientation	Achievement Orientation	Achievement Orientation	Achievement Motivation Innovativeness	
	Initiative	Initiative	Initiative	Initiative Direction, Motivation)	(Self Self
	Attention to Detail	Concern for Order & Quality	for ---	Conscientiousness	
AFFILIATION	Empathy	Interpersonal Understanding	Interpersonal Understanding	Empathy	
		Customer Service Orientation	Customer Service Orientation	Customer Orientation	Service
POWER		Teamwork Cooperation	& Teamwork & Cooperation	Team Building/ Work Collaboration & Cooperation	Team Building/ Work Collaboration & Cooperation
	Persuasiveness	Impact Influence	& Impact Influence	& Influence	
	Written Communication				
	Oral Communication			Effective Communication	(Oral)
	Organization Awareness			Organization Awareness	
	Networking	Relationship Building	Relationship Building	Building Handling Relationships	Bonds
	Negotiating			Conflict Management/ Negotiation	
>MANAGEMENT		Directiveness	Directiveness		
	Developing Others	Developing Others	Developing Others	Coaching Developing Others	and Teaching
	Group Management	Team Leadership	Team Leadership	Leadership	
				Change Catalyst	

CLUSTER	McBer Boyatzis 1982, 1993	Hay McBer Competence at Work, 1993	Hay McBer Dictionary 1996	Fetzer Consortium (Goleman, Gowing) 1997-
>MANAGEMENT				Managing Diverse Work Force Leveraging Diversity
				Managing Human Resources
COGNITIVE			Information Seeking	Information Seeking
	Pattern Recognition	Conceptual Thinking	Conceptual Thinking	
	Use of Concepts			
	Systems Thinking (Theory Building)			
	Quantitative Analysis			
	Planning	Analytic Thinking	Analytic Thinking	
	Using Technology	Technical Expertise		
PERSONAL EFFECTIVENESS	Self-Confidence	Self-Confidence	Self-Confidence	Self-Confidence (Self Esteem) Optimism & Hope
	Self-Control	Self-Control	----	Self-Control (Self Management, Managing Emotions, Stress Tolerance)
	Flexibility		Flexibility	Flexibility Adaptability
	Social Objectivity			
		Organizational Commitment	Organizational Commitment	
			Integrity	Honesty/ Integrity Trustworthiness
				Managing Diverse Work Force Leveraging Diversity
				Managing Human Resources
	Accurate Self Assessment			Emotional Self-Awareness

- Technical Expertise: infrequently coded
- Competency drivers Affiliation and Power motivation are subsumed in Impact & Influence, Customer Service Orientation, Interpersonal Understanding and Relationship Building “molecules.” One competency, Integrity, was added.
- Integrity, which distinguishes superior performers in executive and long sales cycle “relationship-based” sales, customer service and account management roles, is defined as acting openly, honestly and consistently with what one says, “walking the talk” and modeling ethical behaviors when doing so is difficult or risky. Acts of concealing information, dissembling, not following through on commitments or espoused values is scored -1 for integrity.

Fetzer Consortium Dictionary (1997 and in development). The Fetzer Consortium (see Future Directions in Competency Research) is a group of academic, foundation, US government, and industry researchers convened in 1995 to assess the state of competency research and applications, identify best practices, and recommend standards for use of competency methods in society. The Fetzer Dictionary includes the 1982, 1993 and 1996 McBer dictionaries with those from other researchers (Goleman, 1997) .

1. McBer Dictionary 1982 first published in Boyatzis (1982) The Competent Manager, (with additions published in Boyatzis, et.al. (1995) Innovation in Professional Education, a description of the Case Western Reserve Weatherhead School of Management competency-based MBA program).
2. McBer Dictionary 1993 published in Competency at Work  
New: Advances in Competency Dictionaries
3. Hay McBer Dictionary 1996, a revision of Dictionary 1993 by David McClelland.

McClelland, seeking the most parsimonious set of competencies which accounted for most variance in most models, reduced the number of core competencies to 18. Competencies eliminated from Dictionary 1993 on the basis of low frequency or lesser explanatory power, were

- Concern for Order & Quality: infrequently coded
- Self-control: infrequently scored and negatively correlated with performance in entrepreneurial and creative jobs

In Table III competencies are organized by “Period:” columns of competencies associated with the three social motives Achievement, Power and Affiliation which account for most human operant motivation<sup>1</sup>, plus two “rare earth” periods, cognition and regulator traits which cross all levels and periods of competence. “Level” rows within periods are organized by “depth” (analogous to atomic weight in Mendeleev’s period table of elements) as in the iceberg model of competence described above.

Operant motives and traits—the “deepest”, most neurally “hard wired,” hardest to change competencies are placed at the base of the table. Respondent characteristics—the “big five” personality variables (Costa & McCrae, 1992): (1) extroversion (dominance), (2) conscientiousness or dependability, (3) affability, (4) openness to experience, or flexibility, and (5) emotional stability (v. “neuroticism” = “low self confidence” in competency terminology) , and respondent cognitive abilities IQ and Analytical Thinking, are placed at higher levels in the table. Declarative knowledge and procedural skills are placed at the top of the table.

*Table III. A Periodic Table of Competencies*

“Current concerns” research in which subjects are “beeped” at random intervals during waking hours and dictate their thoughts into a tape recorder finds that >85% of thought code for one of the three social motives. A sample of 14,910 six-picture written TATs collected from 1968 to the present and coded by Hay McBer using the scoring system described in Atkinson (1958) finds virtually 100% code for one or more of the three social motives: 99.9% (14887) for Achievement, 98.3% (14659) for Affiliation, and 87.1% (12990) for Power. Obviously other motives exist e.g, thirst, hunger, sleep, and sex, but these have rarely been found to be “competencies” in the definition used here.

LS	Developing Others	Impact and Influence				
		Organizational Awareness	Relationship Building			
		Team Leadership	Teamwork & Cooperation			
		Directiveness				
		Initiative: "Act"				
	Self-Confidence: "Can do"		Self-Control: "Not"			
					Technical Expertise - procedural	
WLEDG					Technical Expertise - declarative	
ITS					Analytic Thinking	
ONDEN	Occupational Preference					
native					Flexibility	
five: concept ocial Role	Conscientiousness	Extroversion/ Dominance		Affability	Openness Experience	Emotional Stability v Neuroticism (low Self-Confidence)
4INT						Self-Confidence
	Concern for Order & Quality	Interpersonal Understanding	Organizational Commitment	Conceptual Thinking	Self-Control	
otives	Achievement Motive	Power Motive	Customer Service Orientation	Affiliation Motive	Information Seeking	Initiative
OD	ACHIEVEMENT	ACHIEVEMENT/ POWER	POWER	AFFILIATION	COGNITIVE	REGULATOR

**Competency “molecules”** are combinations of competency elements which act together to produce effective performance in task situation.

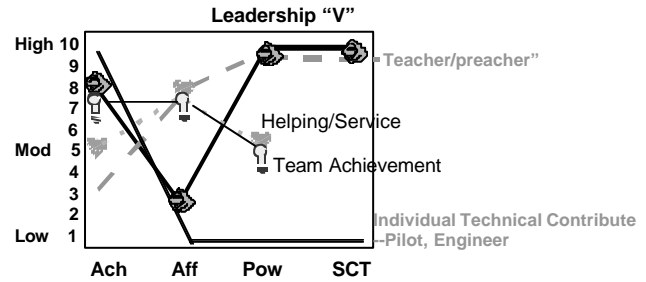
The concept of molecules is a significant advance in competency methodology. Until recently, most competency models were lists of competency elements without any information about how these elements combined or acted together to produce effective behavior. Molecules have very different properties than their constituent elements e.g. the liquid H<sub>2</sub>O, water, differs completely from its constituent elements, the gases hydrogen, H<sub>2</sub> and oxygen, O<sub>2</sub>. “Laundry list” competency models are similar to biological analyses which define a human being as being composed of hydrogen, oxygen, carbon and nitrogen. This “model” might distinguish a human from a rock but would not distinguish a human from a tree.

Motive profile “molecules” have been known to predict behavior in different job families for many years. For example, the “leadership motive profile” (McClelland & Boyatzis, 1982) : moderate-high achievement motivation (n Ach), low- moderate affiliation motivation (n Aff), high power motivation (n Pow) and high self-control (SCT) is a four-element competency “molecule” which predicts success in leadership and management jobs:

 $n \text{ Ach}_8 \ n \text{ Aff}_3 \ n \text{ Pow}_9 \text{ SCT}_{>5}$ 

where subscripts are normal distribution decile scores e.g. 3=30%ile, 9=90%ile as shown in Figure 9.

Figure 9. Motive Profile “Molecules”



**Achievement:** do better against results standards

**Affiliation:** make friends, express caring for others

**Power:** impact, influence others

**SCT: self control** ("socialized" v. "personalized" Power)

Helping/Service competencies are driven “helping” motive profile, a molecule of moderate-to-high Affiliation with moderate Achievement and moderate Power motivation (Kolb & Boyatzis, 1970; McClelland, 1978)

nAch<sub>5</sub>nAff<sub>7</sub>nPow<sub>5</sub>

New “Team Achievement” motive profile predicts success in teams and self-managing work groups.

Competency studies of high performing members in effective self-managing workgroups have identified a new “molecule” called the “team achievement” motive profile, composed of moderate-high achievement, moderate-high affiliation and moderate power motives.

nAch<sub>8</sub>nAff<sub>8</sub>nPow<sub>5</sub>

A worker in a toy manufacturer captured the essence of this findings as “we are all good friends, having lots of fun together making more and more widgets, better and better, faster and faster...we can influence each other when needed, but don’t have to play a lot of politics.” “Fast, focused, friendly, self-confident, fun” teams are increasingly common in entrepreneurial high tech organizations where fast product development cycle times are essential to meet competitive pressures

Recent competency (and neuroscience) research indicates that competence is always a “molecule” or combination of competencies, usually with four components abbreviated

1. Motivation t: one or more operant motives and one or more respondent values, preferences or attributions;
2. Observation: information seeking, interpersonal understanding or organizational awareness;
3. Cognition: cognition: declarative knowledge content “data” bases, conceptual “rule” bases, and analytic or conceptual processing; and
4. Action: behavioral skills.

For example, effective influence in sales is a “heart>eyes>head>hands” molecule composed of eleven competencies shown in Figure 11. Driven by “heart” motives to influence and serve, superior salespeople seek information using Interpersonal Understanding and Organization Aware-

ness “eye and ear” competencies; identify client needs using “head” Conceptual Thinking, and then initiate to persuade prospects using “hands” (mouth) Influence Skills.

Interpersonal Understanding is a prerequisite for effective influence and persuasion. An understanding of the unspoken feelings, concerns and agendas of those individuals, and the informal “political” alliances, rivalries, key decision-makers, etc., of organizations, is needed before one can effectively influence individuals or organizations.

As will be seen below under “Applications”, “molecular” competency models, combined with situational analysis—relation of individual competence “molecules” to job/role “receptor sites”—account for as much as 80% ( $r=.90$ ) of variance in performance—predicative validities eight times those of competency “elements” alone.

Cross-job family and cross-cultural comparisons

Competency dictionaries using universal behavioral indicator “atoms” made possible systematic comparison of competencies among groups of similar jobs, at different levels of the same job family, across differing types of jobs, and across different organizations and cultures.

Comparative analyses highlight differences in the frequency of behavioral indicators relating to take given competency. For example, both salespeople and first-line managers use Direct Persuasion behaviors: influencing people directly, by data, “reason why” rationales, or citing “what’s in it for you” potential benefits to the target of persuasion.. Direct Persuasion indicators are typically more than 40% of behavior observed in sales models, but only 10% of supervisors’ behavior. The frequency of behavior indicators provides an importance measure or “weight” for the competency in a job .

Comparison of competency models for similar jobs in different parts of the world reveal surprisingly few differences among superior performers. A major study funded by the US Agency for International Development (USAID) found superior entrepreneurs in Asia, Latin America and Africa showed the same 20 competencies found in superior performers in these jobs in Europe and the United States (only one competency differed statistically significantly among the three cultures: Mansfield, et.al. 1987, Spencer & Spencer, 1993, Chapter 17). 44dConfrontative messages may be given more bluntly in Australia than in Hong Kong, but superior performers in both cultures are higher in Impact and Influence behavioral indicators. Cross-cultural differences exist in the nuances of how competencies are expressed, not in the underlying competencies themselves. Superior expatriates and country nationals and multinational jobs show higher levels of cross-cultural Interpersonal Understanding, i.e., are better able to understand the meaning of others words, gestures and actions and to adapt their own behavior to communicate effectively and build positive working relationships without people from different backgrounds.

New: cross cultural differences in CEO Competencies

A major study (Hay/McBer 1996) of high performing Asian (Japan, China, Philippines), Americas (Canada, United States, Mexico, Venezuela) and European CEOs (United Kingdom,

Belgium, France, Germany, Spain, Italy) found all shared 12 competencies in three clusters:

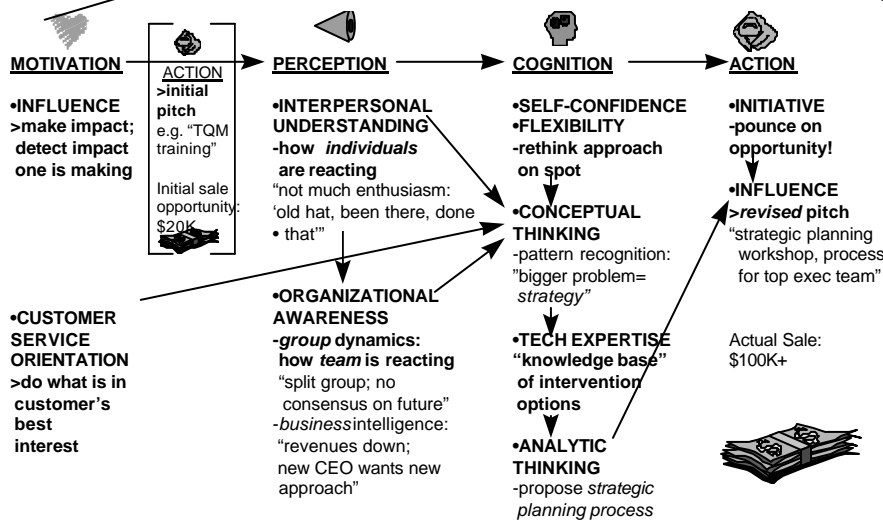
- Strategic thinking: Broad Scanning (Information Seeking), Analytic Thinking, Conceptual Thinking and Decisiveness
  - Drive for Success: Self Confidence, Achievement Motivation, Social Responsibility and Initiative
  - Building Commitment: Organization Awareness, Good Judgment of People, Leadership, and Impact and Influence
- Significant differences were found, however, for three competency variables
- Building Business Relationships: Personal v. Contractual  
Personal relationship building was most important in Asia (“we establish relationships so we don’t need written contracts”) and least in the Americas where “the (written) deal’s the thing; didn’t like (supplier personnel), but they had the best price.”
  - Action Orientation: Planning v. Implementation. Planners believe “a good plan enables anyone to carry it out” where Implementers believe “good people will carry us though any situations  
Planning is most important in Europe and Asia, especially Japan, where “just damn it, do it” bias for action distinguishes American CEOs.
  - Authority: Centralized v. Participatory Leadership  
Centralized authority distinguishes superior CEOs in Europe, Canada and Asia; United States and Mexican CEOs use more participatory leadership.

Traditionally, competency models were presented as a list of competencies with associated behavioral indicators, examples and discussion. In the newest models, competencies

- are scaled in JND intervals which permit precise definition of job competency requirements for both average and superior performance-and assessment of individuals-at any level in a job family
- are identified as competency molecules containing heart, eyes, head and hands elements
- are mapped to specific steps or critical job situations in which they predict superior performance, a “molecule—receptor site” analysis which considers both the competencies and the precise setting in which they are expressed. Figure 11 shows a “see and seize” molecule in step six of a 24 step consultative selling job, a critical situation “initial meeting with management buying decision makers.

Figure 11. Competency Molecules mapped to a Step and Critical Situation in a Consultative Selling Job

STEP IN PROCESS	4	5	6
	Call client contact to "scout" personalities, issues likely to come up in meeting	Initial meeting with client management buying decision makers	Call contact to get feedback on meeting, tips on points to make (or not make) in proposal
CRITICAL SITUATIONS	TASK	Audience not buying initial pitch; other needs offer different selling opportunities	



Competency-based human resource applications can be classified as follows:

- Staffing: recruitment, selection, succession/human resource planning, de-staffing (who to keep and who to let go during downsizing or strategic change initiatives) and retention.
- Development: formal training, developmental job assignments, mentoring, and evaluation of training and professional development programs.
- Performance management: goal setting and "performance contracting" at the beginning of a performance period, coaching during the performance period, and performance appraisal and reward (or sanctions) at the end of the period.
- Compensation: competency-based pay
- Organizational assessment, development and change
- Competency-based human resource applications add value by increasing the performance of individuals, teams and groups toward the superior benchmark at the right of the bell curve as shown in Figure 12.

## COMPETENCIES

## "SEE AND SIEZE" MOLECULE

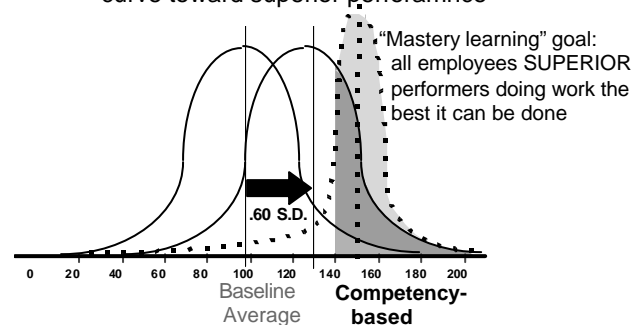
5. **Validation.** Criterion and predictive validity of the competency model is tested by determining the extent to which competencies coded from BEJ transcripts and/or assessed using psychometric tests or assessment center ratings correctly identify known superior versus average performers in a second criterion sample, or correctly predict adequate and superior performance of new hires. It is worth noting that the behavioral event interview, initially used as a hypothesis generation method in constructing the model, can also be used as a psychometric assessment method if properly conducted. BEI transcripts can be coded for competencies with inter-rater reliability of .8-.9 (Boyatzis, 1982). Competency scores from BEIs alone have shown criterion validities from .4-.6 (Spencer, 1978; Winter & Healy, 1982) to as high as .9 for competency "molecules" mapped to specific job situations. For example, the "team achievement" motive profile, plus one of three internal (e.g. self confidence) and one of three external (e.g. organizational awareness) competencies predicted economic outcomes over two years at  $r=.90$  for four types of executives (strategic, turnaround, developer and general) executives in Pepsico (McClelland, 1966). Molecule—receptor site matching was key to getting this result e.g. "internal" competencies of achievement motivation and conceptual thinking predicted success for strategic executives but not more "hands on" turnaround and developer managers.

6. **Develop Applications** to solve business problems. Competency models are rarely "pure" research—most are conducted to improve organizational performance.

Insert

Figure 12. How competency based HR programs add value

Training and performance management shift productivity curve toward superior performance



The shaded areas at the right of the curve for the shifted bell curve and the J curve represent the value added by competency-based development and performance management. The ideal is shown in the J curve: all employees have developed competencies to perform at a superior level i.e. all can do the work the best it can be done.

Research over the past 10 years shows that competency based staffing can shift performance .25-.50 S.D., worth 5-25% in low to high complexity jobs and 30-60% in sales jobs (Spencer & Morrow, 1996). Competency-based training and performance management shift performance .60 S.D., worth 11-30% in low to high complexity jobs, and 30-72% in sales jobs (Morrow, Jarrett & Rupinski, in press, Burke & Day, 1986, Falcone, et.al.,1986)

The following section provides a brief summary of the key points in developing competency based human resources applications and evaluating their economic utility.

### Competency-based Staffing

Once the competencies which predict superior performance for a job have or job family have been identified, the steps in implementing a competency-based staffing system are as follows:

1. Design recruiting materials which "pull" candidates most likely to have the competencies e.g. "chance to innovate" (achievement), "...influence! (power), "work in a team with good friends" (affiliation). Honesty is both ethical and efficient: "this job requires making 100 cold calls a day, 97 of which will result in rejection. If you pride yourself on having thick skin and can stand up to rejection to make a lot of money, call..." People high in fear of rejection and depressive explanatory style (most people!) will not apply, but those who do will have passed one screen for a difficult-to-find competency.

Competency-based recruiting and selection systems usually focus on screening methods used to winnow a small number of strong candidates from large numbers of applicants quickly and efficiently. Assessing recruits involves special challenges, e.g., recruiters must screen many applicants in a short period of time (30-minute interviews), applicants straight from college may have little work experience on which to base judgments, etc.. Competency-based recruiting systems therefore stress identification of a few (3-5) core competencies that meet the following criteria:

- competencies which applicants will have had the opportunity to develop and demonstrate in their lives to date, e.g. initiative.
- competencies which are likely to predict candidates long-run career success and which are hard to develop through employer training or job experience, e.g. comment such master competencies as achievement motivation, work impact and influence, which are more cost-effective to select for than to develop. For example, a firm hiring technical individual contributors might want to recruit 10% of new hires for influence and impact competencies, e.g., select some candidates who not only had good grades in the sciences but also were captains of sports teams or leaders in student organizations-to have a pool of potential employees with the competencies to become managers in the future.
- competencies which can be reliably assessed using a short, targeted BEI developed for this purpose. For example, if "Collaborative team leadership" is a desired competency, interviewees might be asked "tell me about a time when

you got a group to do something," and their responses coded for consensus building versus adversary behavior.

2. Identify cost-effective candidate assessment methods.

Assessment of internal or external candidates can involve a variety of methods: behavioral event interviews, tests, assessment center simulations, review of performance appraisal reports, and superior, peer and subordinate ratings. Reviewers (Smith, 1988; Boyle, 1988, Jackson, 1994) give the following ranges for assessment methods in descending order of criterion validity:

• 360° Ratings	.60-.84
• Assessment centers	.65
• Behavioral Event Interviews	.48-.61
• Work sample tests	.54
• Ability tests	.53
• Modern personality tests	.39
• Biodata	.38
• References	.23
• Interviews (non-behavioral)	.05-.19

### New: BEI Methodology

McClelland (1996) found that verbal fluency has no effect on competency scores above a quality threshold of threshold about 16,000 words (65 pages double spaced transcript pages): in a sample of 251 interviews coded for work length correlated  $r=.04$  (n.s.) 22 competencies coded.

New: BEI and 360° ratings As shown in Table IV, Cashman & Ott (1966) found that competencies coded from BEIs correlated  $r=.97$  with competencies rated by 360 survey (boss, peer and subordinate) respondents for a sample of 250 executives.

**Table IV. Correlation of senior executive competencies rated by 360° surveys with competencies coded in Behavioral Event Interviews (N=250)**

Competency	360 Survey		BEI	
	Score	Rank	Score	Rank
Impact & Influence	2.1	1	2.1	1
Customer Service	1.1	2	1.2	2
Initiative	1.0	3	.9	3
Results Orientation	-.1	4	.5	4
Developing Others	-.9	5	-2.5	5
Team Leadership	-2.5	6	-3.5	6

High potential and high performing executives scored higher on 13 of 14 competencies measured, and competency scores predicted economic performance, as measured by Cigna's Performance Assessment and Review (PAR) system bonus awards for business results achieved ( $p<.01$ ).

Jackson (1994) has reported 360° rating correlations of .21 (self report), .40 (superiors), .54 (peers), .51 (subordinates) and .84 (combined scores) with senior executive performance.

These findings are significant because they demonstrate the construct validity of competencies measured by BEI and

360 survey assessments, and suggest that ratings, which are much less expensive than BEI administration and coding, may be equally valid.

Casio (1982) and Smith (1988) provide methods for calculating the cost-effectiveness of various selection methods given their costs of administration and criterion validity. The authors' experience is that biodata and paper and pencil tests are cheap ways to narrow a selection pool, but past job performance and BEI data are the most cost-effective and most valid assessment methods.

3. Train assessors in the assessment method, e.g., the behavioral event interview.
4. Develop a competency-based job-person database and matching system

At minimum, a competency-based human resource information systems include job competency requirements, candidate or employee assessment database, and a job-person matching system. Analysis of job-person fit data to make selection, placement and succession planning decisions can be done by hand but once an organization has more than a few jobs, people and competencies, "decision support" computer systems are needed to deal with the thousands of combinations and permutations. Many competency-based human resource systems are available which can compare as many as 100,000 candidates on competencies found to predict superior performance in any number of jobs. (Spencer, 1995). Candidates are recommended in rank order based on their 'goodness of fit' with job competency requirements.

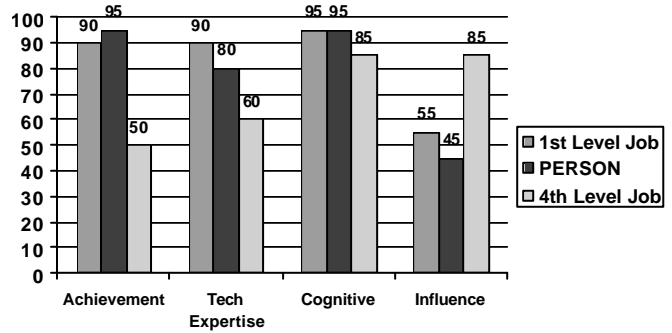
5. Use validate job-person matching algorithms to select persons with the highest probability of doing the job well.

Competency-based staffing is based on many studies which show the better the fit between the requirements of a job and competencies of a person, the higher will be the persons' job performance and job satisfaction. High job performance and satisfaction in turn predict retention (1) because good performers need not be fired; and (2) because satisfied employees are less likely to quit (Locke, 1976 ; Mowday, Porter and Steers, 1982; Caldwell, 1991).

For example, Figure 13 shows the fit between the competencies of a technical professional and the competency requirements of his first job (new hire industrial chemist) and his fourth job (manager of an oil refinery).

This person can be seen to be a good match for his first job, which requires individual-contributor competencies: achievement motivation, technical expertise and cognitive skills. However, he is not a good match for his fourth job: his individual-contributor Achievement and Technical Expertise competence exceed the managerial jobs requirements-and he lacks the interpersonal and organizational Influence competence needed to succeed in upper management.

**Figure 13. Comparison of a Person's Competencies at First and Fourth Level Jobs**



Quantitative job-person matching algorithms include

1. Simple difference

$$(JCR_1 - PC_1) + (JCR_2 - PC_2) + (JCR_3 - PC_3) + \dots$$

where

$JCR_i$  = job competence requirement on competency i

$PC_i$  = person's competence on competency i

$JCR_i - PC_i$  = the simple difference, positive or negative, between the competency requirements of the job and the person's competence.

The best candidate has the lowest total gap score. Note that this method rewards overqualification: a person can make up for a deficiency on one competency with another competency which exceeds the job requirements.

2. Absolute simple difference ("city block")

$$|JCR_1 - PC_1| + |JCR_2 - PC_2| + |JCR_3 - PC_3| + \dots$$

where ...

$JCR_i$  = job competence requirement on competency i

$PC_i$  = person's competence on competency i

$|JCR_i - PC_i|$  = absolute difference (positive number) between job competency requirement and person's competence on competency

The candidate with the lowest score is the best match for the job. Note that this method penalizes overqualification as much as underqualification, on the assumption that overqualified candidates may be bored, hard to retain and hence less productive than persons better matched to their jobs.

3. Weighted simple difference

$$[(JCR_1 - PC_1) \times W_{t1}] + [(JCR_2 - PC_2) \times W_{t2}] + [(JCR_3 - PC_3) \times W_{t3}] + \dots$$

where

$JCR_i$  = job competence requirement on competency i

$PC_i$  = person's competence on competency i

$W_{ti}$  = the weight of the competency I, e.g. 3= high, 2=moderate, 1=low

$JCR_i - PC_i$  = simple difference (positive or negative number)

The weighted simple difference method rewards over-qualification but perhaps less than the unweighted simple difference method because a person's overqualification on an



unimportant (low weighted) competency will be less likely to make up a deficiency in an important (highly weighted) characteristic.

### 3. Weighted absolute value

$$[|JCR_1 - PC_1| \times Wt_1] + [|JCR_2 - PC_2| \times Wt_2] + [|JCR_3 - PC_3| \times Wt_3] + \dots$$

where

$JCR_i$  = job competence requirement on competency  $i$

$PC_i$  = person's competence on competency  $i$

$|JCR_i - PC_i|$  = absolute difference (positive number)

$Wt_i$  = the weight of the competency  $i$ , e.g. 3= high, 2=moderate, 1=low

The weighted absolute difference method calculates the "gap" between competency requirements of a job and a person's competence, multiplies this difference by a weight based on the importance of the competency, and sums weighted differences for all competencies. This method penalizes over- and under-qualification equally.

### 4. Euclidean distance: the square root of the sum of the squares of the differences between the competence required by the job and possessed by the person

$$(JCR_1 - PC_1)^2 + (JCR_2 - PC_2)^2 + (JCR_3 - PC_3)^2 + \dots$$

where

$JCR_i$  = job competence requirement on competency  $i$

$PC_i$  = person's competence on competency  $i$

The best candidate is the one with the lowest score, the least Euclidian distance from job requirements. Note that the Euclidian distance method also penalizes overqualification as much as underqualification.

### 5. Profile Comparison

The profile comparison method (Caldwell and O'Reilly, 1990) correlates the rank order of the competency requirements of a job (q-sorted on the basis of most important to least important for performance) with the average rank order of a person's competencies (q-sorted on the basis of most descriptive to least descriptive of the person by the person's manager, a peer, and his/her self-Report). The best candidate is the person with the highest job-person rank or correlation. Caldwell (1991) reports profile comparison job-person match correlations show criterion validities of .39-.98 with job performance, .22 with job satisfaction, and .19 with turnover.

Competency-based job-person matching algorithms have many applications in succession planning: candidates can be systematically compared on the basis of "goodness of fit" to jobs they might assume in the future. For example, a rule-of-thumb from Weber's law is that 15% difference (plus or minus) between a person's competence and the competence requirements of the job will by definition be "just noticeably different," i.e., a mismatch of less than 15% (using the "least noticeable difference" pattern-matching algorithm) should predict a successful promotion or placement.

A job-person difference of 32% (two just-noticeable-differences) represents a challenging promotion (or

significant demotion). Job-person matches greater than three just-noticeable-differences (52%) will be real stretches for a person, with significant retention risks: from failure if the requirements of the job are greater than the person's competencies, or from boredom if the "Over qualified" persons abilities exceed those required by the job.

Table V compares the five quantitative Job—Person Match Algorithms

**Table V. Comparison of Six Quantitative Job-Person Matching Algorithms**

1. Simple Difference			
Competency	First Level Job Requirement	Person Score	Difference
Achievement	90	95	-5
Tech Expertise	90	80	10
Cognitive Influence	95	95	0
Total	55	45	10
Difference			15
JND intervals			1
Competency	Fourth Level Job Requirement	Person Score	Difference
Achievement	50	95	-45
Tech Expertise	60	80	-20
Cognitive Influence	85	95	-10
Total	85	45	40
Difference			-35
JND intervals			2
2. Unweighted Absolute Value ("city block")			
Competency	First Level Job Requirement	Person Score	Difference
Achievement	90	95	5
Tech Expertise	90	80	10
Cognitive Influence	95	95	0
Total	55	45	10
Difference			25
JND intervals			1.5
Competency	Fourth Level Job Requirement	Person Score	Difference

Achievement	50	95	45
Tech Expertise	60	80	20
Cognitive	85	95	10
Influence	85	45	40
Difference			115
JND intervals			>5

### 3. Weighted Simple Difference

Competency	First Level Job Requirement	Person Score	Difference	Weight	Score
Achievement	90	95	-5	3	-15
Tech Expertise	90	80	10	2	20
Cognitive	95	95	0	3	0
Influence	55	45	10	1	10
WEIGHTED FIT SCORE					15.0
JND intervals					1.0

Competency	Fourth Level Job Requirement	Person Score	Difference	Weight	Score
Achievement	50	95	-45	2	-90
Tech Expertise	60	80	-20	1	-20
Cognitive	85	95	-10	3	-30
Influence	85	45	40	3	120
WEIGHTED FIT SCORE					-20.0
JND intervals					1.4

### 4. Weighted Absolute Value

Competency	First Level Job Requirement	Person Score	Difference	Weight	Score
Achievement	90	95	5	3	15
Tech Expertise	90	80	10	2	20
Cognitive	95	95	0	3	0
Influence	55	45	10	1	10
WEIGHTED FIT SCORE					45.0
FIT SCORE ADJUSTED FOR WEIGHT					20.0
JND intervals					1.2

Competency	Fourth Level Job Requirement	Person Score	Difference	Weight	Score
Achievement	50	95	45	2	90
Tech Expertise	60	80	20	1	20
Cognitive	85	95	10	3	30
Influence	85	45	40	3	120
WEIGHTED FIT SCORE					260.0
FIT SCORE ADJUSTED FOR WEIGHT					115.6
JND intervals					>5

**Table V. Comparison of Six Quantitative Job-Person Matching Algorithms**

5. Euclidian Distance					
Competency	First Level Job Requirement	Person Score	Difference	Square	Score
Achievement	90	95	5	25	
Tech Expertise	90	80	10	100	
Cognitive	95	95	0	0	
Influence	55	45	10	100	
Sum of Squares				225	15.0
JND intervals					1.0
Competency	Fourth Level Job Requirement	Person Score	Difference	Square	Score
Achievement	50	95	45	2025	
Tech Expertise	60	80	20	400	
Cognitive	85	95	10	100	
Influence	85	45	40	1600	
Sum of Squares				4125	64.2
JND intervals					>3
6. Profile Comparison					
Competency	First Level Job Requirement Importance Rank	Person Score			
Achievement	2.5	1.5			
Tech Expertise	2.5	3			
Cognitive	1	1.5			
Influence	4	4			
JOB--PERSON CORRELATION			RANK ORDER	0.85	
Competency	Fourth Level Job Requirement Importance Rank	Person Score			
Achievement	4	1.5			
Tech Expertise	3	3			
Cognitive	2	1.5			
Influence	1	4			
JOB--PERSON CORRELATION			RANK ORDER	-0.55	

Note in Table V that all job-person match algorithms except the simple and weighted simple difference methods, which allows *over* qualification to cancel under- qualification, would recommend against promoting the engineer whose profile is shown in Figure 13. As individual contributor skills are not likely to be substitutable for interpersonal and political savvy in the boardroom, absolute value methods (including Euclidean distance) are better predictors of success in specific jobs. Utility of Competency-based selection systems Table VI shows the results of eight competency-based selection systems.

**Table VI. Meta-analysis of Eight Competency-Based Staffing Systems**

Industry -Job Family	N	Design	Productivity Increase	Turnover Decrease	Economic Value	Return on Investment
Retail-sales	60	Control	+19%	-50%	\$720K	2300%
Wholesale-sales	80	Control	+16%	-50%		
Computer-sales trainees	700	Longitudinal	---	-90%	>\$3.15 mil	>1000%
Food & Beverage -executives	47	Longitudinal	+10%	-87%	\$3.75 mil	>1000%
Cosmetics-sales	74	Control	+33%	-63%	\$3.58 mil	>1000%
Computer programmers	100	Longitudinal	--	-99%	\$1.43 mil	>1000%
Retail-customer service/tele-marketing	320	Longitudinal	+24%	-99%	>\$1.6mil	>1000%
Financial services	120	Control	+24%	---	\$750K	525%
MEDIAN			+19-24%	-63%		>1000%

Median productivity increases were 24% and median reduction in turnover 70%. In most cases, returns on investment exceeded 1000%. Cases include:

- Retail sales; 50% of 60 new hires were selected on the basis of competencies assessed using a behavioral event interview, and the other 50% were selected using traditional biodata criterion (one requirement was “ten years of sales experience,” which meant mostly male-aged white males were hired, an affirmative action concern). In the year following selection, turnover in the competency-selected group was 20% (six people) and average sales of \$5000/week, compared to 40% turnover (12 people) and average sales of \$4200/week for the traditional group. Benefits of the competency-based selection system were:
  - Turnover “Cost avoidance”: 6 sales people retained at \$20,000/person replacement costs=\$120,000; and
  - Increased revenues: 30 sales people 30 salespeople X \$40K extra sales/year X 50% gross margin \$600K/year net increased contribution,

A total one-year benefit of \$720,000. return on \$30,000 invested in the competency study and selection training was 2300% (Spencer, 1986, pp. 95-96). In addition, the competency-based selection systems resulted in the hiring of more female and minority sales people (without prior sales experience), solving the affirmative action problem.

- Telecommunications firm: reduction in turnover of competency-selected programmers saved 22 professionals costing \$65,000 to replace, a \$1.43 million return on a \$120,000 investment in competency research and selection training.
- Pepsico: an 87% reduction in executives costing \$250,000 to replace saved the firm \$4 million.
- Commercial sales: 33 people were hired using the BEI and a competency model; a control group of 41 was selected without behavioral interviews. In the following three years, five of the competency-selected group quit or were fired, compared with 17 turnover in the control group. Competency-selected system people increased sales an average of 18.7% per quarter, compared to a 10.5% average increase

for sales people in the control group. On an annual basis, competency-selected system people each sold \$91,370 more than control salespeople, a net revenue increase of \$2,558,360 (\$91,370 \* 28 salespeople).

- Computer sales: a large computer firm decided to transfer several thousand senior staff “overhead people who cost money” (average yearly compensation of \$57,000 per person) to become “salespeople who make money.” Not all staff “bureaucrats” have the competencies to be effective in sales: initial attrition from sales training was 30%, or 210 of the 700 staff sent for sales training each year. Sales trainee failures were terminated after four months, when they had failed three consecutive month-end tests. Each failure cost the firm \$16,667 in salary costs alone, \$3.5 million per year for 210 failures (this figure is conservative, because trainee benefits and other costs of training-instructors, materials and overhead-were also lost.) Using a competency model developed by studying its successful sales people, the firm cut attrition to 3%, 21 dropouts, a 90% saving worth \$3.15 million (Rondina, 1988) .

Improved selection system benefits come from (a) avoidance of the costs of turnover; and (b) increased revenues or productivity from better performing employees hired using competency methods.

#### Costs of Turnover include

- lost productivity during hiring time (55-57 days i.e. roughly two months sales or production), acquisition of new staff (roughly one third of first year salary),
- lower productivity during a new hires learning curve period—the time from day hired to day 100% productive (defined as the average productivity of average experienced people in the job; learning curve time averages 12 months for technical/professional personnel); and
- out-of-pocket direct costs for relocation and training (Spencer, 1986). The minimum cost of replacing a technical/professional is direct salary for a year (Spencer, 1986, Flamholtz, 1985, Swanson & Gradous, 1988) ; the actual cost probably 2-3 times direct salary if “full cost” accounting for overhead is added to salary and if lost productivity during replacement e.g. lost sales, loss of a major contract, delay in time to market of a new product is considered.

Increased revenues and productivity come from better people—as noted above, superior performers one standard deviation above the mean produce 19%, 32%, 48% and 48-120% more in low, moderate, high complexity and sales jobs. The median 24% productivity increase from competency-based selection means the same amount of work can be done with  $[100\% - (100\% / (1 + \% \text{productivity improvement}))] = 20.5\%$  fewer staff.

Appendix B provides a worksheet for calculating the benefits of competency-based staffing programs.

#### Competency-based Development: Training, Career pathing, Work Assignments

1. Recognition. The objective of Step 1 is to get learners to convince themselves that the competencies to be taught do exist and are important to be able to do their jobs well.

Two ways learners can be led to this recognition are “compare-and-contrast cases and hard simulations. A compare-and-contrast case gives learners incidents from a superior performer and an average performer in the job. Learners are asked: What is the difference between these two people? Who is the superior and who is the average performer and why? What is the superior performer doing that the average performer is not doing? Learners are essentially asked to be competency researchers and do a thematic analysis as described above under Competency Methodology. Learners might observe, for example, “The woman who’s the success thinks about doing better and takes many more action steps when she’s blocked.” They infer and demonstrate to themselves the importance of achievement motivation and initiative.

A second way to stimulate recognition is to involve learners in a hard simulation: a situation or problem that feels real to participants and is sufficiently challenging for them not to be able to solve easily. The intended learner response is: “Yes, this is the kind of situation I encounter on my job, and no, I don’t know how to do it as well as I might –[hence] I have something to learn.”

Compare-and-contrast cases and recognition simulations are designed to establish credibility for the competencies and create an “actual-ideal discrepancy” for learners that motivates them to want to learn.

2. **Understanding.** Step 2 explains the new competency concept. Learners are taught exactly what the competency is and how to do it. Readings and lectures provide the conceptual model for the competency, for example elements of achievement-motivated thought or behavioral indicators and methods for direct persuasion. Live or video demonstrations provide modeling examples of the competency in use in a job situation.
3. **Self-Assessment.** Step 3 gives learners feedback on their own competence against the levels that predict superior performance, in graph like that shown in Figure 13 between the engineer’s competence and his desired fourth level job is used to highlight the gaps between a learner’s actual competence and the ideal shown by superior performers in job. Learners identify for themselves the biggest discrepancy they feel between competencies they have and those they want to develop—those they have the most energy and interest in learning.
4. **Skill Practice/Feedback.** In Step 4, learners practice the competency behaviors in realistic simulations, compare their performance with the standard for superior performance, and get coaching feedback on how to do better. Learners repeat as much practice/feedback cycles as they need to reach the standard.
5. **Job Application Goal Setting.** In Step 5, learners set goals and develop action plans for exactly how they are going to use new competencies in their jobs (see Competency-based Performance Management below). Goal-setting increases the likelihood of goal accomplishment from 5-20% to 60% - 70% (Kolb & Boyatzis, 1967) and results in an average increase in productivity of 19% (Latham & Locke, 1979). Effective goals are specific, measurable, challenging but with

moderate risk, and time phased. Learners may also anticipate the resources and obstacles that may help or hinder them in goal accomplishment; this reentry planning helps people survive initial setbacks.

#### 6. Followup Support Follow-up and support activities include:

- Sharing competency goals and plans with supervisors, and contrasting with them for feedback and coaching assistance in use of new behaviors
- Rewarding initial experimentation with use of new competency behaviors
- Holding “goal progress review meetings” at which learners hold a reunion, report progress on attaining their goals, share what has worked and has not worked, get additional ideas from the trainers, and get support and encourage one another.
- Establishing reinforcing reference groups of competency-trained people that is, a “critical mass” of people in each work group who speak the same language and can encourage one another.

In the case of the engineer (Figure 13) not ready for promotion to executive, a competency-based development program might include

- interpersonal skills training,
  - assignment to jobs that require interpersonal and influence competencies (e.g., a training job in human resources or labor relations), having him work for a mentor who is known throughout the organization as a “master corporate politician.”
- Meta-analyses (Burke & Day, 1986; Falcone, et.al., 1986, Morrow, et.al., in press) of many training evaluation studies show that managerial, technical and sales training can shift the performance curve .60 of a standard deviation, increasing productivity or other economic value 11%, 18%, 29% and 29-72% for low, moderate and high complexity and sales jobs respectively.

New: Success of a self-directed change based MBA program

Boyatzis et.al (1995, 1996) have recently shown that MBA students’ competencies on all eighteen competencies developed in the Case Western Reserve Weatherhead School of Management significantly increased during the two year program using a self-directed change approach in which MBA students

- get a baseline measure of their competencies in an intensive assessment center conducted during the first two weeks of their first year of study
- identify, set goals and develop detailed personal learning plans to develop competencies which they feel deficient in and they commit to improving
- take formal courses, participate in development activities, work with mentors, and receive frequent feedback on their development of target competencies
- are reassessed at the end of their second year of study and “certified” on competencies they have developed successfully, as demonstrated (a) on operant tests (b) in behavioral simulations, (c) in a “document of performance” project in an internship assignment, and (d) by 360 assessment ratings

by professors, peers, and internship mentor/supervisors who have observed students behavior on the job.

This unique program is among the first to measure and credential the actual “value added” by higher education to students on competencies known to predict success careers and life.

New: Returns on investment in competency-based v. traditional training Reanalysis of Morrow, et.al.’s data on effect size shifts and return on investment from 18 training programs (Spencer & Morrow, 1996) found

- Traditional theory and knowledge training shifted the performance curve .41 standard deviation and returned an average 87% return on investment.
- Competency-based training, defined as those programs which taught and had trainees practice motivation and behavioral skills shifted the performance curve .70 standard deviation and returned an average 700% return on investment.

Both traditional and competency-based training were effective and economically cost-justified, but competency -based training produced almost twice the improvement in performance, and eight times the return on investment

Appendix B provides a worksheet for calculating the benefits of competency-based development programs.

### Competency-Based Performance Management

Traditional performance management systems consist of a cycle of (1) objective setting or performance contracting at the beginning of a period, (2) management during the period, then (3) performance “appraisal” on results achieved against starting objectives, with and (4) reward (or sanction) at the end of the period.

Competency-based performance management systems differ in three important ways:

- Goal setting for development of competencies which predict results
- Emphasis on “coaching” assistance to employees in developing competencies during the performance period; and
- Explicit measurement and reward for competency development, as well as business results achieved, at the end of the period. Usually business results and competency improvement are weighted e.g. 65% results, 35% development to produce a score which determines merit pay.

Where traditional PMS emphasize what an employee “did for the firm recently” –last period–hence are relatively short-term and backward looking, competency-based PMS emphasize development, what an employee will be able to do, longer term, in the future. These systems are most appropriate where

- Jobs which do not have clear results outcomes e.g. service positions like air cabin attendants where performance is competence: being nice to customers so they will want to fly with the attendants’ airline again.
- “Jobs” don’t exist or change so rapidly that objectives are no sooner set than a person is in a different job. Many management theorists have observed that “the death of the

job” requires valuing people for the number of different roles they can competently contribute to in a fast- changing environment.

- Competence to contribute to future work is more important than past contribution to work which may no longer exist i.e. “what can you do v. what have you done” for the organization.
- Firms have a commitment to investing in human assets.

xThe framework for a competency-based/”coaching” performance management system is shown in Figure 14.

ORGANIZATIONS' Priority		“Coaching”		EMPLOYEES' Priority
Criterion	Perf. Results	Critical Job Situations/ Behaviors	Competencies	
Desired (Top 10%)	1.5 x	★ ★	★ ★	
Employee Goals	x+y%	Attention to > >	Develop > >	
Baseline (Average)	x	μ μ	μ μ	

Employees are taught competency concepts i.e. that superior performers produce significantly better results because they pay attention to and behave differently in critical task situations because they have different, or a higher level, of specific competencies which can be learned. For example, where average salespeople pay attention to paperwork, superior salespeople pay attention to customer contacts and use relationship building competencies.

Employees use the model provided by superior performers to set goals and commit to developing the competencies and demonstrating the behaviors in the critical job situations which predict “top 10%” success. Managers commit to coaching—giving “how to” tips, behavioral feedback, support and reassurance, and development opportunities—to help the employee in every way possible. So, where traditional PMS focus on results, the firm’s priority, competency-based PMS focus on employee competencies, the employee’s priority. This “employee- centered” approach is more motivating and effective: if the competency research is valid, employee development and use of competencies in critical job situations will produce better business results.

Latham & Locke (1979), Burke & Day (1986) and Morrow, et.al. (in press) have shown that goal setting and performance management shifts the performance curve .60 S.D., worth 19- 30% in increased performance depending on the complexity of the job.

Appendix B provides a worksheet for calculating the benefits of competency-based performance management programs.

## Competency-Based Pay

Pay for competence can be fixed (higher salaries for employees with valuing adding competencies e.g. fluency in Japanese or greater creativity), or variable e.g. bonus pay for successful development of one or more competencies.

Development of competency-based pay systems involves the following decisions:

1. Amount or percentage of pay to be based on competence
2. Percentage to be paid for each competency e.g. by distribution of 100 points
3. Measure of development or demonstration of each competency e.g. again distribution of 100 points where 0 = no development and 100 = the most development possible.
4. Aggregation of points to determine the percentage of (1) amount of pay opportunity based on competence paid the employee as a bonus.

Pay for competence is investment in potential performance, and should be rationally related to expected return using the equation

$$E(v) = A * p * DF$$

where

- $E(v)$  = the expected value of competence in dollars  
 $A$  = the amount of economic value in dollars an individual with the competency may bring (or save) the firm  
 $p$  = the probability that the firm will get the amount; and  
 $DF$  = the discount factor used to find the present value of  $A$  received at some future point in time.

Amount ( $A$ ) represents economic benefit the competency ; probability ( $p$ ) the likelihood that the firm will get the benefit; discount factor ( $DF$ ) when the firm will get the benefit. An example is the calculation a professional sports team makes in a contract with a star athlete. The team must estimate the additional revenue the star will bring in additional box office and media receipts, when and for how long the team will receive these earnings, and the probability that the star will play for the length of the contract (e.g., not be injured or otherwise unable to perform). A decision to pay for a person's "portability," innovativeness," or "entrepreneurship" represents a similar investment analysis-or should. Firms that fail to relate competency based pay to economic value received risk serious salary inflation. Employees quickly learn to show they have developed—and insist on being paid more for—competencies, but unless increased competence results in increased earnings sufficient to pay for increased compensation, the compensation scheme is unsustainable.

Competency-based team and organization development and change competency research methods are increasingly being used with organizations e.g. US Navy DDG guided missile destroyers, pharmaceutical firm drug development teams, toy and polyester fiber plant self-managing work groups, rather than individuals, as the units of analysis. Studies of high v. low

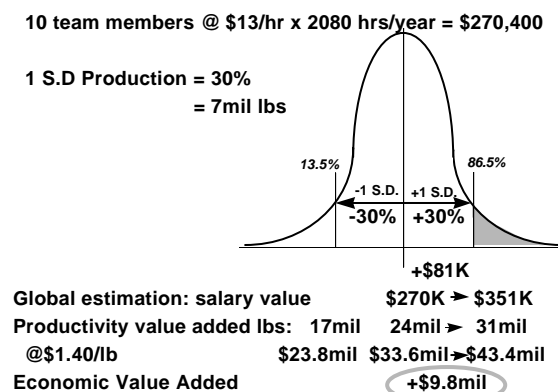
performing groups identify variables which predict superior performance. Organizational competency variables include

- leadership
- work flow processes
- technology
- organization, team and job/role design
- staffing
- development
- performance management systems
- culture and values

OD interventions based on helping less well performing organizations adopt the processes, technology, structure, and human resources practices of superior performing groups can produce significant increases in productivity.

Productivity curves for groups are similar to those for individuals, as shown in Figure 15 for self-managing production teams in polyester fabric plants—but because production teams leverage outputs many times their salaries, superior team performance produces substantial benefits.

**Figure 15. Productivity Curve for Superior Self-Managing Production Teams**



An "organization" competency study in a pharmaceutical firm found significant work process, organization, leadership and individual competency differences between high performing drug development teams, which took a new drug from discovery to government approval in 2.5 years, and average drug development teams' 12 year development cycle time. For example, where average drug development teams were organized as separate "silo" functions which "handed off" work in a rigid sequence Discovery=> Toxicology=> Clinical Medicine I=>CM2=CM3=>Regulatory Affairs which had many communications difficulties, superior teams operated as virtual, rapid application development teams of scientists, doctors and lobbyists working together in shared spaces as autonomous, entrepreneurial "small drug companies" within the larger firm. Reduction in drug development cycle time is hugely valuable: each additional year under patent protection is worth \$100 million. The firm reorganized all of its drug development efforts to the rapid application "venture team" process and structure found by the competency model. This intervention

reduced cycle time an average of four years, worth \$800 million to the firm, a return on a \$100K investment in the competency research of 8000% (Boyatzis, Esteves & Spencer, 1992).

## Conclusion

Competency psychology has wide acceptance in human resources in industry, government, military, education, health care and religious organizations world-wide. Raven (1997) estimates that competency research and applications is a \$100 million business in the North America and Europe. The approach remains, however, controversial in industrial organizational psychology. At the 1997 National Meeting of the Society for Industrial Organizational Psychology (SIOP), a vehement critic described competency methods as “slickly packaged junk science peddled by unscrupulous consultants to ignorant consumers” (Depinet, 1997). One of these customers, A Ph.D. I-O psychologist from a Fortune 500 company, responded that the competency approach was I-O psychology in more user-friendly language—and his firm used competencies because they made more practical sense to, and hence were much more easily accepted and used by managers and employees.

A balanced view is that competency psychology is a new approach to IO psychology which shares similar objectives but differs in research methodology and variables emphasized. Traditional and competency I-O psychology share the following objectives:

- identification of reliably measurable human characteristics which are valid predictors of work performance; and which
- can be applied to selection, training and development, performance management, reward strategies and other human resource applications to improve individual and organizational performance.
- Differences between traditional and competency I-O psychology are summarized in Table VII.

Table VII. Comparison of Traditional and Competency I-O Psychologies

	Traditional I-O Psychology	Competency-based IO Psychology
Variables emphasized	“g”-general intelligence, “IQ”; cognitive processing of “declarative” knowledge: “know what,” “can do”	“p”-“emotional intelligence,” “EQ”; motivation, interpersonal and political skills, initiative, self-confidence, self-control: “procedural” knowledge, “will do because ‘want to’”
Neuroscience	“Talking brain”: lateral-dorsal prefrontal cortex (calculation, analytic reasoning, planning) with infero-lateral temporal lobe (verbal memory), pre-motor and motor cortex, Broca’s area (speech)	“Emotional brain”: basal forebrain (amygdala, nucleus accumbens: motivation, emotional arousal, self-control) with mesio-prefrontal cortex (personality), supplementary motor area (initiative)
Measurement	Respondent/reactions to structure stimuli and situations e.g. paper-and-pencil tests	Operant/spontaneously-generated behaviors in relatively unstructured situations, as described in Behavioral Event Interviews
Research methodology	Study jobs and tasks 1. Identify or infer from job descriptions or job task analyses cognitive and/or motor skills needed to do a job e.g. operate a street car or an airplane • Construct respondent tests to measure the skills needed to perform these tasks, • Factor-analyze performance scores on those tests to create reliable scales 3. Validate tests by correlating factor scores with criterion measures of on the job performance	Study people who do jobs or tasks well or best e.g. achieve sales one standard deviation above the mean 1. Identify personality and cognitive characteristics in empirically coded Behavioral Event Interview transcripts which statistically distinguish superior from average performers 2. Develop inter-rater reliable coding scales for threshold and distinguishing competencies. 3. Validate competency models by correlating competency scores with criterion measures of on-the-job performance.

In essence, traditional industrial/organizational psychology starts with separate analyses of the job and the person and tries to fit them together. This approach had its greatest success in predicting academic performance from academic-type tests, but has proved quite inadequate for predicting performance in high-level jobs of greatest importance to modern business.

Competency methods start with person in job, make no prior assumptions as to what characteristics are needed to perform the job well, and determine from open-ended behavioral event interviews which human characteristics predict job success. Competency research is parsimonious in emphasizing criterion validity: what actually causes superior performance in a job, not what factors most reliably describe all the characteristics of a person, in the hope that some of them will relate to job performance.

Competencies identified by this approach are context-sensitive, i.e. describe what successful entrepreneurs in developing countries actually do in their own organizations and culture, not what Western psychological or management theory say should be needed for success. Competency-based human resource applications predict superior job performance and retention—both with significant economic value to organizations—without race, age, gender or demographic bias.

As neuroscience has overcome “Decartes error” by showing cognitive and emotional processes are inextricably linked, traditional and competency-based I-O psychologies will almost certainly converge in the near future by incorporating the most robust methods and variables offered by each approach. As this convergence emerges, competency psychology provides human resource practitioners with methods broadly applicable to staffing, performance management and individual and organizational development in the challenging years ahead.

## Appendix A.

### Economic Value Of Competence Survey

This survey collects data you can use to cost-justify competency-based human resources applications.

Please answer the following questions for an economically valuable job you want to analyze (a sales job is ideal) and return this form to [the Conference Coordinator.]

The survey can be answered anonymously if you wish. Alternatively, if you would like feedback on how your firm’s job compares to industry averages and potential returns on investment in competency-based selection, training and performance management, you can fill in your name and address at the bottom of the last page and we will send you a “benchmarking” report. Individual firm data will be held in strict confidence—we will report only Conference and industry averages.

Thank you for your participation!

I. Your firm’s INDUSTRY (product/service): \_\_\_\_\_

II. The JOB or ROLE you are analyzing: \_\_\_\_\_

1. The average annual SALARY for this job: \$\_\_\_\_\_ (A1)

2. The BENEFITS RATE for this job: \_\_\_\_\_% (A2)

3. The BUDGET, financial resources or payroll a person in this job controls: \$\_\_\_\_\_ (A3)

III. Productivity of Average and SUPERIOR (defined as the **top 1 out of 10**) employee in this job.

4. How much **more** does a SUPERIOR performer produce compared to an experienced Average employee in the job, whose productivity is defined as 100%?

100% \_\_\_\_\_ % (A4)  
Average employee                      SUPERIOR (top 1 out of 10)

5. Actual DOLLAR figures for yearly sales or other economic outcomes?

\$ \_\_\_\_\_ (A5)      \$ \_\_\_\_\_ (B5)  
Average employee                      SUPERIOR (top 1 out of 10)  
e.g. salesperson                      employee e.g. salesperson

#### IV. Staffing

6. How many employees are there in this job? \_\_\_\_\_ (A6)  
7. What is the annual turnover rate for employees in this job? \_\_\_\_\_ % (A7)

#### V. Training, Development, Performance Management

8. Learning Curve: How many MONTHS does it take for a new hire to become fully productive (equal to the average productivity of an experienced person in the job)? \_\_\_\_ (A8)

Please provide the following data for a training program you have attended, sent a colleague to or evaluated:

9. Please enter the number which best describes the TYPE OF TRAINING: \_\_\_\_\_ (A9)

1. Sales              2. Executive              3. Management  
4. Supervisory    5. Technical              6. Interpersonal Skills/  
Communications  
7. \_\_\_\_\_  
Other \_\_\_\_\_

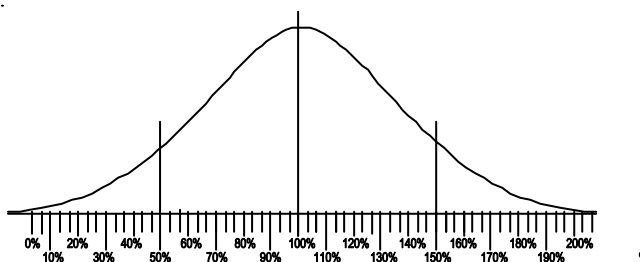
10. Please fill in the RELATIVE PERCENTAGES OF TIME (adding to 100%) in training spent :

a. Learning facts , theories or ideas \_\_\_\_\_ %

b. Practicing motivation or behavioral skills \_\_\_\_\_ % (A10)

11. PERCENTAGE OF TOTAL JOB tasks addressed by training: \_\_\_\_\_ % (A11)

12. The % Productivity of the average trainee BEFORE training, on the 0% -200% scale below the curve; where 100% = the average performance of an experienced person in the job: \_\_\_\_\_ % (A12)



13. The % Productivity of the trainee AFTER training, on the scale below the curve, where 100% = the average performance of an experienced person in the job (fill in a % productivity if greater than 200% after training): \_\_\_\_\_ % (A13)  
14. How many MONTHS AFTER TRAINING does a trainee reach 100% productivity? \_\_\_\_\_ (A14)  
15. For how many months after training is this INCREASED PRODUCTIVITY MAINTAINED ? \_\_\_\_\_ (A15)

### Appendix B

Appendix B.	
Competency-based Human Resource Applications Cost::Benefit and Return On Investment Analysis Worksheet	
Data Input from Economic Value of Competence Survey	
A	B
I. INDUSTRY	
II. JOB/ROLE	
1. Salary/year \$	
40,000	
2. Benefits % rate	
0.35	
3. Budget, resources \$	
controlled \$ 100,000	
III. AVERAGE	SUPERIOR
PRODUCTIVITY	
4. Ave v. Superior %	100%
5. Revenue \$	
\$ 300,000	\$ 444,000
IV. STAFFING	
6. # Employees in job	
100	
7. Turnover rate/year	
20%	
V. DEVELOPMENT/PERFORMANCE MANAGEMENT	
8. Learning Curve in months	
12	
9. Type of Training	
1	
10. % Competency-based	
30%	
11. % Job tasks addressed by training	
50%	
12. Productivity BEFORE training	
80%	
13. Productivity AFTER training	
120%	
14. Months to 100% productivity	
8	
15. Months training gains persist	
24	



Appendix B.				
<b>Competency-based Human Resource Applications Cost::Benefit and Return On Investment Analysis Worksheet</b>				
<b>CALCULATIONS</b>	<b>BASELINE OR CONTROL</b>		<b>COMPETENCY-BASED</b>	
III. LABOR COST DATA				
16. Salary/year	\$ 40,000	=A1		
17. Benefits % rate	0.35	=A2		
18. Total Cost/year	\$ 54,000	=A4*A5	\$ -	
IV.STAFFING				
--A. BENEFITS FROM REDUCED TURNOVER				
19. Replacement cost	\$ 40,000	=A1 or Note 1	\$ 40,000	
20. # in job	100	=A6	100	
21. % turnover/year	20%	=A7	10%	
22. # leave/year	20	=A20*A21	10	=B20*B21
23. Turnover cost/year	\$ 800,000	=A19*A22	\$ 400,000	=B19*B22
24. Net Benefits from Reduced Turnover			\$ 400,000	=A23-B23
--B. BENEFITS FROM INCREASED PRODUCTIVITY				
25. S.D. Effect Size Shift			.25	
26. % Gain from Improved Selection			12%	=(B4-1)*B25
--B.1.BENEFITS FROM INCREASED REVENUES				
27. Net revenue/person	\$ 300,000	=A5	\$ 336,000	=A27+(A27*B26)
28. Total Revenues--all employees	\$ 30,000,000	=A5*A27	\$ 33,600,000	=A5*B27
29. Net Benefits from Increased Revenues			\$ 3,600,000	=B28-A28
OR				
--B.2.BENEFITS FROM COST SAVINGS				
30. Costs managed/person	\$ 100,000	=A3	\$ 100,000	=A3
31. Savings/person	0		\$ 12,000	=B30*B26
32. Total Savings--all employees	\$ -	=A6*A31	\$ 1,200,000	=A6*B31
33. Total Benefits from Cost Savings			\$ 1,200,000	=B32-A32
OR				
-- B3. BENEFITS FROM -REDUCED STAFF				
34. Total Staff required with turnover and productivity %	\$ 100	=A6	89.29	=A7/(1+A26)
35. Total Staff Costs	\$ 5,400,000	=A18*A34	\$ 4,821,429	=A18*B34
36. Total Benefit from Reduced Staff			\$ 578,571	=A22-B22

Appendix B.				
<b>Competency-based Human Resource Applications Cost::Benefit and Return On Investment Analysis Worksheet</b>				
OR				
--B4 : BENEFITS FROM SHORTER LEARNING CURVE				
37. Learning Curve Time saved by training in months			4	=A8-A13
38. Value time/Employee			\$ 9,000	=A37*(A18/12)*.5
39. Total Benefit for all Employees Trained			\$ 900,000	=A6*B66
<b>V. DEVELOPMENT AND PERFORMANCE MANAGEMENT</b>				
--QUICK ESTIMATE				
PRODUCTIVITY	AVERAGE		SUPERIOR	
40. Ave v. Superior %	100%		148%	=B4
41. S.D. Effect Size Shift			0.6	
42. % Gain from Development			29%	=(B40-1)*B41
43. BENEFITS FROM INCREASED REVENUES			\$ 86,400	=A5*B42
44. Increased Revenues--all employees			\$ 8,640,000	=B20*B43
OR				
45.BENEFITS FROM REDUCED COSTS			\$ 28,800	=A3*B42
46. Reduced Costs--all employees			\$ 2,880,000	=B20*B45
OR				
47. BENEFITS FROM REDUCED STAFF			22.36	=B20-(B20/(1+B42))
48. Total Benefits from Reduced Staff Costs			\$ 1,207,453	=B47*A18
B. EVALUATION	Before Development		After Development	
49. % Job Time on Tasks Impacted by Training	50%	=A11	50%	=A11
50. % Productivity on Tasks	80%	=A12	120%	=A13
51. Economic Value	\$ 21,600	=A18*A49*A50	\$ 32,400	=A18*B49*B50
52. Economic Value Added/ Trainee /Year			\$ 10,800	=B51-A51
53. Duration of benefits/years			2	=A14/12
54. Benefit from training--all employees			\$ 2,160,000	=A6*B52*B53

**Appendix B.**  
**Competency-based Human Resource Applications Cost::Benefit and Return On Investment Analysis Worksheet**

RETURN ON INVESTMENT ANALYSIS					
IV. INVESTMENT	A	B	C	D	
Labor Costs		Per Diem/Unit	# Days/Units	Total	
1. Benefits rate	35%				
2. Paid Days Off/Year	40				
>Internal Staff	Salary	$=(A+(A*A1))/260-A2$		$=B*C$	
3.HR Professionals	\$ 50,000	\$ 306.82	30	\$ 9,205	
4. Line Managers	\$ 65,000	\$ 398.86	8	\$ 3,191	
5.Participant employees	\$ 50,000	\$ 306.82	20	\$ 6,136	
6.Support	\$ 28,000	\$ 171.82	3	\$ 515	
Vendors					
7. Consultants		\$ 2,000	20	\$ 40,000	
8. Travel & Expenses		\$ 500	4	\$ 2,000	
9. Materials		\$ 125	6	\$ 750	
10. Equipment					
11.TOTAL INVESTMENT				\$ 61,797	$=SUM(A3:A10)$
RETURN					
12.Reduced Turnover				\$ 400,000	From Benefits WS A24
13.Reduced Staff				\$ 578,571	From Benefits WS A36
14.TOTAL RETURN				\$ 978,571	$=SUM(A12:A13)$
15. RETURN ON INVESTMENT				1484%	$=(A14-A11)/A11$

**Notes:**

The worksheet uses data from the Appendix A Economic Value of Competence Survey. Spreadsheet references are used e.g. A1:A15 are the input fields on survey. Formulas are given opposite calculated fields. Input fields are highlighted in gray; unused fields are shown in diagonal crosshatching.

IV. Staffing Benefits: come from reduced replacement costs and increased productivity—increased revenues, cost savings or reduced staff because fewer more productive people can do the same amount of work: # more productive staff = previous staff/(1+%productivity increase). Effect size shift from competency-based training is conservatively assumed to be .25 standard deviation (B25). Note that these benefits may “double (or triple) count” the true benefits from the effect size shift. Researchers should be care to count only benefits they can justify.

1. A minimum estimate of the cost of turnover is the direct salary of a person who leaves. A full replacement accounting which assumes a hiring cost (A3) of one third salary (whether paid to a search firm or incurred internally); lost productivity at salary value of time (A6) for the number of days it takes to fill the job divided by 365 days in a year; learning curve time of 12 months, and new hire productivity averaging 50% during this time, hence a learning curve cost of  $A3*A8$ ; and out-of-pocket direct costs of \$3000 (A10) = 129% direct salary—see spreadsheet below.

FULL REPLACEMENT COST	A	FORMULA
1. Salary/year	\$ 40,000	$=A1$
2. Benefits % rate	0.35	$=A2$
3. Total Cost/year	\$ 54,000	$=A4*A5$
4. Hiring Cost	\$ 13,333	$=A1/3$
5. Days to Fill Job	55	
6. Cost of lost productivity during time to fill job	\$ 8,137	$=A3*(A6/365)$
7. Learning Curve Time in months	12	
8. Average Productivity During Learning Curve Period	0.5	
9.. Cost of Lost Productivity During Learning Curve	\$ 27,000	$=A3*(A7/12)*A8$
10. Direct costs of relocation, training, etc	\$ 3,000	
11. TOTAL COST OF TURNOVER/PERSON	\$ 51,470	$=A4+A6+A9+A10$

V. Development : Training and Performance Mangement Benefits: similarly come from increased revenues, cost savings and reduced staff due to greater productivity. The “Quick Estimate” of Development Benefits uses the .60 (B41) standard deviation effect size shift for training and performance management found by several studies e.g. Burke & Day, (1986). Again note the caution against double or triple counting for

productivity increase benefits. The “Evaluation “ benefits calculation uses the difference between before and after development productivity X the salary + benefits cost of employee time spent on tasks affected by training. This is a minimum estimate—most employees leverage three times their salary + benefits costs. A3:Budget or resources controlled or A5: Revenues produced by an employee in a job should be substituted for A18: Salary + Benefits cost in Economic Value (A51) if these figures are known.

VI. Return on Investment : An ROI analysis is shown for a typical competency-based human resources application. Internal firm labor costs are valued at salary + benefits divided by days worked per year (average = 220). Vendor costs are at per diem or per unit cost multiplied by units expended. Costs should include both the competency study and its implementation—in this case, training line managers to use competency methods to hire new employees. The case return is based on IV. STAFF-ING benefits of B1. Reduced Turnover (\$400,000) and B3. Reduced Staffing Needs (\$578,571). The return on a \$61, 797 investment in the competency project is \$978,571, 1484%.

Notes -

## LESSON 17

### DESIGNING & CONDUCTING SPECIFIC T & D PROGRAMMES

Friends

After reading this lesson you will be able to

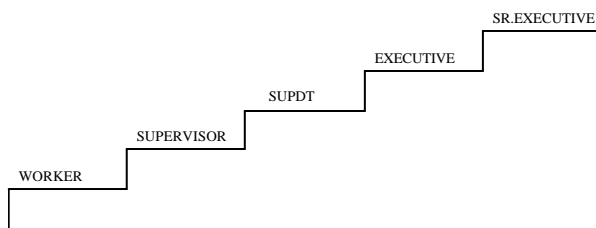
1. Understand how to design various types of training and development programmes
2. Explain how to design training program
3. Conduct various types of training and development programmes

#### Introduction

The training and development plans are aimed at developing talent to perform effectively in the present and future higher level or more challenging work situations. The process is to develop competence to handle series of challenging situations.

Every Human being has an urge to reach to the top. Successful organisations plan to guide them to their career growth. A systematic approach to progress in the career plans or to attain capabilities is a training and development process.

If we look at the ladder below, we find that a worker gains the proficiency and becomes a supervisor learns to develop managerial capabilities, a manager strives for higher level and so on.



#### T & D Programme

The T & D activities are the techniques of encashing on the human capital whose potential is much more than any other resources in the organisation. Therefore, a variety of T & D methods are used to harvest maximum from available human resources.

Mainly the following are the T & D programmes

##### 1. Basic Training at Professional Institutions

- Trade apprentice at ITI or Trade Schools
- Diploma/Degree at Polytechnic & Engineering colleges
- Management education at Post Graduate level or practice oriented certificate examinations

##### 2. In-Service Training and Development

- Familiarization or initial training programmes. Apprentice training (in house)
- On the job training (OJT)

##### 3. Special Training and Development Programmes

- Special cadre development programme

- Grass-root level T & D programmes
- Technology transfer training programme

##### 4. Management Development Programme

- Supervisory development programme
- Top and middle managerial development programmes
- OD and MBO programmes etc.

#### Basic Training at Professional Institutions

Technology oriented training.”. Imparted at these institutions. There are many craft ‘centres and school which provide technical, professional training for wood working, gardening, sculpture workshop training etc. besides Ideal Training Institutes in various district levels. Polytechnic and engineering colleges train technical middle managers supervisors equipped with basic theory and reasonable practical experiences.

Concept of HRD has also popularized the management courses being conducted by various management institutions. The professional managers coming out from such institutions are better decision makers and interpersonal relationship developers. Such institutions are also doing research and development in behavioral science to equip the managers with more modern techniques of optimizing Human resource.

In-service Training and Development: - Every organization in one form or other runs familiarization or initial training programmer of new entrants, on the job Training programme for new as well as old employees and Apprentice programmer for workers etc. Some organizations even have a separate Training and Development institution or workshop.

The duration of this training can be few weeks, a couple of months depending upon the knowledge skills to be imparted to the trainees.

Such programmes can have two phases:

1. General Education or work Familiarisation.
2. On the job training as the fresh employees may not have the experience of the machine or work.

#### Apprentice Training

This is also for the new employees and hence both the above phases of the training and development programmes are there. The duration of these programmes will however be three months to 18 months depending upon the technology type and size of organisation and training and development facilities available in the organisation.

#### Special T & D Programmes

The process of HRD includes the development of all levels of employees. However the work force (sensitive group) supervisor (line managers) managers and training and development resources requires special attributes. As such special training and development programmes are designed for their specific needs.

These can be classified as below:

- Programme for Workers
- Programme for Supervisors
- Programme for Managers/Executives
- Programme for T & D Specialists
- Programme for Entrepreneur Development
- Programme for Planners & Development
- Programme for Private Secretaries
- Programme for Secretarial Staff
- Programme for Telephone Operators
- Programme for Public Relation Officers

Apart from above-there are programmes depending upon required special skill or behavioral change Such as :

- Programme of finance for non-finance executives
- Programme on Computer awareness
- Programme on self-learning
- Programme on group dynamics
- Programme on traditional skills-sales, production, quality, office management etc.
- Programme on family planning strategies
- Programme on social forestry
- Programme on health and hygiene and so on.

There is no limit to special training and development programmes as it is a vast field and every one needs T & D programmes for self or the group improvement. However, in this Chapter we are only discussing the design and implementation of programmes for workers, supervisors and managers.

## Workers Training Programme

These programmes can be designed under the same criteria as discussed in earlier chapters. Here we are going to illustrate the programme for workers, supervisors and managers. However, the detailing of the programme may vary according to the organisational objectives and training and development strategies.

### Objectives

In industry the excellence is achieved not by investing on human resources or imparting technics to senior officers alone but it depends on producing the desired quality product with lowest possible cost. The corporate efforts from grass-root level to the top administrative level are required aiming at the training of work force to ;

- Update their technical knowledge
- Improve their skill to perform better
- Development belongingness to bring about industrial harmony
- Increase qualitative productivity

### Training Need Identification

It is an inescapable fact that -respect of total manpower dispersion in the organisation the bulk of the work force is from p-roouet10IU!!!.d service areas. This force is instrumental

in transforming raw-material into the products. It is thts—  
leveLat which major

share of human resource investment and working capital are consumed. This is the16r:cewhich produces quality and which ultimately affects the organisational image and its economy. It is, therefore of utmost importance that this force be exposed to appropriate training and development programmes.

T & D need identification are carried out through (1) production records (2) interview of the workers and (3) comments of supervisors on their performance.

### Training Need Assessment

The people at this level have varying levels of basic education right from illiteracy to post graduation or Technical Certification (ITI). The nature of work amongst them is also varying depending upon industry to industry. Therefore the training and development need and yet complex in nature. As it works on “bottom-up” concepts “top management” willingness is necessary for success., This programme ease out the tensions of the unions and reinforce belongingness to develop healthy working climate in the organisation.

### Planning the Programme

Regardless of the programme, the reasonable cause of action is to develop a functional description of the T & D programme of the workers as more clarity of the objectives and the expectations are necessary at this sensitive level of employees.

Task Analysis (TA), Task Identification matrix (TIM) Task Beyond Present Capacity (TBPC) are some of the approaches found useful in planning the programmes/instructions for workers training programmes.

### Evaluation

Though these programmes cannot do miracles in short term, they are going to develop the assets to the organisation. The trained worker is going to perform in a well planned way and to develop a proper work ethic. Therefore the evaluation of these programmes is to be designed in such a way that there is an automatic feed back on the conduct of course;; its utility the opportunities of identifying their own deficiency and the level of improvement.

The individual also realises the due regards and considerations provided by the organisation.

Thus the programme must demonstrate the following:

- The ability to evaluate programme with respect to the organisational objectives and job performance requirements.
- The ability to evaluate programme in process by reviewing the POI and draft instruction material.
- The ability to evaluate productivity and performance of the trainee worker.
- The ability to evaluate attitudinal change and industrial harmony.

### Feed Back

The feed back on the programmes should be properly utilised in counselling the worker or improving the workers programmes depending upon the job descriptions.

## Supervisory Training & Development Programme

The original attempts to improve the standard of the supervisors were made during the world war 1914-18 in United States under the stress of emergency. It was then that some forms of rapid training became essential. From 1933 Roosevelt reform measures again emphasised the need for a good supervisor.

The rapid increase in the size of the organisation and the technological advancement, further produced few problems in delegating the authorities and responsibilities to the supervisors which again added new dimensions to the job profile of a supervisor.

Apart from the need of high technical skill innovation and creativity for supervision the swiftly moving changes of social structure has opened new vista for the supervisory excellence due to growing independence of workers; their educational awareness and legal threats.

All the above, combined, stress the need for greater measures of;

- Administrative control
- Effective managerial practices
- Improved technical skill and knowledge
- Redressing of total profile of a supervisor.

### Other factors influencing the training need:

The influencing of unions, greater demands for work culture, safety and wages market competitions and government policies exercise pressure on the management to work out measures to improve productivity, optimize resources through better supervision and tight control.

The secret of sustaining these forces and managing the situation successfully is reflected in the following statements.

How it is done rather what is done

Why it is done rather what is said

How it is said rather, why it is said

### The Role of Supervisor

Basically the definition of a supervision is in its word only: super + vision. A supervisor is to look at the work situation and the worker to get maximum results. The management experts have defined the role of the supervisor in different ways:

#### Keith Davis

The key stone in the organisational arch is; the supporting structural member between the management and work force is a supervisor.

#### Rensis Likert

A supervisor is a 'link pin' between the Upper and lower plans of organisational structure.

#### M. Scott Myers

He is one of the facilitators who makes resources and informations available to the subordinates while allowing them to plan and implement their work.

While there are number of such definitions the simple one was developed by international labor organizations as below:

"Supervisors are usually first line managers whose major function is working with and through non-management employees to meet the objectives of the organisation and the need of the employees."

In today management concept 'supervisor is a sensitive link between the management and the workers. He is supposed to be a manager in the organization as some time he is charged as 'Step Child' of management or an 'Orphan Child' as he is neither a management man nor a representative of worker. At the same time he has a very important role in the management.

The above role concept analysis helps to understand the responsibilities and accountabilities of a supervisor.

He mostly works on two simple objectives

- Organise the work
- Manage the operation

The latest approach of supervisory skill development, however, takes into account his foresight sympathetic approach, ability to suggest improvement in methods, develop understanding between management and work force strive for improvement etc. These have added the 'departmental development, dimension to his duties and accountabilities.

The chart below illustrates the basic functions of the supervisor.

## Functions of Supervisors

### Supervisor

Organise the Work	Manage the Operation	Develop the Department
Plan the work	Select the correct worker	Find facts
Instruct clearly	Train & Develop the worker	Update equipment
Simplify work	Monitor the operation	Suggest improvement plans
Plan quality & safety measures	Delegate responsibility	Reduce cost/wastage
	Settle grievance	Maintain self, subordinates and Department
	Improve working conditions	
	Build team spirit	Plan future strategies

The success in supervision depends upon the supervisor himself. It calls for high standard of general ability with commensurate degree of intelligence, maturity of character and a temperamental control on the floor. Therefore, he must be :

- Well equipped with technical process and details.
- Straight forward and consistent.
- Able to administer, recommend and criticise impartially
- Able to lead by examples and display sound judgement
- Able to demonstrate initiative to overcome obstacles
- Able to work amicably with other colleagues.

### Management Responsibility

Management also owe some responsibility for successful supervision. These provide moral support to the supervisor and help him develop enjoyable work culture, administer power and authority and ensure proper discipline on the shop floor/offices. These responsibilities can be listed as :

- Provide sound practical policies.
- Issue clear instructions.
- Define the role clearly and accurately.
- Make supervisor to understand the policies positively.
- Be prepared to accept suggestions and implement them to avoid practical problems at the shop floor/offices.
- Recognize and maintain the authority privileges of a supervisor.

### Training Objectives

The management is, therefore, interested in supervisory training and development programmes for a variety of reasons. The main objective can be framed as below:

- To help him improve knowledge, skill, attitude and performance.
- To help him develop competence to increase productivity.
- To help him prepare for greater responsibilities in higher level of management. To help him learn how to develop his subordinate.
- To improve interpersonal relationship and communication skill.
- To equip him with modern tools and techniques of management to harness best the
- human resources and maintain industrial harmony.

### Summary

The detailed modules can be designed based on the management objectives and the training strategies of the organization.

Designing the social programmes necessitates micro level analysis of the organisational objectives careful designing of T & D strategies, phasing out the programmes to cover all aspects of knowledge skill, behavioral improvement and evaluation techniques for effectiveness of the programme.

The norms or the attributes of the employees at various levels are changing with the change in technological, social, economical and political scenario affecting the policies and strategies of the organisation. There is a constant search for improved methods and techniques to train and develop, special categories of employees who play important roles in the organisations.

What we need is to update the specification of the role, we need to improve, and design the programme to make it more and more effective.

Some of the recent trends in managerial training programmes are:

**Self Development/Renewal** - If an individual has commitment to self renewal the organisation can remove some of the obstacles and can provide opportunity to do so. This can be fastest method of improvement and development and develops more trust and belongingness to the organisation.

**Training Through Laboratory** - The National Training Laboratory (NTL) in USA has developed a training methodology for executive development which enables them enjoy the simulation of work situation on one hand and provide opportunity of sharing the experience on the other. The 'T-Group' or 'Sensitivity Training' for executive and middle

managers has been found very useful and encouraging laboratory training methods. Of course, the theory portion is supplemented in the following sessions to understand the behavioural science and the case complexity.

**Grid Team Training** - This is associated with the managerial grid concept (Task and relationship) Robert R.Blake and Jane S. Mouton who had developed this concept, describes that this method can be used to develop vertical and horizontal level of management, within the company.

According to this training methodology five principal managerial styles are diagnosed and corrective actions can be taken to improve them (for details please refer Chapter V).

### Tips to Design Programmes

After studying the organisational objectives and identifying the T & D needs the following steps can be followed in designing the programme.

- Define the objective.
- Match the objective with the training needs
- Phase out the knowledge, skill and attitudinal changes desired. Outline the programme
- Determine training methodology and location for training. Schedule the programme
- Monitor the programme
- Develop evaluation and follow up actions

### General Training Tips

When planning training think about:

- your objectives - keep them in mind all the time
- how many people you are training
- the methods and format you will use
- when and how long the training lasts
- where it happens
- how you will measure its effectiveness
- how you will measure the trainees' reaction to it

When you give skills training to someone use this simple five-step approach:

1. prepare the trainee - take care to relax them as lots of people find learning new things stressful
2. explain the job/task, skill, project, etc - discuss the method and why; explain standards and why; explain necessary tools, equipment or systems
3. provide a demonstration - step-by-step - the more complex, the more steps - people cannot absorb a whole complicated task all in one go - break it down - always show the correct way - accentuate the positive - seek feedback and check understanding
4. have the trainee practice the job - we all learn best by actually doing it - ('I hear and I forget, I see and I remember, I do and I understand' - Confucius)
5. monitor progress - give positive feedback - encourage, coach and adapt according to the pace of development

Creating and using progress charts are helpful, and are essential for anything complex - if you can't measure it you can't manage



it. It's essential to use other training tools too for planning, measuring, assessing, recording and following up on the person's training.

Breaking skills down into easily digestible elements enables you to plan and manage the training activities much more effectively. Training people in stages, when you can build up each skill, and then an entire role, from a series of elements, keeps things controlled, relaxed and always achievable in the mind of the trainee.

Establishing a relevant 'skill set' is essential for assessing and prioritising training for any role. It is not sufficient simply to assess against a job description, as this does not reflect skills, only responsibilities, which are different. Establishing a 'behaviour set' is also very useful, but is a more difficult area to assess and develop. If you want more information or guidance about working with Skill and Behaviour Sets, and advanced assessment and training planning methods, giving a brief outline of your situation. Using Skill-Sets to measure individual's skills and competencies is the first stage in producing a training needs analysis for individuals, a group, and a whole organisation. You can see and download a free Skill-Set tool and Training Needs Analysis tool the free resources page.

Psychometric tests (and even graphology - handwriting analysis) are also extremely useful for training and developing people, as well as recruitment, which is the more common use. Psychometric testing produces reliable assessments which are by their nature objective, rather than subjective, as tends to be with your own personal judgement. Your organisation may already use systems of one sort or another, so seek advice.

Some tips to make learning more enjoyable and effective:

- keep instructions positive ('do this' rather than 'don't do this')
- avoid jargon - or if you can't then explain them and better still provide a written glossary
- you must tailor training to the individual, so you need to be prepared to adapt the pace according to the performance once training has begun
- encourage, and be kind and thoughtful - be accepting of mistakes, and treat them as an opportunity for you both to learn from them
- focus on accomplishment and progress - recognition is the fuel of development
- offer praise generously
- be enthusiastic - if you show you care you can expect your trainee to care too
- check progress regularly and give feedback
- invite questions and discussion
- be patient and keep a sense of humour
- Induction training tips:
- assess skill and knowledge level before you start
- teach the really easy stuff first
- break it down into small steps and pieces of information
- encourage pride

- cover health and safety issues fully and carefully
- try to identify a mentor or helper for the trainee

As a manager, supervisor, or an organisation, helping your people to develop is the greatest contribution you can make to their well-being. Do it to your utmost and you will be rewarded many times over through greater productivity, efficiency, environment and all-round job-satisfaction.

Remember also to strive for your own personal self-development at all times - these days we have more opportunity and resource available than ever to increase our skills, knowledge and self-awareness. Make use of it all.

## Training Aids

### Audio-Visual Aids

Audio-Visual Aids can significantly enhance and reinforce learning. It is worth remembering that people remember 20% of what they hear; 30% of what they see and 50% of what they see and hear. The use of all audio-visual aids helps in capturing the attention of more than one sense facilitating listening and remembering. There are several devices available in the country. More and more are coming into the market. While western countries have started utilizing these audio-visual aids on a large scale, there has not been that much usage of audio-visual aids in training programmes conducted in the country. This is mainly because of the consideration of costs and availability of aids like film. It is also because trainers are not aware of the ready availability of such aids from different agencies.

Making and using appropriate visual-aids require considerable planning and imagination in order to obtain the desired impact. There is no aid available which would suit all situations.

Following factors should be taken into consideration while deciding which device to use:

- Audience - to whom the presentation is to be made (class, convention) and where it is to be held. This will affect the size of the visual.
- The number of times the presentation will be made. If it is to be presented just once, very elaborate and expensive visuals will not be justified most of the time, but exceptions are possible. Single presentations can be made with the help of transparencies and overhead projector. Multiple presentations would justify the cost of preparing slides.
- Location - Is the presentation going to be made in the office premises or does it have to be carried elsewhere? A slide projector is much easier to carry than an overhead projector.

### Available Devices

**Blackboard:** It is inexpensive and generally available in all lecture halls, depend as we do on the lecture method, which needs presentation and noting down of important points on a board. Use of a blackboard requires no prior preparation. It is very useful for demonstrating calculations and formulations. One of the major disadvantages in the use of a blackboard is that the speaker requires to turn away from the audience. This causes the instructor very often to talk to the board and not to the group. The instructor should take care that he writes points on the board rapidly and talks only when facing the group. Points and key words should be written and not full sentences.

Write legibly on the board. Those with bad hand-writing should write points in capital letters. Size and clarity should be such that even last-benchers should be able to read what is written on the board. It is advisable for the trainer to sometimes go to the farthest end of the class and determine whether he himself can read what is written on the board. Lengthy definitions can either be dictated or shown on a flip chart. They should not be written on a blackboard as they take too much of time and space. Key points on "How to use the blackboard" are summarized below:

### How to Use the Blackboard

What To Do	Why
Erase old material	It is likely to distract the group's attention
Avoid talking to blackboard	A bad habit which makes it difficult for group to hear; limits effectiveness of blackboard work.
Don't stand in front of blackboard	Obviously, much of what you have written on the blackboard will be lost if participants have to crane their necks to see it. When referring to old or complicated material, use a pointer.
Draw or write Quickly	Group interest will lag if too much time is used in putting material on board. Free use should be made of standard abbreviations.
What to Do	Why
Write, print or draw legibly	The place for hieroglyphics is a museum not a training room. A little practice will improve the quality of handwriting.
Capital letters	are advisable.
Allow sufficient time for group to copy	If blackboard notes are worth taking, they are worth a few extra minutes of time to be taken accurately. It is advisable to put standard definitions on the board.
Tryout blackboard work in advance.	By plotting layout in advance, the trainer can avoid crowding, or out-of-proportion sketches.
Plan logical relationship of material	Participants will have trouble arranging information in proper sequence in their minds if it is not so arranged on the board.
Arrange group of Blackboard for best	The value of the blackboard is diminished if some participants have to strain to see
Visibility	because of glare, distance or angle of the board.
Avoid using unnecessary words.	A phrase is better than a sentence, a word better than a phrase. The fewer words used, the easier it is to grasp the meaning of a thought.

**Flip Chart** - It can replace the blackboard with the advantage that no erasing is needed. It is specially useful for single presentations which may not justify the designing and preparation of costly visuals. Portable models are available in the market which can be easily carried from place to place. Limitations of the space is the major disadvantage. Drawings have to be stored flat to avoid damage. Such a storage is much more difficult as compared to storing transparencies or slides. Trainers should cover charts with white paper to avoid distraction. The white paper should be removed only at the right time to have impact.

**Magnetic Boards** - It can be used for showing prepared visuals. It can also be used as a blackboard. Magnets may be used as drawing pins for its usage as pin-up boards. It is very heavy and portability creates problem.

**Flannel Boards** - Flannel board visual consists of a paper surface seen by the audience and the flocked material on the side away from the audience that holds the visual in place. All visuals must be prepared well in advance. This cannot be used as a blackboard, which may be necessary to explain some new points which may arise. It is advisable to have both a Blackboard and a Flannel Board to eliminate this disadvantage of the Flannel Board.

**Overhead Projector** - One of the equipment most widely used by trainers is the Overhead Projector. It projects large-size transparent images onto a screen under normal daylight conditions. Transparencies may be conveniently produced by drawing or writing directly onto transparent acetate sheets with grease pencils or felt-tip pens of a type suitable for working on glass or plastic surface. Such pen sets are available in 6 colors. Transparencies can also be prepared using a photocopy process, in which case the drawing or the material is prepared on an ordinary sheet of white paper. Cardboard frames are available as permanent mounts for the plastic sheets. They also serve as a base on which to attach overlay sheets and tabs to be used in flip-off and flip-on displays. It is better to have cardboard frames on transparencies required for multiple presentations.

**ntage and Disadvantages** - The trainer can always face his audience retaining eye contact with participants and making his talk more effective. He can also build the theme point by point as the talk progresses. Different colors can be used to emphasize points. Moreover, transparencies can be used without darkening the lecture hall completely enabling students to take notes.

Disadvantage is that the trainer cannot modify formal visuals in response to new situations and in answering questions. However, the advantages far outweigh the disadvantages. It is recommended that each training institute should procure an overhead projector and trainers should make more and more use of it to make their lecture presentations more effective.

**Slide Projector** - The Episcopes used for projecting small sized opaque material, even directly from books, has gone out of vogue mostly because of its bulky size. Of late gaining popularity is 35 mm slide projector. 35 mm slides are not very difficult to prepare. They are also less expensive and easier to operate than a 16 mm film. They can easily be adapted to different training needs.

**Filmstrip** - Instead of cutting up 35 mm film into individual frames and mounting them separately for their use through a slide projector, they are often preserved in strip form. They are portable and extra copies can be made easily.

**Designing Visuals** - Visuals cannot be prepared in isolation. They are an integral part of a good talk or presentation. To ensure that visuals do not look disjointed, the complete plan of the visual aided presentation should be thought through well in advance.

#### Where to use visuals?

##### Visuals are used to:

- a. Bring out a series of facts leading to some conclusion.  
Complete sentences should not be written in the visuals unless it is a quote. Usually two or three key words should be sufficient to convey the point being made. Visuals should be arranged in such a way that points or concepts are built up step by step.
- b. Emphasise some points. In any presentation there are some specific points which must be highlighted. Visuals should be prepared for such points only.
- c. Attract attention. Attention can be attracted by the use of colour. As per ILO Handbook on training, colors rank in the following order in terms of attraction:  
(i) Orange      (iv) Black      (vii) Violet  
(ii) Red        (v) Green      (viii) Grey  
(iii) Blue      (vi) Yellow

And the colour preferences are in the following order:

- (i) Blue      (iv) Violet
- (ii) Red      (v) Orange
- (iii) Green    (vi) Yellow

Taking the two preferences together indicates that red and blue are the best two colors. Apart from black on white and white on black, the best combinations are dark blue on white, brown on white and green on white.

- d. Present complex industrial, mathematical or chemical processes. Writing such processes or formulae on the black board takes considerable time thus decreasing the interest of students in the presentation. A visual on such processes improves the time management of the trainer and is also more effective.

Visuals should be simple. They should be written in bold letters. They should be clear and unambiguous conveying the meaning that was intended. It is always advisable to rehearse the presentation in the room, where the presentation is actually to occur. At least a visit to the room to examine facilities like electric connections etc. is imperative to avoid problems at the time of the presentation.

#### Film

This is a media which has a great deal to offer to both the instructor and the trainees. Films stimulate interest in a way that an instructor would not normally be able to. Not only can a person absorb a lot more through viewing a film rather than reading a book, but he will probably also remember it longer. Through the media of a film, one can go places, engage in

activities, demonstrations or experiments that it might otherwise be impossible or too dangerous for an ordinary human being to do.

Films can be used in the industrial context to study human relations, for demonstrating selling techniques, making case studies come alive and for studying intricate processes and machines.

The effectiveness of a film as a training aid will however depend largely on the imagination and skill brought to use by the instructor in the selection and integration of the film into his training programmer.

In selecting a film, the instructor should ensure that a few basic requirements are met:

**Length:** The duration of the film should be suitable to the lecture/presentation and the audience. It is also necessary to examine the possibility of using the film in parts.

**Condition:** The film should be in fairly good condition - not broken, defaced or too old.

**Design & Setting:** The film should preferably not reflect old fashioned styles of clothing, sets, automobiles or outmoded machinery as it may prevent the viewer from identifying with the characters or cause them to reject the message itself as outdated.

**Content:** The objectives of the film should be well synchronized with the subject under consideration for the training session. Technical information should be up to date and appropriate to the knowledge and interest levels of the audience. Clarity of attitudes and concepts should be maintained and the narration smooth flowing.

**Style:** The style of the film - the humor, cartoons, drawings and charts, animated drawings etc. should be understandable and appreciable by the audience. The acting should be convincing and the attitudes portrayed by the film acceptable as realistic by the audience.

The instructor should ensure that the film is properly introduced, the purpose of showing the film explained and suggestions given regarding points to be looked out for in the film. Questions, the audience may be required to answer after viewing the film, may also be sometimes given in advance. Some characters in the film may also be introduced in the initial briefing. Such a briefing makes the later discussions much more valuable. The trainer may even want to stop the film at appropriate moments to ask participants to analyze or summaries the events up to that point of time as it is found that this increases the extent of learning and retention. There are some films, which have to be stopped mid-way to initiate discussion. "Eye of the Beholder", an excellent film on perception and communication, is one such example. Similarly, some films have questions at the end to facilitate discussion. The film "Engineering of an Agreement" is one such film with questions flashed at the end. The projector has to be switched off to get answers from participants.

A black-board or flip chart should be available for review notes. Follow-up of a film could even include role playing : re-acting events and obtaining suggestions of the participants.

The room in which the film is to be projected should be arranged for good viewing comfort. It should be sufficiently darkened with ample ventilation. The positions of loud speakers and projectors should be suitably determined. Breakdowns, poor sound reproduction, bad film focus, a stuffy atmosphere and unnecessary background noise will limit the impact of even the most excellent of films.

Films are an effective training media. However, trainers should resist the temptation to utilize films to fill in gaps created by faculty drop-out or sessions ending ahead of schedule. The inclusion of a film should be a well thought out exercise - a well-honed part of the total design, and consonant with the objectives of the course.

The trainer should do his homework to ensure effectiveness of the film discussion. It will be a good idea to prepare questions for initiating discussions on the film. Films should preferably not be followed by a lecture as the concepts brought out in the film can best be reinforced through a discussion initiated by the trainer asking relevant questions and drawing out trainees.

It is a wise trainer who remembers that the purpose of showing a film is ultimately training and not entertaining.

#### **Activity and Assignment :**

1. How would you design a training program for technical workers in a plastic manufacturing company
  2. Explain role of supervisor in organization of training program.
  3. What steps are involved in conduct of training program
  4. Mention common training programs held in most of the organisations
- 

### **Training Media Dictionary**

This part of lesson give brief overview of media and methods used in conduct of training sessions.

#### **Marshall McLuhan's "The medium is the message"**

In learning, the media is not the message. The message must be heard and be understood before any communication occurred. So in training, the message is the learning points and instructional strategy (or methodology) that you deliver to the learners. The media is simply the vehicle for transferring the message and depending upon the circumstance, some are more efficient and effective than others.

Just as there are a number of modes for getting you from one point to another (e.g. walking, car, bicycle, plane), there are a number of modes for getting the message to the learners.

When you concentrate upon the medium's technology, instead of the learners, then the medium does becomes the message. For example, I buy a cheap, reliable, and safe car to get me from one point to another. To me, it is simply a method of transport. However, for others, their transportation is the message. It makes a statement. They might buy a flashy car in order to make a certain statement about themselves.

The same is true of learning. If you look after the learners and organization's needs, then the correct medium to use becomes apparent. And usually there is more than one correct medium.

However, when we become enamored with the medium, then the learners and organization suffers. This is true of any medium — trainers become enamored with themselves and lecture too much, trainers become enamored with PowerPoint and put in every bell and whistle that the program provides, trainers become enamored with the latest technology and uses it without considering the learners or the organization's needs.

### **Introduction**

Media is the plural of medium, which in the training world, is the means of communicating and transferring a learning concept or objective to another individual. There are two types of training media within a training program. The first is the instructional setting or major media. For example, you might have your learners go to classroom training for 2 days. The second is the delivery systems or learning strategies. These are the various instructional methods that take place within the instructional setting. For example, in the two day class above, you might have lectures, videos, programmed instruction, coaching, etc. Other examples include a major media of coaching with learning strategies of job performance aids. Or a major media of CBT, with videos, readings, and simulations incorporated into it as the learning strategies.

Training media may be grouped into four major categories:

#### **Lockstep**

- Classroom (Conventional)
- Boot Camp
- Lecture
- Telecommunication
- Video

#### **Self-Paced**

- Personalized System of Instruction (PSI)
- Programmed Learning
- Text Instruction
- Action Learning (experimental)
- Workbook
- Computer Based Training (CBT)
- e-learning or Internet Distance Learning (IDL) (Online, Networked, or Web)

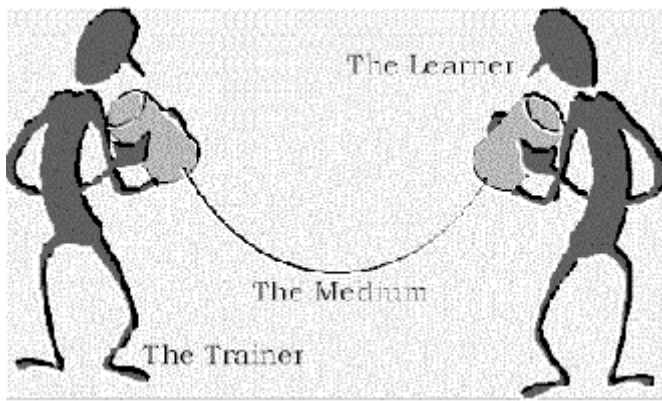
#### **Job**

- Job Performance Aid (JPA)
- On-The-Job (OJT)

#### **Specialized**

- Best-Of-Class Model (blended, hybrid or modular)
- Coaching
- Mentoring

Just as people use a variety of tones, pitches, rhythm, timbre, loudness, inflections, gestures, sign language, etc. to communicate ideals to others; you should also use a variety of media to communicate learning to others. Although no one medium is better than other, each medium is best in certain environments.



### *A Collection of Training Media*

## **Action Learning**

This is a continuous process of learning and reflection with the intention of getting something done. Action Learning does not use project work, job rotation, or any form of a simulation such as case studies or business games. Learning is centered around the need to find a solution to a real problem. Most action learning programs take from four to nine months to complete. Learning is voluntary and learner driven, while individual development is as important as finding the solution to the problem.

Five basic elements of action learning are the problem, set, client, set advisor, and process.

- The Problem must be salient to the learners (the outcome of the problem solutions must matter to them).
- Participants within the small group (set) may all work on the same problem or different problems.
- The clients may either deal with strategic issues (what to do), or tactical issues (how to do it).
- The set advisor is normally a colleague or leader. The set advisor in turn must be supported by the leaders and the training department.
- It uses a process which brings people together to find solutions to problems and, in doing so, develops both the individuals and the organization.

## **Active Learning (Experimental)**

A process of learning new ideas, skills and attitudes through what we do at work or in other behavioral situations. It is about learning from doing, performing, and taking action. Some of the methods or learning strategies it uses are:

- Case studies
- Games
- Simulations
- In-basket exercise
- Reflections or introspection
- Surveys
- Role playing
- Fishbowls
- Icebreakers
- Visualization

## **Modeling**

The classes are often broke into small groups of 2 to 5 learners. Some believe groups of 3 (Triad) is the most effective for promoting interaction, while a dyad (2) promotes intimacy and sharing.

Best-Of-Class Models (BOC) or Best-Of-Breed (BOB), Blended, Hybrid, or Modular

This is the goal of every great learning program, to take each learning objective on its on content, and build a medium that will best communicate and transfer it to the learners. BOCs are customized, rather than standardized. They are built by mixing various formal classes with multiple forms of self-study that is learner-centered and task focused. The trainer is more of a coach and facilitator, empowering learners to construct their own knowledge, rather than being the sole source of direction and knowledge. This type of approach also involves rapid prototyping during its implementation and dictates that learners help with the design of the program to solve their learning needs.

To help with your selection, use the media selection chart and strategy guide.

## **Boot Camp**

An intensive learning environment that accelerates learning (often in the high-tech arena). Boot camps have smaller classes than conventional ones with typically a dozen students or less. Applicants are screened to ensure they have a certain level of knowledge of the subject area, so that other learners are not slowed down in the rapid learning environment. Boot camps are held away from the learner's work environment so there will not be any distractions, normally run from one to two weeks, and immerse learners in one subject for 12 to 16 hours a day to prepare them for a certification test.

The advantage of this type of training is companies get an up-and-running employee back within a short period of time. While the disadvantages include that learners will lose their newly acquired skills if they are not used right away due to the rapid pace in which they were acquired, and some learners like the slower pace of traditional learning programs.

## **Classroom (Conventional) (Resident Instruction)**

This is used when a large group must be taught the same thing at the same time or the task difficulty requires formal training. Before selecting this type of instruction, ensure that it cannot be taught effectively in another manner due to its high cost. If possible, the instructors that will be teaching the program should help with the development process. This tends to lower the development cost and the initial implementation cost. All lessons should be fully outlined.

Conventional classes can run from a couple of hours to a couple of weeks. Many tend to be large, with 20 to 40 learners, who have varying levels of knowledge and skills. This type of training provides human interaction. If the class is not too large, then the trainer may determine the learners' needs so the instruction can be adapted and adjusted accordingly.

The advantages are classroom setting permits the use of a wide variety of training methods, e.g. video, lecture, simulation; discussion. Also, the environment can be controlled to create a

climate conducive to learning and classrooms can accommodate a large number of learners. The main limitations may involve increased costs, e.g. space rental, travel and the classroom may be quite dissimilar to the job setting.

If this type of training is required you have two options. The first is In-House Training where company trainers perform the instruction, either on-site or at another location. The second option is Contract Training, where the trainers are contracted to perform the training at your location, their location, or a separate training site. The two main factors that must be considered when deciding upon In-House or Contract training are: who has the technical expertise to provide the instruction and who can provide the best training at the lowest cost? You must also decide if it will be lock-step or self-paced. In lock-step instruction everyone proceeds at the same pace, where as self-paced instruction allows the learners to proceed at their own pace.

### **Coaching**

A supervisor, co-worker, peer or other outside consultant examines employee performance and provides guidance, feedback, and direction to assure a successful grasp of skills and task completion. A coach can be thought as a one-on-one trainer. Also, the main difference between a coach and a trainer, is that coaching is done in real time. That is, it is performed on the job. The coach uses real tasks and problems to help the learner increase his or her performance. While in training, examples are used within the classroom (the task or problems may be based upon real ones however).

See Coaching and Mentoring

### **Computer Based Training (CBT) or Computer Aided Instruction (CAI)**

CBT provides immediately feedback to the learner and presents various levels of multimedia material until the learner reaches mastery. It is also self-paced and can be delivered to the learner's desk. Some disadvantages are some learners find it difficult to work with a computer for long periods of time as they thrive on human interaction. Also, CBT has an extremely long development times due to the complexity of the instruction, although this is beginning to decrease with better authoring tools.



Games, drills, and simulations can be produced. Games are educational activities presented in a game format. Drills provide practice of materials already learned, in order to strengthen rote knowledge. A simulation models a real situation in which the learner accomplishes a real task.

This type of instruction is generally more expensive to produce, but if it can be used for an extended period, then the cost is greatly reduced as instructors are not needed, travel is eliminated, and the training material can be reused. It should not be used for rapidly evolving technologies as the technology will often change during the long development time of the courseware.

### **e-learning or Internet Distance Learning (IDL) (Intranet, Online, Networked, Enterprise, or Web)**

This form of learning has emerged as a cost effective vehicle for reaching learners remotely. IDL is composed of organizational computer networks that use the Internet, World Wide Web technology, and software for finding, managing, creating, and distributing information. Its main limitations are network bandwidth (size of network's transmittal capacity), and the requirement for each learner to be connected.

This type of media is starting to become a favorite with organizations that have workforces in multiple locations and only require simple learning materials. More complex training requirements will have longer development times as it basically turns into CBT training development.

For more info, see e-Learning

### **Job Performance Aid (JPA)**

Includes technical manuals, decals, flowcharts, or other means of listing the steps for performing a task. Computer Based JPAs include Electronic Performance Support Systems (EPSS), wizards, and Help Systems. Web Based EPSSs can be instantly updated, unlike a technical manual that must be printed, copied, and shipped to all the locations where it is used. Do not use if the task requires high psychomotor skills or if the worker lacks the prerequisite skills.

When developing material, color can often be used for instructional impact. The following chart lists some colors with their associations and emotional responses.

#### **Color**

##### **Mental Associations**

##### **Direct Associations**

##### **Objective Expression**

##### **Red**

hot, fire, heat

danger, Christmas, blood

passion, exciting, active, urgency, speed

##### **Orange**

warm, metallic, autumnal

Halloween, Thanksgiving

jovial, lively, energetic, forceful, playfulness, vibrant

##### **Yellow**

sunlight, brightness

caution, warmth, cowardice

cheerful, inspiring, vital, celestial

##### **Green**

cool, nature, health

Clear, St. Patrick's Day, environment, vegetation  
quiet, refreshing, peaceful, money, abundance

### **Blue**

cold, sky, water  
service, flag, dignity  
subduing, melancholy, contemplative, sober, truth, trust

### **Purple**

cool, mist, darkness, shadow, royalty  
mourning, Easter  
dignified, mournful, mystic, intelligence, spirituality

### **White**

cool, snow  
cleanliness, Mother's Day  
pure, clean, frank

### **Pink**

soft  
nurture, girl  
security

### **Black**

sophistication, elegant  
strength, death  
mystery, seductive

### **Gold**

wealth  
prestige  
expensive

### **Silver**

cold  
scientific  
prestige

Often, color is used more for enhancing the looks of instructional courseware rather than enhancing the instructional material itself. For example, one author of a computer aided instructional reading program (Pournelle 1993) that will teach just about anyone from the age four and up to read English is updating the program from monochrome to color. Why? Not that it will aid in the instruction, as it as already been proven to be highly effective, but because they think it needs a face lift to help sales. The point is, if you have the resources, provide some color to make it look better. But don't think that a colorful piece of courseware is more effective than a black and white one unless the color is effectively used to highlight a teaching point.

Although color is nice and can aid in the visual impact, the most import part of a job performance aid is readability. The text has to be clear, concise, and geared towards the educational level of the worker it is designed for. After you have completed the design, don't rush it off to the printers and get a hundred copies made. First, have subject matter experts proofread it for accuracy and then test it to ensure the proposed learners can understand it. It should also be reviewed by editors for the correct usage of grammar.

If it is a decal, make a facsimile of it. Then paste it on the location where it will be used to ensure it fits. Now observe some workers trying to use it. Is it in the best location to be readily used? Can they read it and understand it? Have a SME also observe the workers to ensure the directions they are following are correct, complete, and in the correct sequence. If it is going to be posted in more than one location, especially if it is going on equipment, then ensure it will also fit in the other locations. Often new equipment is purchased at different times due to expansions or replacements. Just because the job performance aid fits on a certain location on one piece of equipment, doesn't mean it will also fit on the others.

### **Just-In-Time Training**

Providing training when it is actually needed, rather than on a deferred basis. It can be automated, such as web based; or having coaches on stand-by for such needs.

### **Lecture**

Although this is the most popular way to present information since it is easy to design and implement, it can also be one of the worst methods as it is lockstep, passive, and auditory in nature. This method varies from presenting a discourse (extended speech) on a subject to an exchange of ideas. Always provide plenty of activities to help your learners grasp and understand the subject. When used correctly, lectures can set the stage for deeper learning to take place.



One method that trainers have devised to keep from calling their training a lecture, is to have the learners take turns reading from an handout. Although they call it a discussion, it is still a lecture; the only difference is that now you have the learners lecturing from a canned script. Many learners find this type of training confusing as their comprehension, reading, and listening rates are all quite different. Since the material is in a handout, you would be better off by changing it into a self-study program which meets individual needs. If needed, you can then hold a discussion period to highlight, expand, discuss, and ask for questions. In order for a learning program to be called a discussion, there must be some pre-learning so that an intelligent discussion can take place.

### **Lockstep Instruction**

All the learners proceed at the same pace. It requires fewer instructors and is more easily managed than self-paced instruction. It is often the medium of choice for one-shot training sessions. The main disadvantage is that the pace is set for average learners...but, there are no average learners to be found.

Also, it is hard to meet individual learning requirements and styles.

### **Mentoring**

A growing segment which can be offered in person or via E-mail. A mentor is a person who cares about you and goes out of her way to see that you get the best possible chance to fulfill your career potential. It involves teaching, coaching, and helping to build a high degree of confidence. But what brings out the full magic of mentorship is some degree of affection or warm friendship...what a older brother might feel for his kid sister. Traditionally, a senior employee such as a manager, is paired with a more junior employee to prepare him or her for increasing responsibility. But the number of senior employees are limited so another method has been devised. If the employee has identified certain skills to be improved, then a Special Project Mentor (SPM) can be assigned. A SPM should not only be an expert with the desired skills, but also someone who enjoys coaching and teaching their special skills. Pointers on being a mentor:

- Don't confuse mentoring with free-association babbling or spreading company gossip.
- Do NOT give huge or complicated assignments to people who do not have the time or experience to handle them.
- Give small special assignments that will provide a series of small successes.
- Take the lead, ask if she wants some special explanation, an inside view, a bit of tutoring, if she is frustrated with anything.
- Ensure a person's hard work and skill are translated into actual opportunities for promotion and advancement.
- Be willing to give and receive feedback. Be generous with praise, but make it specific.
- Be gentle with corrections, do not point out every little mistake.
- Be clear about your expectations of the mentoring relationship.
- Be willing to discuss what is going well and what isn't in the relationship.
- Be able to commit the time and the energy to the relationship.
- Honor your commitments.
- Let the mentees or peers find their own path...you just need to point them in the right direction.

See Coaching and Mentoring

### **Vendor (Out-of-House or Providers)**

Out of house service providers allow organizations to train their people without making a large investment in the design and development of a program. This type of training also allows them to bring in a variety of specialized trainers. Community colleges are becoming one of the largest segments of the training-provider industry, often discounting courses as part of an economic development strategy to attract or retain local businesses.

### **On-The-Job-Training (OJT)**

This takes place in normal work settings. Although OJT can be an excellent training device, some training activities see OJT as a quick and easy way to get a training problem off their hands. They look at the problem for a short period of time and then tell the activity that has the training requirement, "Train them the best you can and if you have any problems come see us." The design, development, and implementation of OJT material needs the same care and attention as any other training courseware.

**Advantages:** Facilitates transfer of learning as the learner has immediate opportunity to practice and reduces training costs because no training facilities are needed

**Limitations:** The job site may have physical constraints and distractions that could inhibit learning and using expensive equipment for training can result in costly damage and disruption of production schedules.

The supervisors or OJT coaches must know the training material, have easy access to the training material, and know the procedures for providing On-The-Job Training. You may have to provide them with some instruction in On-The-Job Training Methods. In some cases you might want to use instructors in the initial instruction, and then hand the learners over to the supervisors or coaches.

### **Personalized System of Instruction (PSI)**

Dr. Fred Keller introduced PSI. It is similar to text instruction, but has the following characteristics: Lectures are given infrequently and only for inspirational purposes. The course is divided into small units. For each unit the learner gets a study guide that tells the learner what to read and what they must know. After reading the text they answer a set of study questions. The units are small enough so that most can complete the reading and answer the questions in a couple of hours. Other forms of training, such as CBT, activities, etc. may also be used. The learner then takes a unit test. A proctor scores the test and goes over the results, providing feedback and probing to see if the learner really understands the material. The learner must score at least a 90 percent before moving on to the next unit. There is no penalty for flunking a unit test. Those that do are coached, given relevant learning assignments, and then retested until they can pass. Once all units have been passed, then the learner graduates from the course.

### **Programmed Learning**

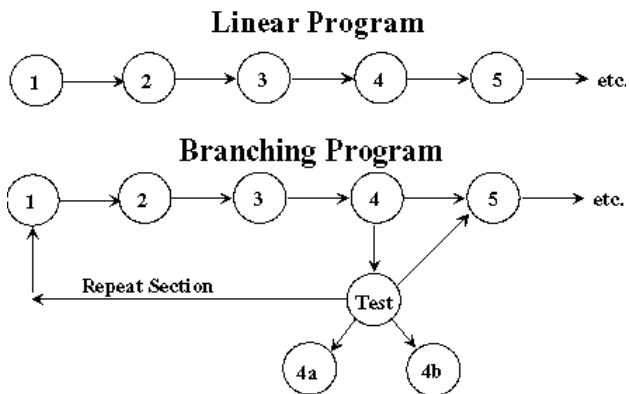
Although Sidney Pressey (1927) originated programmed learning, B. F. Skinner (1958) popularized it. Skinner's approach has been called linear and involves the following features:

- Learners are exposed to small amounts of information and proceed from one frame, or one item of information, to the next in an orderly fashion (this is what is meant by linear).
- Learners respond overtly so that their correct responses can be rewarded and their incorrect responses can be corrected.
- Learners are informed immediately about whether or not their response is correct (feedback).
- Learners proceed at their own pace (self-pacing).

Branching programmed learning is similar to linear pro-



grammed learning except that it is more complicated, since it attempts to diagnose the learner's response. It usually involves a multi-choice format.



After the learners have been presented a certain amount of information, they are given a multiple-choice question. If they answer correctly they branch to the next body of information. If they are incorrect, they are directed to additional information, depending on the mistake they made. Many CBT training courses are based on the concept of linear or branching programmed learning.

Programmed learning has been proven to be effective (Schramm, 1964). A review of 165 studies of programmed learning was made. Of 36 studies that compared programmed learning with the more traditional kinds of training, 17 found programmed instruction to be more effective, 18 found both kinds of instruction to be equally effective, and only one found traditional training to be more effective. Appendix F, Training Programs, shows an example of a programmed learning courseware.

### Self Learning Package (Self Teaching Package)

Although the initial development time is generally greater than for resident instruction, they are usually cheaper over the long run if they can be used for an extended period of time. They include CBT, Text Instruction, Personalized System of Instruction, and Programmed Learning. Since learning is an individual phenomenon and not a group phenomenon, this method allows the learners to proceed at their own pace. The main disadvantage is that the learners must be motivated to learn on their own. This type of training is suitable if close supervision is not required and the task can be learned by individuals or a group. Never use this type of courseware if task failure may result in injury or damage.

## Self-Paced Instruction

Self pace is generally better in most learning situations as it allows each learner to proceed at his or her own pace. It is more difficult to develop as it cannot ad-lib its way through the subject as a good trainer can. Also, it is more difficult to manage than lockstep. Most of the time it is cheaper than classroom training, but sometimes requires more instructors or smaller class sizes because of the wide range of variables that take place within the learning environment.

## Telecommunication

Instructional television (ITV) links several locations for instructional and conference purposes between remote locations

via telecommunication technology. Satellites can cut travel expenses and beam the training to thousands of locations.

### Text Instruction

A learner is assigned reading material to study. The reading material may be technical manuals, books, or courseware produced by the training activity. Self-tests should also be included throughout the training material. Classes and evaluations may also be part of the training material. The learners should always be given a mentor or coach to consult in case they have difficulties with any of the reading assignments. The mentor should hold discussions with their assigned learner on a regular basis.

## Workbook

Similar to Text Instruction, except the reading material has activities and exercises to reinforce the learning concepts.

By bringing them into the process, they understand the problems and have a say in the commitment. This engages their hearts, minds, and hands...the greatest motivators of all!

The most common form is video tapes, with most of them being provided by outside vendors, followed by 35mm films. This also includes a vignette or a short visual used to present a problem for solving or discussing. Another source of videos is to use movies (video tapes) that help to bring the subject to real life.

### Notes -

[illegible]

## LESSON 18

### NEW EMPLOYEE TRAINING

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Now you have also understood various types of training, how the need arises and what is the significance of such training.

This lesson will give you exposure towards Induction and orientation training program.

After reading this lesson you will be able to design Induction programme.

#### Introduction

If you want to keep your staff motivated about learning new concepts? The quality and variety of the training you provide is key for motivation. Reasons for training range from new-hire training about your operation, to introducing a new concept to a workgroup to bringing in a new computer system. Whatever the reason for conducting a training session, you need to develop a comprehensive, ongoing and consistent training program. This quality training program is essential in keeping your staff motivated about learning new concepts and keeping your department profitable.

A complete training program includes a formal new-hire training program, with an overview of the job expectations and performance skills needed to perform the job functions. A new-hire training program provides a fundamental understanding of the position and how the position fits within the organizational structure. The more background knowledge the new associate has about how one workgroup interrelates with ancillary departments, the more the new associate will understand their impact on the organization.

Another aspect of a comprehensive training program is continuing education. The most effective programs make it an ongoing responsibility of one person in a department. This is an important function that will keep all staff members current about policies, procedures and the technology used in the department.

#### New Hire Training

A solid new-hire training program begins with the creation of a training manual. This manual acts as a building block of practical and technical skills needed to prepare the new individual for his or her position. In order for the department to understand current policies and procedures, a manager or supervisor must ensure the department manuals are kept current. This includes any system enhancements and/or change in policy or procedure. In addition, keep the reader/associate in mind when designing the training manual; keep the manual interesting for the reader. Do not be afraid to use language that is not “corporate” or to include graphics. When possible, in computer training, incorporate a visual image of a computer screen to illustrate a function.

Another form of new-hire training includes having the new associate train directly next to an existing associate. Some call this “OJT” (On the Job Training) or side-by-side training. This type of training allows the new associate to see first hand the

different facets of the position. Also, this allows the new-hire the opportunity to develop a working relationship with an existing associate. This type of training reinforces concepts learned in the initial training and should be used to reinforce and apply those same learned concepts.

#### Continuing Education

A continuing education program for a department is just as important as the new-hire training. When training a new associate, I have found they will only retain approximately 40 percent of the information learned in the initial training session. Therefore, a continuous effort must be placed on reminding the staff about various procedures and concepts. This continuing education can be formal or informal. (The author’s preference is always with a more informal approach.)

The formal, or traditional approach, often includes a member of management sending a memo to each associate. The informal, and often more appealing approach to a visual learner, is to send a one-page information sheet to staff. This information sheet, called a training alert, should be informative and presented in a non-threatening manner. Therefore, if the policy or procedure changes, the informal approach would better prepare the department to receive this presentation.

#### New Employee Training - Is It Worth The Investment

##### Getting off on the Right Foot

Many companies provide some sort of introductory training or orientation for most of their new employees. It may take the form of an older employee assigned to show the new employee “the ropes.” Or it may be left to the HR department or the individual’s new supervisor to show them where the coffee pot is and how to apply for time off.

Many organizations, especially in government and academia, have created new employee training that is designed, exclusively or primarily, to provide mandated safety familiarization.

Yet some companies in highly competitive industries recognize the value in New Employee Orientation (NEO) that goes much farther.

They require several weeks or even months of training to familiarize every new employee with the company, its products, its culture and policies, even its competition.

There is a measurable cost to that training, but is it worth it? Let’s look at some of the issues.

##### Some Background Facts

The technology in the workplace is changing very rapidly and companies that can’t keep up will drop out of competition. A survey by the Ontario (Canada) Skills Development Office found 63% of the respondents planned to “introduce new technology into the workplace that would require staff training.” A third of the respondents included “improving

employee job performance” and “keeping the best employees” as desired outcomes.

The American Society for Training and Development (ASTD) reports that less than \$1500 per employee was spent for training in 1996. The largest part of that (49 percent) was spent for technical and professional training. Only two percent was spent for New Employee Orientation and three percent on quality, competition and business practices training.

### **Reasons to not Do New Employee Training**

Even at the less than \$1500 per year for training an employee we reported above, it is still a cost. For some companies, especially those with traditionally high turnover, it can be a major expense. If your profit per employee is less than \$1500, it would be difficult to convince the stakeholders that training is justified. Besides, we all know it is the responsibility of the school system to train people to be workers. And it is the worker’s responsibility to learn how to do a job so they can get hired.

### **Why Do New Employee Training**

Not surprisingly, all the reasons not to train new employees (except cost itself) are actually reasons to do that training. If you have high turnover, training new employees will make them more productive. They will feel better about themselves and the job. They will stick around longer.

If your profit per employee is less than \$1500 per year, you have **major** problems. You need to start training all your employees, not just your new employees, right away. Show your stakeholders the potential ROI of the training as we will discuss below.

And if you still believe that our schools provide adequate training to make students labor-ready you are living in a dream world. Yes, some job seekers make the effort to learn on their own the skills needed for a new job, but most get that training on the job.

### **Required Training**

Government regulation, insurance coverages, and common sense dictate some training that **MUST** be given to every new employee.

### **Other Reasons for New Employee Training**

American International Assurance is an ISO 9002 certified insurance company. AIA makes a commitment to training for their staff because AIA “recognizes that the training and development knowledge, attitude and skills of the staff and agency field force are fundamental to its continued efficient and profitable performance.”

Orchard Supply Hardware considers its New Employee Training program important enough to include in their list of benefits for full and part-time employees.

### **An Interesting Proposal**

Dr. Edward Gordon recommends companies make training a stand-alone function, separate from HR. He points out a twenty percent increase in training expenditure since 1983 has not kept pace with the twenty-four percent increase in workers in the same period. He suggests Training Managers use Return

on Investment (ROI) to demonstrate that the training function is a profit center, not just a cost center.

### **Summary**

In Dr. Gordon’s article cited above, he points out that companies such as Sprint, Xerox, General Electric and General Motors have opted to establish Corporate Universities, reflecting the importance they place on employee training.

The value for smaller companies is arguably even greater. And there is no better time to start employee training than New Employee Orientation.

Read this to enrich your self more on New Employee Training

### **The New Hire Orientation “ToolKit”**

There have been several posts lately on how to improve Orientation. Through my work in retention I have found that poor orientation can increase “buyers remorse” and thus increase turnover.

Below are some orientation tools you might find a welcome addition to what you currently do. Not all tools work in every situation so put together your own mix of tools and then test it to see what works and what doesn’t.

### **Tools to “Celebrate a New Hire”**

Part of HR’s job is to educate managers on the importance of making new hires feel welcomed and important. Managers and employees need to take a larger role in “closing the sale” and owning the process of assimilating the new hires because their talent will improve the teams chance of meeting it’s goals. Managers should consider using one or more of the following “celebration tools” to raise the enthusiasm of and for the new hire.

1. A phone call from the CEO/ GM welcoming them to the organization.
2. An invitation by the CEO/ GM to visit their office on their first day (or the CEO stopping by their work space).
3. A letter from the CEO/ GM welcoming them to the organization.
4. Cake and candles on the first morning to celebrate their joining the “family”/team.
5. A new hire luncheon on the first day to meet the team.
6. Welcome banner for their cubical signed by the CEO and all.
7. Take a Team Picture on the first day and have it signed by all.
8. Give them a Tee Shirt signed by all.
9. Place a Notice/Ad in the Local Paper welcoming them to let everyone know of your new team member (like consulting/ law firms do).
10. Give them a Plaque - Celebrating their First day.
11. Give them a “2 for dinner” certificate to tell their spouse or friend about their new job.
12. Place a welcome Note/picture on your corporate Web site.
13. Put new hires pictures in our local ads or in regular corporate advertising.

14. Send their spouse/kids first day welcome gifts, corporate products or cards to make them feel they are part of the team and to build support for the new company.
15. Have other spouses call and welcome their spouses.
16. Have a new employee lunch for spouses during their first month.
17. Have a “No forms/ video/ manuals” policy during the first day/week. Consider sending them to their home to read prior to starting or let it wait until at least week 2.
18. Give them a “new hire” pin/ hat to let all know they deserve special help. The pin/ hat also entitles them to ask “dumb questions”.
19. Give them a “pre-dated” 5 year pin to show them we expect them to be part of the team for a long time.
20. Give them a “meet everyone card” that requires (rewards) them for getting the initials of all key team members on the card during the first \_\_\_\_ days.
21. Give them a “new hire” reserved parking spot to celebrate their first week.
22. Give them a License Plate Cover for their car announcing their new company
31. Give them a “Help Source” Card with the names / E-mail addresses of people with a reputation as “helping types”.
32. Do a survey of your past “new hires” and identify their problems, frustrations and things they would liked to have “More of/ Less of”. Do the same at exit interviews to see if poor Orientation played a part.
33. Develop a “new hire” network of new hires and recent hires so a recent hire can act as a Big Brother/ Sister for a brand new hire.
34. Develop a set of success measures and metrics so that the process can be continually improved and those that helped in orientation can be rewarded. Include training, MIS and operations to ensure all details are measured.
35. Pre-assess the training needs of the candidate and schedule the required development before the candidate starts. Give the new hire the tools they need as fast as possible in order to succeed.
36. Pre-schedule a series of one on one meetings with the new hire to identify their frustrations and problems before they get out of hand.

### Anticipating and Answering Their Questions

Under traditional orientation programs most questions are asked by the candidate while they are in HR and generally they are asked only on the first day. Through focus groups and surveys possible questions can be anticipated and answered before the candidate garners the courage to actually ask the question. By expanding the time for questions, providing assimilation help over several weeks and making it easier to get answers you will improve a new hires productivity and lower a new hires frustration level.

37. Assign a “Welcome coordinator” or concierge that they can call before they start their job.
38. Give them access to the company Intranet or call center so they can learn about the firm and it’s benefits before they start.
39. Give them “Silly/ Dumb” question “coupons” to give to people. The coupons can help ease their fear of asking “dumb” questions.
40. Identify questions specific to their particular job through interviews with previous hires in their job class.
41. Designate the recruiter as the HR person responsible for helping the candidate get answers to most of their questions before they start as well as after their beginning date.

### Tools to Make them Part of the Team

Helping the manager understand what the worker expects (why they accepted the position) and how to best manage them is almost as important as helping the worker understand the firms culture and the teams expectations. By helping managers understand the need to develop an early strategy on how to assimilate, manage and develop the new hire HR can make a significant strategic contribution.

42. Plan an hour of uninterrupted time with the manager on their first day.

### Time to Productivity Tools

Many workers encounter delays and frustrations in getting “the tools and training they need to start off running in their new job. By increasing the effectiveness of Orientation programs delays can be minimized and workers can begin producing days or weeks earlier than under traditional programs. Most of these TTP tools need to be used before the new employee starts.

23. Change the managers and teams performance appraisal and reward systems to include time to productivity for new hires.
24. Prior to starting get the new hire their E-mail address, password, telephone #, ID card, corporate credit card, a departmental org chart/ telephone directory, etc.
25. Provide them a Glossary of acronyms, buzzwords and on-line FAQ’s so they don’t have to ask uncomfortable questions about these buzz words (they are afraid to ask because it might make them seem like a dumb hire). Knowing these words might also decrease the number of errors on the job.
26. Assign them a departmental “mentor” to assist them during the first month in getting answers they need. An alternative is a orientation team to own the process.
27. Give them a copy of our mission/vision statement, our departments short term plan. and org chart prior to the first day.
28. Give them telephone directory (updated with their name in it if possible).
29. Ask them who they would like to meet during their first week and have the meetings already scheduled.
30. Have their business cards mailed to their house before their first day.

43. Pre-schedule a series of “no cancel” meetings with the boss and key team members during the first month.
44. Give the new hire \$25 certificates to give to the top 5 mentors that help them the most during their first week/ month.
45. Get the manager to ask them for a “What they dislike list” - and then develop a what they want “More or Less of” list and then manage to it.
46. Ask them about their Dream job and how they can best be managed. Periodically manage toward it.
47. Develop an individual “Challenge” plan for the first 3 months to ensure that the employee is continually challenged in their job.
48. Develop an individual “Growth/ Development” plan for the first 3 months to ensure they are developing at an acceptable rate.
49. Assigned a recent hire from the team as a mentor to ease the transition.
50. Have the CEO/GM do the orientation presentation to show the new hires how important they are to the organization.
51. Give them 5 “free lunch coupons” to use on co-workers so that they will rapidly get to know them and the local restaurants as well.
52. Expand the recruiters job description to including staying in touch with “their hires” and using their knowledge to help managers understand and manage their new employees.
53. Give them a “Rouges” gallery (pictures of the whole team) on the intranet (or hard copy) of all team members so it will be easier for them to put names with the faces they meet.
60. If they have relocated, consider getting the spouses and kids of your current employees to help orient them to the “cool things” in the community.
61. Develop a New Hire electronic chat room/list server/Web page to help them help each other. Consider forming an affinity group and pay for their lunches.
62. Do a post-orientation survey and ask them what they want more of and less of from orientation. Ask them to write down any new ideas or solutions they have on how to improve orientation and use them.
63. Consider varying the length and type of orientation depending on the job/importance of the hire.
64. Develop the capability to do orientation “remotely”, globally and Just In Time

## **The New Hire Orientation “ToolKit”- Part 2**

### **64 ways to improve your time to productivity for new hires “Celebrate” Your New Hires Using This Orientation Toolkit**

#### **Sales Reps know it - First impressions are everything!**

HR professionals need to know it also. Many corporations miss an opportunity to make a great first impression and to “close the sale” on a newly recruited individual by providing a lackluster orientation! They also inadvertently also slow the new hires development and the time it takes for them to reach their expected productivity.

A weak orientation may just be a missed opportunity to WOW a new hire but it may also turn into a disaster if the orientation process contradicts the initial impression put together by the recruiter. Almost all companies do an orientation for new hires but few pay much attention to them. Often workers come to work excited about the prospect of a new job and new friends only to get cold water in their face the first day on the job. A simple survey of workers not only will show how boring orientation can be but also how little of it employees actually remember.

HR has it all backwards. We celebrate when an employee LEAVES our firm but where is the party when a new hire comes on board? Stop getting “the intern” to put the video tape into the VCR and making the “benefits clerk” the first point of contact for a new hire. HR needs to start making the beginning of a new job a celebration and a process to make the new hire productive right out of the gate!

The “horrors” of traditional orientation

Remember the horrors of your first day when:

- You were given 15 minutes to—”read and sign a 100 page handbook”.
- You had to watch the orientation “video from hell”.
- You spent the morning filling out confusing benefits forms until it hurt.
- On your first visit to your cubical you found no phone #, email address, password or business cards.
- Your boss might have been out of town the week you started.
- You met dozens of people but you don’t remember any of them.

• Your assignment the first day is to “read” the manuals and wait until the boss has time to give you some projects.

#### **Additional assimilation/orientation tools**

54. Don’t let the “intern”/HR Benefits person do the orientation! Dump the dull video’s and take out the boring stuff (Have a comedian do it if necessary like they do in comedy traffic school)!
55. Do a frustration (barriers to productivity) survey among the new hires at the end of the first, third and sixth month. Manage to the results.
56. Benchmark other firms best practices (Corning, 3COM, HP, etc.).
57. Use orientation as a intelligence gathering process. Find out all you can at time of hire. Ask them who at their old firm is good and ready to leave, what are their best practices etc. Ask them why they took the job and why they rejected other firms. Feed that information back to the recruiters to help improve our recruiting process and to managers so we can improve on how we manage our new hires.
58. Extend orientation to at least a week (to as much as 6 weeks) so that you don’t initially overwhelm them with information. Stop doing it in one day.
59. Give them a list of the “best” restaurants, schools, child care, etc., in the neighborhood to help them feel comfortable with their new neighborhood.

- You find that the training you require to do your new job isn't even offered until next month

### **Buyer's Remorse/Regret!**

Many new hires are questioning their decision by the first day. The next week isn't much better with nothing to do because the boss hasn't had time to give you a project. Buzzwords and acronyms are everywhere but you are too embarrassed to ask what is a "SNAFU" and similar strange words that are thrown at them. And you still don't have a computer.

The recruiter that made all of those wonderful promises is long gone. Your family is nervous about the "change" and it's even worse if you just physically relocated your family. It's like your first day in France and you don't speak french. you feel alone and wonder if it was a good decision.

If a firm makes a negative "first impression" it may take months to overcome an employee's initial frustration and "buyers remorse". Research shows clearly that "improving" orientation can increase retention rates by as much as 25%. Initial hire frustration also slows "time to productivity", increases error rates and can in general take the enthusiasm out of any new hire.

Poor Orientation programs can also impact future recruitment efforts. Everyone you know asks you during your first week "how's your new job?" Unfortunately the response to the question is often "It's not what I expected" or "they never told me..." which can result in negative rumors that could discourage others from applying.

Remember that a great HR function learns to prioritize it's customers and activities. The depth of the orientation can and should vary with the position and the "importance" of the hire. Getting a team leader up to speed might be more important than getting a janitor.

### **Celebrate the new hire and reduce time to productivity**

The "celebration" approach assumes that the first day, week, month as crucial to getting a new hire "signed on" to the company's culture and shared vision. Later in this document is a Tool Kit of techniques that can have a significant impact on the quality of your orientation program and shorten the time to productivity. Make orientation something they will remember rather than regret!

### **Who is responsible for orientation?**

Most Orientation is owned and done by HR. Not senior level HR people but junior ones, generally from benefits. This is "bass-ackwards". Managers and employees need to own the orientation process. There are numerous reasons for giving managers ownership of the process including:

- The team needs to realize how important it is to get and assimilate a new team member in order to be successful.
- Managers and employees need to "own" the orientation process and take responsibility for getting new hires up to productivity because they are closer to the problem and they will suffer the consequences if it's not done correctly!
- The team and the managers are the only ones that can, over time, listen to and understand what the "new-be" in their function needs, wants and can provide it to them.

- HR can't be strategic when it is mired in paper and routine. If it uses a Intranet/ Call Center solution HR can make it easy for employees and managers to "self-service" their own assimilation needs with a minimum of HR effort.

### **Goals of Orientation Programs**

#### **1. Celebration**

- Make workers and co-workers see hiring and orientation as an opportunity to acquire new talent and increase productivity so they can become more of a winning team.
- Excite new hires about their new job/team and excite the team about the new hire.

#### **2 - Speeding Time To Productivity -**

- Give them the information they need and help eliminate barriers so you can speed up their time to productivity and have a positive ROI occur earlier.
- Eliminate poor starts/ disillusionment that may lead to "crib death" resignations and retention issues.
- Reassure new hires that they made a good decision by allowing them to begin meaningful work as early as possible.

#### **3. Anticipating & Answering Their Questions -**

- Provide avenues to anticipate and answer questions that new hires might have.

#### **4. Becoming Part of The Team**

- Identify motivators/ challenges/ "de-motivators" and dream job factors of the new hire so managers and the team can manage to them.
- Get family and other workers involved in the orientation and retention of a new hire.
- Give us a competitive advantage over our competitors by treating new hires differently so they can spread the word on how we "celebrate" new hires.

Who is good at orientation?

- Corning
- 3COM
- PepsiCo
- Peoplesoft
- Oracle
- HP

### **What are the characteristics of a World Class orientation program**

1. It has weighted and targeted goals and it meets each of them
2. It is done by a senior person.
3. Is an on-going process.
4. It begins before the first day.
5. It makes the first day a celebration.
6. It involves the family and others in the process.
7. It makes them productive on the first day.
8. It isn't boring/ rushed or ineffective.
9. It's global / multi-lingual and diverse. Have a one size fits one strategy to allow for individual/ local needs.

10. It's available on the Intranet and uses technology.
11. It reduces turnover.
12. It can be done "remotely" and during "off" periods.
13. It is monitored, measured and rewarded. It also uses feedback to continuously improve

### **A Quick Guide To Employee Orientation - Help For Managers & HR**

We would not be understating the case if we said that orienting employees to their workplaces and their jobs is one of the most neglected functions in government. Countless horror stories exist about how a new employee has received a ten minute talk with the manager, and directed to his or her office position, with no further guidance or instruction. Not only is this exceedingly stressful for the employee, but it virtually guarantees a very long period of unproductiveness for the employee.

In this month's PSM Supplement we present an overview of the orientation process, and a checklist that you can use when orienting new staff. As you read the article, keep in mind that orientation is also important for existing employees if a) they have never received proper orientation or b) there have been many changes in the organization and its purpose and function.

### **Purposes of Orientation**

Orientation isn't a nicety! It is used for the following purposes:

#### **1. To Reduce Startup-Costs**

Proper orientation can help the employee get "up to speed" much more quickly, thereby reducing the costs associated with learning the job.

#### **2. To Reduce Anxiety**

Any employee, when put into a new, strange situation, will experience anxiety that can impede his or her ability to learn to do the job. Proper orientation helps to reduce anxiety that results from entering into an unknown situation, and helps provide guidelines for behaviour and conduct, so the employee doesn't have to experience the stress of guessing.

#### **3. To Reduce Employee Turnover**

Employee turnover increases as employees feel they are not valued, or are put in positions where they can't possibly do their jobs. Orientation shows that the organization values the employee, and help provide tools necessary for succeeding in the job.

#### **4. To Save Time For Supervisor & Co-Workers**

Simply put, the better the initial orientation, the less likely supervisors and co-workers will have to spend time teaching the employee.

#### **5. To Develop Realistic Job Expectations, Positive Attitudes and Job Satisfaction**

It is important that employees learn early on what is expected of them, and what to expect from others, in addition to learning about the values and attitudes of the organization. While people can learn from experience, they will make many mistakes that are unnecessary and potentially damaging.

### **Two Kinds of Orientation**

There are two related kinds of orientation. The first we will call Overview Orientation, and deals with the basic information an employee will need to understand the broader system he or she works in. Overview Orientation includes helping employees understand:

- government in general, the department and the branch
- important policies and general procedures (non-job specific)
- information about compensation and benefits
- safety and accident prevention issues
- employee and union issues (rights, responsibilities)
- physical facilities

Often, Overview Orientation can be conducted by the personnel department with a little help from the branch manager or immediate supervisor, since much of the content is generic in nature.

The second kind of orientation is called Job-Specific Orientation, and is the process that is used to help employees understand:

- function of the organization, and how the employee fits in
- job responsibilities, expectations, and duties
- policies, procedures, rules and regulations
- layout of workplace
- introduction to co-workers and other people in the broader organization.

Job specific orientation is best conducted by the immediate supervisor, and/or manager, since much of the content will be specific to the individual. Often the orientation process will be ongoing, with supervisors and co-workers supplying coaching.

### **Some Tips**

1. Orientation should begin with the most important information (basic job survival).
2. Orientation should emphasize people as well as procedures and things. Employees should have a chance to get to know people and their approaches and styles in both social and work settings.
3. Buddy an employee to a more experienced person, but make sure the more experienced person wants to buddy up, and has the inter-personal skills. This provides ongoing support.
4. Introduce employees to both information and people in a controlled way. A new employee can't absorb everything at once, so don't waste your time. Space out introductions.

### **Conclusion**

Orientation (or lack of it) will make a significant difference in how quickly an employee can become more productive, and also has long term effects for the organization. To help you in the orientation process, we have included a checklist for the Job-Specific Orientation. Note that any complete program will include other elements...those that would be included in the Overview Orientation

Also see the format of Induction program.

## Format of Induction Programme



Duration of the Program: 2 Days

Number of Participants: 5 – 10 people

Facilities Required:

- Room with the seating capacity of minimum 10 people
- A Computer, an LCD projector, A white board, Felt pens.
- Stationary for participants.( Notepad)

Faculties Name: INTERNAL

Budget Cost involves Training Material, publishing induction books, Lunch (if not from company canteen).

### The Program.

#### Day 1

9am to 10 am – Icebreakers.(Games involving introduction of participants Eg: The CHIT FUNDA & NICE NAMES) [Faculty Name]

10 am to 10.15- **Tea Break**

10.15am to 11.45am- 4W & 1H of aurionPro. [Faculty Name]  
(This includes name & owners, history, milestones, list of customers, Business development areas, technology competence, organization Structure, annual revenue & revenue by regions.)

11.45am to 12.30am- Values & Culture. [Faculty Name]

#### Values:

1. Open atmosphere (with examples)
2. Outstanding Teamwork (projects)
3. Respect for individuals (varied skills & recognition)
4. Pride in work
5. Long-term Relationship
6. Commitment to results (Lincon's Life) (attachment:1)
7. Customer intimacy

#### Culture:

1. High level of transparency
2. People Oriented (welfare programs)
3. Accountability & Authority

4. Review Meets

5. Separation & Retention.

12.30pm to 1 pm-

1 pm to 1.30pm-

1.30 to 2pm-

2 pm to 4 pm-

Objectives.

Queries if any?

#### LUNCH

Tongue Twisters (Tooter)

Briefing on Policy Statement & Their Roles.(Faculty: )

The End Result- What role will they play in attaining those objectives.

(This would be a question-answer session with inputs from our side.)

#### BREAK

Policies, Benefits, Functions of various departments, Performance

Appraisals, Career path, Welfare

Prog. [Faculty Name]

DO'S & Don'ts at aurionPro

Positive Note.(Participants roam in the room with a stick-on on their back & the other participants fill it with positive things about the person

4pm to 4.15 pm –

4.15 pm to 6 pm-

6 pm to 6.15-

6.15 pm to 6.30-

.....END OF DAY ONE!!



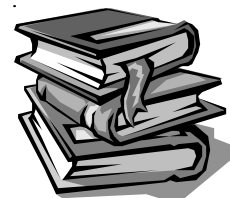
### The 2<sup>ND</sup> Day!

9am to 9.30 am –

Do you know me? (A small game where participants try to recollect names & specialties of people around them) [Faculty Name]

9.30 am to 10am - Objectives.

Recollecting Policy Statement &



10 am to 10.15am-

10.15am to 11.15 am- Lifecycle)

#### Tea Break

SDLC (Software Development [Faculty Name]



11.15am -12.30pm-	Project & People Management briefing. <b>[Faculty Name]</b> Synergy
12.30pm to 1 pm-	Queries if any?
1 pm to 1.30pm-	<b>LUNCH</b>
1.30 to 2pm-	Slide on perception. (Objective: There are 3 solutions to a Problem: 1. Yours 2.others 3.the correct one. Hence respect Others views) <b>[Faculty Name]</b>
2 pm to 4 pm-	Discussing bank Disbursement . <b>[Faculty Name]</b>
4pm to 4.15 pm –	<b>BREAK</b>
4.15 pm to 5 pm-	ISO <b>[Faculty Name]</b>
5pm to 6 pm -	Communication (written & oral; Chinese Whispers)(attachment:2) Leadership (Jack Welch) (attachment :3) Teamwork (Characteristics of effective team members) (attachment:4) <b>[Faculty Name]</b>
6 pm to 7pm -	Do u know us well enough?? (A quiz with alternatives) & a formal welcome to the aurionPro family. <b>[Faculty Name]</b>

### End of the Session.

Note: Feedback forms will be sent to each participant on the next day.

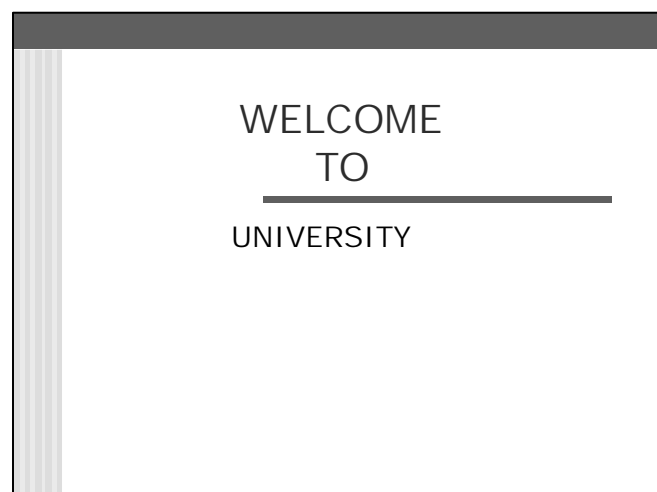
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### Induction Book

The induction book shall include:

1. Vision of the company
2. History of the company
3. Details about the operational units, service units with organisational chart (may be given as an detachable annexure which will can be changed as and when there is a change)
4. Locations- regional offices.
5. Achievements, awards
6. Details of partners.
7. General Rules and regulations pertaining to all functions like accounts, common leave rules & policies etc
8. Copy of the formats can be provided or places where it is available can be given
9. Other benefits , welfareschemes, retirement benefits specific to cadres can be given as annexure such that the employee gets details of benefits pertaining to his cadre only (otherwise manual will be unnecessarily bulky)
10. List of holidays (detachable)

### The Following Presentation will Guide you for Preparing Inudction Program :




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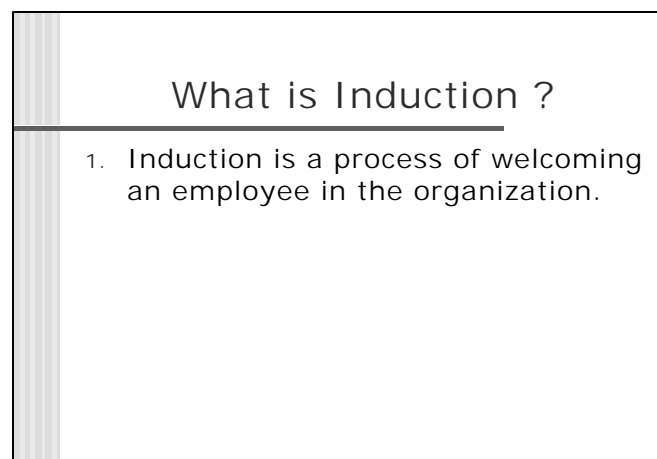
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## Who is responsible for Induction ?

- Induction is joint responsibility of HR and line Manager

## Induction Program

- Mentioned below is the typical induction program .Your suggestions on the same are solicited
- Induction – Technicians ( ½ day )
  1. Welcome by HR
  2. Introduction to company
  3. Formalities like joining report
  4. Introduction to personnel policy manual & handing of employee hand book
  5. Introduction to GM & HO staff
  6. Visit to other locations
  7. Induction by Service Manager

## What is the objective of Induction ?

- There are two objectives depending upon the organization / department needs
  1. To make the employee mesh or gel with existing employees & culture
  2. To make the employee gel with the employees but at the same time helping him locating his place in the organization and developing an identity which helps in cultural change

## Induction – Executives / Assistant Mngr /Mngr 2 days

1. Welcome by HR
2. Introduction to company
3. Formalities like joining report
4. Introduction to personnel policy manual & handing of employee hand book
5. Introduction to GM & HO staff
6. Visit to other locations
7. Spend half day in every department trying to understand the working of the department. Here the respective department head should give brief about department , introduce him to his staff and instruct staff to practically show the working of the department

## Induction

- Because of prior commitments and paucity of time ,line managers don't spend time with new employees
- It is therefore suggested that besides the normal induction , all employees who have joined the organization 1 to 3 months prior (across all levels )should have induction program for one whole day wherein all the department Managers will give a presentation about their department and it's relevance with other departments and organization as whole
- This will serve the following purpose
  1. It will create a sense of belongingness for the organization and enhance the image of the organization in front of the employees.
  2. It will help managers to build their presentation skills

## What role the respective department Head should play in the induction

- 1 Welcome the newcomer and put him at ease.
- 2 Discuss about the incumbent's personal life, where he lives, his hobbies, interests and so on.
- 3 Discuss about the organization, its products, its growth, its future plan and so on.
- 4 Discuss about the employee's job description, job content, responsibilities in general and about the specifics of his assignment.
- 5 Discuss about the avenues of Self-development, training programmes, promotions, rotations and such areas.
- 6 Discuss in detail about working conditions which would include hours of work, grievance handling machinery, dress code and such.

## Induction – 1 day ( sketch)

- 8.00 am –opening remarks by GM
- 8.20 to 9.20am – Presentation by Finance
- 9.20am to 10.20am –Presentation by IT
- 10.20am to 10.40 am – Tea Break
- 10.40 am to 11.40 am – Presentation by HR
- 11.40 am to 12.40 pm – Presentation by Suzuki
- 1.00pm to 4 .00 pm – lunch
- 4.00 pm to 5.00 pm – Presentation by Service
- 5.00pm to 6.00 pm – Presentation by Parts
- 6.00pm to 7.00 pm – Presentation by GMC
- Conclusion by HR

## What role the respective department Head should play in the induction

- 7 Introduce the new incumbent to his colleagues and seniors in the department, receptionist and such. As one realises, the focus here is on trying to ensure that the incumbent can get over his initial fears, inhibitions and happily settle down in his organisation.
- 8 If you feel that the new employee has got certain new skills and that he can act as a catalyst in cultural change then breif him about his role and the identity he needs to maintain .At this juncture one needs to share secrets with him

## Remarks

- This induction program can be made successful only with your suggestions and participation. kindly feel free to give the same .These suggestions will be discussed and finalized in the next managers meeting

- 
- This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## 1. Why is New Employee Training Important.

- [illegible]

- [illegible]

- Collect the Induction Program tool kit / Information from atleast 5 Software Companies.

## LESSON 19

### INTRODUCTION TO TRAINING METHODS AND TECHNIQUES

---

Friends,

In previous units of you have been explained about concept of training and development and the procedure of training.

This unit gives an exposure to various training methods and techniques used, most commonly used training methods, best method to be used for specific type of training.

After reading this unit you will be able to:

1. Explain various methods and techniques to training
2. Understand the significance of training methods in effective training
3. Select appropriate training method

#### Introduction

Training is considered as a tool for Human Resource Development (HRD). Nowadays it is an unmissable step in each and every developmental process of human being. It has immense potential in transfer and utilization of latest technical know how, leadership development, organization of people, formation of self help group mobilization of people as well as resources empowerment of resource poor rural mass, entrepreneurship development etc. which are considered as essential components of HRD.

Hayword (1989) identified training as one of the key factors in implementing extension and observed that extension design and planning should include training for all staff at all levels as a basic mechanism for inculcating competence professionalism and service morale. For all these an appropriate training methodology is very much essential. There are many such methods followed by different training institutions for imparting training in extension. The ancient one of these is Lecture Method. For so many days it was the only method used in training, but due to its various drawbacks now it is almost obsolete. It is observed that participative methods, simulation methods are very much effective in imparting training. Electronic technologies are also likely to make a deep impact on training of extension personnel in India and abroad. Use of Interactive Computer Video Technology (ICVT), Computer Aided Instruction (CAI), tele conferencing etc. are getting popularity day by day. Moreover, these are proved to be very effective tools in extension training. Here we shall discuss about the current trends in the use of extension training methods for giving training to the extension personnel.

#### Recent Methods Used in Training

Within a few years the global scenario has changed quite a lot. Need of professionalism is clearly established to meet new challenges in various fields of specialization. Despite back ground education, professionalism can be achieved only with proper training. The most important question facing us today is: How to make training better?

Some commonly used methods are discussed in the following pages:

#### Case Study:

##### What it is?

A history of some events or set of circumstance with the relevant detail is examined by the trainees.

Case Studies fall into two broad categories:

- a. Those in which the trainees diagnose the causes of a particular problem.
- b. Those in which the trainees set out to solve a particular problem.

This method was first used to introduce an empirical approach to management education and training emphasis was put on the study of typical cases of past practical experience.

##### What it will achieve?

It is suitable where a cool look at the problem or set of circumstances, free from the pressures of the actual event is beneficial. It provides opportunities for exchange of ideas and consideration of possible solutions to problems the trainees will face in the work situation.

#### Exercise

##### What it is?

Trainees are asked to undertake a particular task leading to a required result following lines laid down by the trainers. It is usually a practice or a test of knowledge put over prior to the exercise. It may be used to discover trainees knowledge or ideas before further information or new ideas are introduced. Exercise may be posed for individual or for group.

##### What it will achieve?

Suitable for any situation where the trainees need to practise following a particular pattern or formula to reach a required objective. The trainees are to some extent on their own. This is a highly active form of learning. Exercises are frequently used instead of formal test to find out how much the trainee has assimilated. There is a lot of scope in this method for the imaginative trainers.

#### Application Project

##### What it is?

Similar to an exercise but giving the trainees much greater opportunity for the display of initiative and creative ideas. The particular task is laid down by the trainer but the lines to be followed to achieve the objectives are felt by the trainees. Like exercise, project may be set for either individual or groups.

##### What it will achieve?

Suitable for initiative and creative testing. Project provides feedback on a range of personal qualities of trainees as well as their range of knowledge and attitude to the job. Like exercise projects may be used instead of formal tests. Again there is a lot of scope for the imaginative trainers.

## **In Basket ( In Tray)**

### **What it is?**

Trainees are given a series of files papers and letter similar to those they will be required to deal with at the place of work. Trainees are asked to take action on each piece of work. The results are marked or compared with one another.

### **What it will achieve?**

Suitable for giving trainee desk workers a clear understanding of the real life problems and their solutions. The simulation of the real situation aids the transfer of learning from the training to the work situation. It's a valuable way of obtaining feedback of the trainees progress. Also useful for developing attitudes towards the work eg priorities customers, complaints, superiors etc.

## **Business Games**

### **What it is?**

Trainees are presented with the information about a company financial position, products market etc. They are given different management roles to perform. One group may be concerned with sales, another with production and so on. These decisions in terms of profitability are then calculated.

### **What it will achieve?**

Suitable for giving trainee manager practice in dealing with management problems. Simulation of the real life situation not only aids the transfer of learning but is necessary because of trainee manager applying only theoretical knowledge to the work situation could cause major problems. Also a valuable way of assessing the potential and performance of trainees. It helps considerably in developing many aspects of a manager's role.

## **Sensitivity Training ( Group Dynamics)**

### **What it is?**

Trainees are put into situation in which :

1. The behaviour of each individual in the group is subject to examination and comment by the other trainees;
2. The behaviour of the groups as a whole is examined.

(The trainer is a psychologist, sociologist or a person who has himself received special training)

### **What it will achieve?**

A vivid way for the trainee to learn the effect of his behaviour on other people and the effect of their behaviour upon him. It increases knowledge of how and why people at work behave as they do. It increases skill of working with other people. Also it is a valuable way of learning the skill of communication.

## **Role Playing**

### **What it is?**

Role playing has occupied an important place in extension training as a method of simulating real life situations. It is an effective way of bringing into the classroom real life situation which otherwise may not be possible. This method enables participants to understand better the behaviour of others as well as their own emotions and feelings.

The trainer has to brief the person who are going to play the role, describing the role to be played and the manner in which it is to be played. After the role play session is over it is discussed

not only with the group but also with the players as to how good or bad they have done it. This discussion facilitated the learning process.

### **What it will achieve?**

It is suitable for near to life practice in the training situation and is helpful to the trainees. It is useful in strengthening the skills of human interaction. It is helpful in assessing personal attitude, feelings and behavior, thus developing empathy towards client.

## **Interactive Lecturette**

### **What it is?**

Traditional lectures are criticized on many counts. In order to overcome drawbacks present in traditional lecture Interactive lecturette is now being adopted by the trainers. In this method aspects of communication and adult learning involved in teaching and learning are carefully considered. Interactive lecturette is brief, uses experiences of participants, allows two way communication, facts or contents are organized from known to unknown and simple to complex manner. In this trainers can use a variety of modes to support lectures viz. questions, seeking examples, sharing personal experiences from learner etc.

### **What it will achieve?**

It is good for making training interaction participative and interesting. It helps in developing creativity among participants.

## **Simulation Game**

### **What it is?**

Nowadays many training organizations are training experts are utilizing the techniques simulation game in the training programme. A simulation game combines the attributes of simulation (simplification of some real life situation) with the attributes of a game, an activity in which participants follow prescribed rules. That differ from those of reality as they strive to attain a challenging goal. Some expert trainers are also utilizing behaviour simulation games which focus primarily on the processes of interpersonal relations, on how decisions are made, and with what consequences, rather than on the substance of the decisions.

### **What it will achieve**

It is suitable for enquiry oriented approach to teaching in the field of social science. It facilitates the active participants involvement in learning as it utilizes the discovery learning method in which participants are directly immersed in a real or contrived problematic situation from where they develop hypothesis test it and arrive at conclusion

## **Programmed Instruction**

### **What it is?**

Originally the term programmed instruction was used in reference to a particular format for presenting printed learning material to an individual learner. The material to be learnt is prepared in such a way that it can be presented to the learner in series of carefully planned sequential steps. These steps progress from simple to more complex levels of instruction. At each step, the student must make a response that tests his comprehension. That is to say, he must write his answer to a question

fill in a missing word or phrase, or choose a correct statement from several possibly correct statements or take some other appropriate action. This method of imparting instruction has immense potential in extension training.

#### **What it will achieve**

Programmed Instruction is particularly useful as an enrichment activity. It can help provide highly motivated participants with additional learning experience that the trainer might ordinarily be unable to provide because of classroom time pressures. The programmed can be function as a kind of tutor for slow learner in situations where more personalized attention may be virtually impossible

#### **New Electronic Technologies In Training**

Electronic technology is a generic term covering an array of technologies which are already in use or have tremendous potential for use in a wide variety of educational use. Time has come to use appropriate electronic technology for better implementation of training. Followings are some recent electronic technologies which are in use for training in extension

##### **Computer**

In the field of extension in India, a beginning has already been made in the introduction of computers in monitoring and evaluation units of the states. States of Karnataka and maharashtra have already taken a lead in this direction. Use of computer in extension training is increasing day by day.

##### **Video Tapes**

Video tapes have already found quick use in extension in India. The directorate of Extension makes a number of video tapes in the field of new and emerging areas of technology dry land farming, women in agriculture etc these can be shown to the trainees in training programme.

##### **Interactive Computer Video Technology (ICVT)**

The use of computers and video tapes in the field of training is now well established. Some leading institutions like manage hyderabad are using this technology in training programme.

##### **Broadcast Television**

A television system in which programme on training are sent out by radio waves and are seen on television. Indira Gandhi National open University (IGNOU) is very well using this technology in its educational and training programme.

##### **Cable Television**

A television system in which programmes are sent along wires to television sets after they have been transmitted to a central receiver.

##### **Capacitance Disc**

A video disc which uses electric charges for audio and visual signals. It is read by a sensor which has to be in contact with it.

##### **Computer Aided Instruction (CAI)**

An educational concept which places the student in a conversational mode with a computer which has a programmed study plan. The programmed course selects the next topic or phase of study according to previous responses from the student allowing each student to progress at a pace directly related to his or her learning capability.

#### **Interactive System**

Any system which allows a continuous way communication between the user and the system.

#### **Interactive Video (IV) or Interactive Computer (IC)**

The phrase Interactive video refers to a video programme with which the user (trainee) can interact. Interactivity takes place between the user and the system. Same things for IC also. The system composed of four basic components monitor or video or display unit, Video tape or video disc a computer, a disc drive. The computer controls the video or tape or video disc. Disc drive loads programme into the computer.

##### **Laser Disc**

A video disc typically 30 cm in diameter with a silvery reflective surface. The disc is read by a laser beam, hence its name. Due to a tough protective coating on it, a laser disc is very durable.

##### **Tele Text**

A one way information service in which information is displayed as pages of text and other visual material. TVs are required to be specially equipped to receive such information.

##### **Tele Conferencing**

A Two way audio and one way video system. It is used now a days by many institutions for education and training purpose.

##### **Summary**

Training is a crucial and continuous requirement for human resource development. It is needed for skilful extension of current technological know how. With the dynamic change in the world situation it is necessary to move away from the didactic methods of imparting training to new innovative methods for meeting up the new challenges. At present time, because of ineffective performance of lecture method, participatory training methods such as case study, role playing exercise, application project, simulation games etc are getting popularity and being used in training. Besides modern electronic technologies viz CAI, ICVT, Video tapes, tele conferencing etc. are likely to make a deep impact on training of extension personnel in India. The use of satellites and internet can make the training more effective and easy by saving time money and of course energy of participants, organization and nation. It is hoped that extension fraternity would like to view these developments with keen interest as it is a very promising area for effective extension training and Human Resource Development

#### **Exercise 1- Determining Training Delivery Methods**

For each of the following situations, determine, as a group, which training delivery method(s) best suits each situation. At the conclusion of the group meeting, have one or two members share the group's findings with the rest of the class.

1. You have a co-worker who is considered to be the department's "Local Area Expert" in Filemaker Pro, in addition to you. A new version of Filemaker Pro hits the market. As the department's support provider, it is your job to teach the new features of the new version to your co-worker. After all, if there are two of you that know the application's new features, your department will have more resources available when they have questions on the new

version. What delivery method(s) would work best in this situation? Why?

2. Your whole department is moving from Macs to Wintel machines and is getting new equipment during the summer months while the student population is on break. You plan on introducing the new equipment to one work group at a time to minimize the confusion.
3. Not only do you and your department's other support techs have to set up the new equipment, but you are responsible for training your users in the use of the new equipment, operating systems and applications. What training delivery method(s) would you and your co-workers use in this situation? How would you implement the training? Explain your reasoning.
4. You have a number of co-workers in your department who need to learn Microsoft Access. Their time is limited due to work schedule constraints and the cost of bringing in a vendor to do the training is high. It is your job to determine the best way to minimize the cost of the training while coordinating the training around demanding work schedules. By the way, you happen to be an Access Power User. How would you deliver this training?
5. You support a department that has never really devoted resources to training (sound familiar??). Your users have varying skill levels and need training on a variety of applications. You have done a needs assessment and have determined that your users need training in Windows, Word, Excel and PowerPoint. Traditional classroom training is not an option since it would mean running several sessions of each topic for a small number of people. What would be your training plan for this department?

## Article

Allow me to share with you my personal perspective on effective training methods. This perspective, I believe, will guide you along a path to becoming a more efficient grappler. It will also help you to discover what areas of training need the most attention in your training regimen.

There are three specific areas of training that will help you become a better grappler:

1. technical knowledge,
2. the development of physical and mental attributes, and
3. the use of strategy.

## Technical Knowledge

Technical knowledge begins with the student learning a series of physical movements called *techniques*. Once these movements have been learned, the student should practice them until he/she can do them in their sleep. The student should try to reach a level where he/she can reflexively respond to a specific stimuli and perform the technique without thought. Next, a student must learn how to put the basic techniques together into a series of movements called *combinations*. These combinations will teach the student how to flow from technique to another when they encounter resistance. Resistance will guide them into the next area of training, *the development of physical and mental attributes*.

## Attributes

Attributes are those qualities that fuel the techniques. Physical attributes, like speed, power, explosiveness, balance, coordination, timing, sensitivity endurance and accuracy are the qualities that give life and vibrancy to techniques. Mental attributes, like focus, concentration, determination, the will to survive, and pain tolerance give extra added fuel to the physical attributes. Developing attributes is an extremely important and necessary component of training for the serious martial art student. Why? Because technical knowledge without the aid and assistance of physical and mental attributes is useless. Physical movements without the added fuel of speed, power, timing, accuracy or explosiveness are nothing more than a series of flowery dance movements. Developing these physical and mental qualities is *more important* than the accumulation of technical knowledge. Once technical knowledge has been combined with the development of physical and mental attributes, the student can begin to focus on the use of strategy.

## Strategy

Strategy can be defined as "a careful plan or method." It is the choosing of a specific set of tactics that will enable the student to accomplish their desired goal in an efficient and effective manner. The strategy they choose will depend upon the unique set of circumstances that have presented themselves. It will also depend on the amount of technical information the student has, as well as which attributes the student and his opponent possess.

So, "Where do I start?" you might ask? Well, you start by learning and practicing the mechanics of a specific technique. Next, you put some techniques together into two and three technique combinations. Next, you spar with it, and then finally, you review it. Here's an example of what I mean: let's start with the mechanics of a triangle and an arm lock. There are eight separate components of a triangle. There are seven separate components of an arm lock. To realistically put these two techniques together into an effective combination (while sparring) would require you to manipulate about fifteen different components within a short period of time (less than two seconds). Plus, you would have to set the first technique up by leading your opponent into it from a superior position. (As you can see, this is not an easy task to accomplish. Especially the first time you try it. This is why it is so important to master the mechanics of one technique before moving on to another one.) So, as you can see, this is a lengthy process. However, it is obtainable.

Once you can perform a technique reflexively where you no longer have to think about it, you can then move on to developing the specific attributes required to make that technique work.

Once you gain a handle on the mechanics and the attributes, you can then focus your efforts on developing a variety of strategies to set the technique up on a variety of opponent's. For example, how would you set up the technique on a bigger and stronger person? How would you set up the technique on a more experienced person? How do you set up the technique on an opponent who is faster than you are?



Do you see how strategies are dependent upon the physical and mental attribute and technical knowledge you possess? Do you see how technical knowledge and attributes lay a foundation for strategy?

Start this new journey of yours by first identifying your weaknesses. Once you've done that, attack those weaknesses like a wild chicken on crack! Get rid of those weaknesses so that you can one day look back on them and say, "I remember when..." Find something that you're not good at and work hard to become good at it!

In closing, let me leave you with these words of wisdom: Everything of value will come through great efforts on your part!

Good training to you,

SOURCE: Adapted from Danial Solomon and Harry L. miller. Exploration in Teaching Styles (Chicago: Center for the study of Liberal Education for Adults. (1961).

### Two Sample Profile of Training Styles

Dimensions	Profile A	Profile B
1. What does he think important?	Teaching subject matter of content	Developing participants or process
2. How does he relate to the group?	Impersonal or lacks sympathy	Personal or full of sympathy
3. How does he communicate? .	Talk or teacher active	Elicits or participant active
4. What method does he prefer?	Cognitive	Experiential
5. How does he react change?	Rigid	Flexible
6. How far does he control the group?	Controls completely	Allows full freador

Following is the example of training method.

Read/See the following method of training and comment which is this method of training and in which type of training it can be used with what number of particpatns

### tree Swing

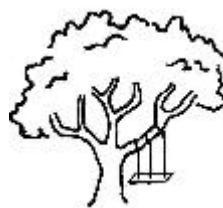
the tree swing or tire swing pictures - for training, presentations, etc.

The tree tyre (or tire) swing picture depicting tyre (or tire) and rope swing in various states of dysfunctionality, illustrates the pitfalls of poor product design, or poor customer service, and the dangers of failing to properly listen to customers and interpret their needs. The tree swing also demonstrates the dangers of departmental barriers, and failures of departments to talk to each other, and to talk to customers. As such, the tree swing is perfect for training these issues. If you are using the tree swing to highlight a training subject most people very readily interpret the pictures into their own organisational situations. If you'd like some tree swing discussion pointers they are at the foot of the page.

**what marketing suggested**



**what management approved**



**as designed by engineering**



**what was manufactured**



**as maintenance installed it**



**what the customer wanted**



### Tree swing (or tire swing) discussion pointers

Normally no pointers are needed - people very readily interpret the pictures into their own organisational situation. Here are a few typical 'them and us' reactions just in case:

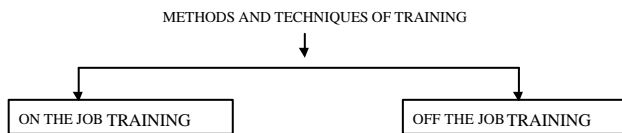
**of marketing** - add unnecessary value, add complexity, bells and whistles, embellish, put their own mark onto things, fanciful, impractical, untested, untried, creativity for creativity's sake, subjective not objective, theoretical not practical, clever ideas, think they know what's best for the customers even if the survey feedback is utterly clear, fail to consult with engineering, production and anyone else in the organisation.



## LESSON 20 ON THE JOB TRAINING

Friends,

In previous lessons you were explained about the methods of training. The methods explained in previous lesson can be broadly classified in to two head



After reading this lesson you will be able to

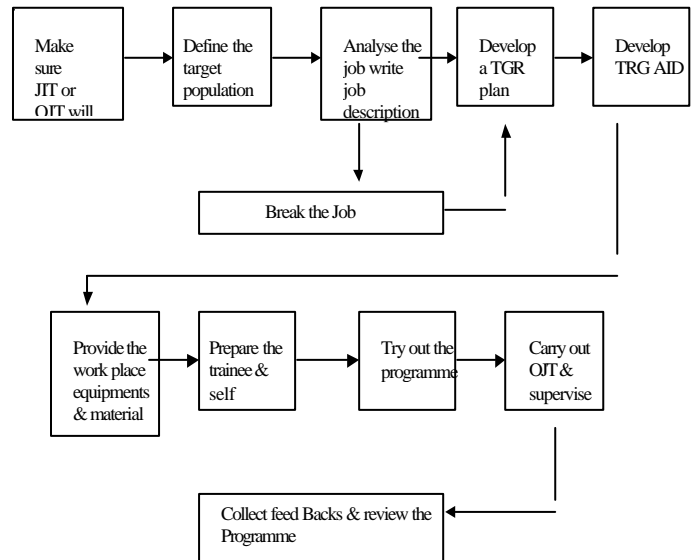
1. Define What is On the job training
2. Know the merits and demerits of on the job training
3. Explain various methods used under on the job training
4. Make effective use of the on the job training.

### On the Job Training

OJT training, sometimes called direct instruction, is one of the earliest forms of training (Observational learning is probably the earliest - see Albert Bandura). It is a one-on-one training located at the job site, where someone who knows how to do a task shows another how to perform it. In antiquity, the kind of work that people did was mainly unskilled or semiskilled work that did not require specialized knowledge. Parents or other community members, who knew how to do a job necessary for survival, passed their knowledge on to the children through direct instruction.

On-the-job training is still widely in use today. In fact, it is probably the most popular method of training because it requires only a person who knows how to do the task, and the tools the person uses to do the task. It may not be the most effective or the most efficient method at times, but it is the easiest to arrange and manage. Because the training takes place on the job, it is realistic and no transfer of learning is required. It is often inexpensive because no special equipment is needed other than what is normally used on the job. The other side is that OJT takes the trainer and materials out of production for the duration of the training time. In addition, due to safety or other production factors, it is prohibitive in some environments.

### Design & Conducting OJT Programme



### Format for Determining the Target Population

JOB REQUIREMENT	Skill	Previous	Education
		Experience	level
EXPECTATION FROM	Skill	Knowledge	Performance
TRAINEE	--	n	level
EQUIPMENTS	Place	Time	--
MATERIAL			
AVAILABLE			

**All this while, you've been plodding along blissfully, getting the job done and doing your little bit to maintain profitability. All along, you have firmly believed in the fact that the end justifies the means and have followed this adage in letter and spirit. All through, you have been patting yourself on occasions when you have deserved credit or recognition and your bosses have been too busy to notice. Till the words 'training session' entered the workplace to plague your life!**

It's a sad day in the life of any productive employee when the management decides to conduct something called a 'training session'. Admittedly there are some industries, which require, and even warrant regular training sessions for up-dating skill-sets. But it is my personal belief that for a vast majority, the training session is a means for the management to kill time and harass the lower levels of the hierarchy.

### **Phase I: Power Point (less) Presentations & OHPs (Oh Help Please)!**

You will agree that it is not a pleasant experience to be accosted by your manager who has his hands filled with slides and a wicked twinkle in his eyes. You will also agree that this can mean only one thing - hours (or days!) spent cooped up in a claustrophobic room, while the aforementioned manager draws from his extensive repertoire of personal experience, power point presentations, OHP slides and powerful jargon to bombard you with fabulous theory of how things ought to work.

Unfortunately, if you and your equally tortured colleagues have learnt one thing from time, history and the failed dot.com debacle, it is that - theory may sound brilliant and even path breaking on paper - but there's a world of difference between bookish knowledge and real-world excellence. But alas, as none of you can voice this concern without seriously compromising your employment, you grin and bear the torture like a martyr.

Emboldened by what he construes as your total commitment and favour towards the cause of professional development, your manager delves deeper into his session with gusto. His personal experiences get exaggerated by the minute. His power point sessions get more animated by the session. His OHP slides get more and more colourful. And his jargon reaches a new bombastic high forcing all of you to furtively flip through your pocket dictionaries and industry primers.

### **Phase II: Role-Play & Play-Safe**

Phase I might have been bearable but Phase two of the training session ventures into a sadistic territory called role-play. Here is where your manager (who else!) will come up with a situation where he/she pretends to be this skinflint (what else!) customer who is trying to browbeat you into offering discounts. The uninitiated make the mistake of enthusiastically participating in these to the extent of haranguing the manager till he makes up his mind to personally flush the remainder of their careers down the drain. However, those who have had a previous taste of these sessions offer but the meekest resistance before successfully proving to the gathering that their petty, local college knowledge is no match for the manager's B-School intellect.

If you're confused, remember the thumb rule. Although these sessions are declared to be skill-updating workshops to give you a taste of things in the real world, they are little more than an in-house opportunity for your manager to showcase his/her superiority. By establishing his/her superiority, you are not making an ass of yourself. You are, 'stooping to conquer'. The enthusiastic employees however have stood up, been hacked to their lowly place in the hierarchy and are successfully on their way out of the company!

### **Phase III: Group Study & Group -ism?**

After role-play, phase three will entail having the participants (if you can term those being coerced or even threatened at that, to participate) split into groups to tackle projects or deal with case studies. On paper, this is intended to build-up teamwork and ensure the kicking-in of lateral thinking processes to solve a problem. In practice, it will have the opposite effect. It will bring to the fore all the petty, personal problems you have with the members of your team ensuring that you hate the sight of each other at the end of it all. And the best part is, no one could

have come up with the right solution, pre-occupied as you were with fighting amongst yourselves! This is the 'divide-to-rule' policy of the manager and is meant to make his life simpler!

### **Feedback & Payback**

If you are getting depressed wondering how you can deal with a situation like this, relax! All is not lost. At the end of each training session you will be given a form to be filled wherein you can anonymously provide feedback on the session. Your manager or the person conducting the session has to submit this form to his higher-ups to keep them posted on the benefits of the activity. (This is probably the only part of the session that works practically in real-life, as it does theoretically on paper. So take advantage of it!) Use the opportunity to spew venom on the manager and deride the futility of the entire exercise. This will ensure that the higher-ups will think twice before giving him another opportunity to conduct a new training session.

But ensure that you don't overdo the cribbing. For who knows? The higher-ups might just rely on the feedback to boot the manager and they might simply pick one of you for promotion to fill his post. In which case, you just might be offered the distasteful job of conducting the next training session!

Although many view employee training as a necessary evil and expense that must be tolerated, a well designed training program pays for itself and increases the bottom line. Such a program teaches new employees to "do it right the first time," thus minimizing down time, equipment damage, and personal injury while maximizing productivity and profits. A training program as recommended in this web site ensures consistency of training and provides a means to objectively measure employee performance as training progresses. And, the best news is that a quality job-task-training program doesn't have to cost an arm and leg to design, develop, implement, and maintain!

There are several good models for developing training and this site does not attempt to introduce a new model or endorse any particular model here. It does, however, offer suggestions relating to the three essential and critical areas of any model:

1. Designing and developing materials used in the program
2. Implementing the program (using the materials to train new employees)
3. Maintaining the program so that training materials are always correct and reflect the latest changes in production processes. This also includes upgrading the training for "already trained" employees when production process changes are implemented.

Types of courses, or course delivery systems, most often associated with job-task training include:

- Lecture and lecture/lab
- Self-paced instruction, including print-based self-study, web based training (WBT), and computer based training (CBT)
- Structured on-job-training (OJT).

### **This site has four categories of Tips:**

1. General Tips (for all Training)

2. Tips for Lecture and Self-Paced Instruction
3. Tips for Computer Based and Web Based Training
4. Tips for structured OJT

To view the tips in sequence, simply scroll down or use the Table of Contents to go directly to the category of your choice. Suggestion: Don't skip "General Tips."

I am in business to provide help to businesses in their job-task training design and development endeavors. I invite you to click on "Services Offered" on the left side of your screen.

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## General Tips (1-9)

**Tip 1:** Don't be too quick to select course delivery mode.

Don't jump to the decision on course delivery medium until you have complete and accurate definitions of three things:

- What the learner must be able to do at the conclusion of the training (performance objectives - obtained during task analysis).
- What the learner must know to be able to meet the performance objectives. (identified during task analysis)
- What the learner already knows and can already do before the training begins (audience analysis).

For instance, if the worker must be able to operate a certain piece of equipment, then structured OJT or lecture/lab would be reasonable delivery systems, at least for the final part, of the worker's training. Lecture by itself, print-based, or computer based training would fall far short. In short, select the delivery medium that permits adequate testing of the performance you expect of the learner at the conclusion of the course or training module. For many job-tasks the only way to determine if the worker can actually perform the tasks in the job setting is to observe the performance, on the job. For that reason, structured OJT becomes a logical choice for at least part, if not all, of the worker's training. For knowledge level skills that support task performance, pre-requisite training delivered by lecture, lecture/lab, print-based self-study, or CBT may, in some circumstances, be practicable. In other circumstances, it may be more prudent for workers to gain the required knowledge, at the job-workplace while actually learning to perform the task. This is addressed further in the tip on Task Analysis.

**Tip 2:** Document the Audience Analysis and make it a part of the training design documentation.

When doing an audience analysis, concentrate on the characteristics of the new-hire for the job, but don't completely ignore the workers who are currently performing the job. In many cases, job processes are simplified over the years and the incoming skill requirements for new-hire change accordingly. Failure to look closely at the current new-hire audience can result in a program that works well when tested on existing workers but falls flat on its face with new-hires.

To conduct the audience analysis for a new-employee training program start by examining the skills or experiences mandated

by the human resource department for the job. However, investigate carefully to ensure that what is documented as hiring practices, and actual hiring practices are the same. In some cases, documented hiring criteria simply cannot be met due to a tight labor market. Design training programs based on actuality and not on good intentions!

In many businesses, hiring practices seem to have a habit of changing over the years. And those changes can show up in training programs by lengthening the time required for a new worker to complete training. If, after a few years, the time required for new learners to become productive seems to lengthen, check the audience characteristics at that time against the audience analysis you originally documented to make sure that the original audience assumptions are still valid. If the audience changes, training will have to be revised or altered accordingly.

**Tip 3:** Make sure the Task Analysis is complete and accurate.

Simply stated, a task analysis is determining and listing all of the tasks performed by workers in the process of performing the job for which they were hired.

An accurate and complete task analysis is, in my estimation, the key to effective and efficient training. Weaknesses in the task analysis can result in wasted time, wasted money, and poor worker performance. Task analysis is not the place to cut corners! Training programs that fail, usually have roots in erroneous or "fuzzily-worded" tasks and performance standards.

Tons of paper have been devoted to task analysis methodologies, and I won't try to duplicate those writings here. I would suggest, however that the general areas of responsibilities (duties) for a job be defined first and the tasks comprising each duty be developed next.

For some jobs, it makes more sense for a new worker to be trained and become proficient in one duty and then move to the next. In other jobs, a new worker might have to learn the tasks associated with multiple duties simultaneously.

Be consistent with your working definition of the word "task" and how you articulate task statements. For example,

- Tasks are usually considered meaningful units of work for which an employer is willing to pay.
- Tasks have beginning and ending points; for continuous process tasks, this might be the beginning or ending of a shift.
- Tasks are independent of each other, can usually be observed, and the task or its results can always be measured.

For instance, changing the oil in an automobile can be considered a task. However, draining the old oil is not a task because it is part of the task of changing the oil and is not therefore done independently.

When doing the task analysis:

- Articulate all task statements with short sentences (usually two to seven words) that succinctly and accurately describes the observable, measurable performance, for example, "Produce widgets" or "Perform monthly maintenance."
- Don't include references to knowledge, training, skills, or attitudes in the task statement itself.

- Don't include modifiers unless absolutely necessary to ensure universal understanding. For instance the second example "perform monthly maintenance" contains the modifier "monthly." This would be appropriate in a situation where there might be multiple maintenance schedules with "monthly" being one of those.
- For each task, develop as many statements of performance standards as necessary to explicitly describe the "yardstick" that an observer must use to determine if the task has been performed to the standards set by the company. Accurate statements of performance standards, including references to safety procedures, ensure that the same yardstick measures all workers. Don't use subjective terms such as correctly, in a timely manner, and appropriately that may be interpreted one way by one person and another way by someone else. This eliminates potential inconsistencies in training and worker claims of unfair evaluation.

When you think you have all of the performance standards listed for a task, ask yourself (or a subject matter expert) this simple question: "If the worker performs this particular task and meets all of these standards, do we know that that task has been done correctly?" If the phrase "yeah, but" comes up in answer to that question, then the performance standards are not complete! Don't stop until the answer is a unequivocal "yes."

After you are sure that the list of performance standards for each task is complete, ask the following question for each performance statement: "Is there any logical way that this statement could be interpreted one way by one person and another way by another person?" If you get any answer other than a solid "no," the standard of performance needs tweaking at best and a major overhaul at worst. Quality statements of performance standards are vital in ensuring consistency of training and evaluation.

- Develop a list of any particular safety precautions or procedures associated with the performance of the task to ensure that safety is included, in context, throughout the training program. Safety precautions should also be automatically included in the performance standards of respective tasks to ensure that everyone knows how to perform the task safely as well as efficiently.
- Develop a list of condition statements that describe the setting for either teaching or evaluating performance and include safety equipment, tools, materials, processing-equipment, and supplies required for the task. Condition statements serve several purposes. In the structured OJT environment, they remind worker/trainers to make sure that all of the conditions are ready before teaching or evaluating the task.

#### **Rank each task as to:**

8. How difficult it is to learn
9. How frequently it is performed
10. How critical it is that the task be performed correctly (to the performance standards)

Use these rankings to identify where job aids or refresher training might be needed. These rankings will also help match

development efforts to the real-world needs of the business. Another benefit might be a clue to the sequence of content for training, with simpler, non-critical tasks being taught before more complex and critical ones. However, keep in mind that in some structured OJT environments, training must follow the sequence dictated by the real-time events on the production floor.

- For each task, list the skills and knowledge that a worker must have before starting to learn how to perform the task in a hands-on laboratory or on-job environment (prerequisite skills and knowledge). This information, in conjunction with the knowledge/skill information identified in the audience analysis dictates the learning experiences required before the worker can begin hands-on laboratory or workplace learning for this particular task.

**Tip 4:** Be specific when defining prerequisite skills and knowledge.

In many programs, prerequisite skills and knowledge are defined in such ambiguous terms or at such a high level that the prerequisite training developed (or purchased) is far more than is needed or prudent. Personal experience: after closely examining one prerequisite knowledge course that resulted from such ambiguity, one training manager exclaimed, "my goodness, we should be developing maintenance people, not brain surgeons!"

Ask the question, over and over, must this knowledge be gained before "hands-on" or can it be incorporated with hands-on learning. Where possible, lean heavily toward incorporating knowledge with hands on. In many cases, knowledge courses must be scheduled administered so far ahead of hands-on training that content is forgotten by the time it's applied. Although my purpose here is not to reinvent nor dwell on learning theories, keep in mind that knowledge is retained when it is applied. If you learn a set of facts today but do not use those facts for a month or even a week, from now, they probably forgotten by the time you need them!

**Tip 5:** Document course maintenance plans early in the design process.

In most businesses, continual process improvement is prerequisite to being in business tomorrow! Process improvement means that tasks, as well as task performance standards, must also change. These changes arbitrarily dictate corresponding changes to training.

A company's operating procedures, their training program, and the way they actually do things must be absolutely congruent or the training program has no credibility in the eyes of employees and trainees. In companies where absolute congruence is not maintained, training is considered a joke (and a rather expensive one at that) by most employees!

The following items are among the things that I recommend addressing when developing plans for training-program maintenance. While not a complete list of things you may wish to consider, it serves as a good starting point.

- Who, or what department will be charged with the responsibility for training material maintenance? Will that department be a keystroking function that responds to input

from someone else, or will they be charged with making content-type decisions?

- How will changes to the production process be communicated to those charged with course maintenance?
- Who will make the actual changes to the wording in existing material?
- Who will have review and approval rights for alterations to the training program? (Safety Department? Environmental Impact Department? Other departments?)
- When anyone proposes a change, how and to whom will that change be submitted, and who must approve and initiate the change?
- How will proposed changes be circulated to those who must review and approve?
- What resources such as computers, software, and personnel are required to maintain the training program? And where will those resources come from?
- What plans will be implemented to keep the training program lock-stepped with operating procedures in a controlled-document environment?

**Tip 6:** Make decisions, in the design phase, concerning document control.

If your company's operating procedures are controlled documents, the company will have to decide if trainee/trainer guides should be controlled documentation and how to implement and maintain control on these documents.

**Tip 7:** Plan, in the design phase, how to track training and certification.

This tracking system must be able to accommodate "update" training when production processes change. For companies that use standard operating procedures that are regularly revised, the tracking system must be able to tie task training to specific revision levels of operating procedures.

**Tip 8:** Plan how to handle training and/or certification of existing skilled workers.

Develop a strategy for how to handle employees who have been around for some time and are already performing the job. Do you "grandfather" all existing employees? Or do you force them to be re-trained? Or do you require them to pass a task evaluation? The question of how to handle existing employees must be addressed early on to avoid serious personnel and attitude problems in your new training program. A word of caution: Beware, you can't bypass this one and it can be a barrel of snakes!

**Tip 9:** Continually monitor training quality.

Establish and maintain a system of collecting data including trainee reaction, training times required, training efficiency, and training consistency monitor the training effort and detect any slippage in training quality. The longer the program is in place the more this becomes an important issue. Left unmonitored, I can just about guarantee quality slippage.

### Summary of General Tips

(Click to review entire tip.)

**Tip 1:** Don't be too quick to select course delivery mode.

**Tip 2:** Document the Audience Analysis and make it a part of the training design documentation.

**Tip 3:** Make sure the Task Analysis is complete and accurate.

**Tip 4:** Be specific when defining prerequisite skills and knowledge.

**Tip 5:** Document course maintenance plans early in the design process.

**Tip 6:** Make decisions, in the design phase, concerning document control.

**Tip 7:** Plan how to track training and certification.

**Tip 8:** Plan how to handle training and/or certification of existing skilled workers.

**Tip 9:** Continually monitor training quality.

### End of General Tips

## Tips - Lecture & Self-Paced Courses(10-17)

**Note:** All General Tips (1-9) apply to lecture and self-paced courses.

**Tip 10:** Explain the relevance of each course segment, at the beginning of the segment.

Explain how the information in this section is necessary to perform the task or tasks for which the learner is going to be held accountable. In the job-task training arena, this is probably the most effective way to satisfy Gagne's first condition of learning, Gain attention. Studies indicate that when the relevance of information is known prior to exposure to that information, retention is higher.

**Tip 11:** Always state (or write) objectives in the terms that the learner will be measured in the training environment.

For instance, a properly worded objective in a self-study, CBT, or even a lecture course might read something like "Match a column of words commonly associated with the *framus* to their respective definitions."

An example of an improperly worded objective statement is "this lesson will teach you the definitions of the words associated with a *framus*." Unfortunately this type of wording is all too often used when writing objectives. Statements worded like this may be the goal that the designer had when the material was written but from a learner's viewpoint, it is simply not an objective.

**Tip 12:** Disclose the respective objective(s) at the beginning of course segments (preferably immediately following the explanation of relevance).

Let learners know exactly what they will be expected to do at the end of the segment or training session. This enables learners to start preparing to meet that objective from the beginning of the segment.

**Tip 13:** Maintain congruence between objectives and job-tasks. When defining the objectives for any course, ask yourself, is this objective parallel to job requirements, and does it really support worker performance on the job? For instance, let's suppose a learner is being trained to operate and maintain a machine we'll call a "*framus*." When the *framus* breaks or does something wrong, the worker is supposed to follow a written procedure to

isolate the failing electrical circuit card and then replace the entire card. An objective (with supporting content) that requires the learner to identify the number of circuit chips on each circuit card may be a great exercise in trivia but is not congruent with the job that person is expected to do at the job-site. Nor does the objective contribute to the performance of job-tasks in any way. Failure to maintain congruence between job-tasks and training objectives invites the design and development of long courses that often fall short in producing required results.

**Tip 14:** Maintain congruence among content, learner interactions, and objectives

Make sure that the content of learning events, practice interventions, tests and objectives are all congruent. Developing content, practice interactions, or test questions that dwell on identifying the types of circuit chips on a circuit card when that information is not necessary to meet the stated objective is a waste of time, both from a design and development viewpoint, and also from a learner's viewpoint.

**Tip 15:** Restrict content to that required to meet objectives and perform job-tasks.

It seems to be a natural phenomenon that many (maybe most) courses seem to have lots of information in them that is really not needed to support the objectives and tasks. If you don't need it, I'd suggest taking it out.

Sometimes (many times?) designers or developers are pressured to "Put this in - they need it!" If you find yourself in an argument with a subject matter expert (or anyone else) about whether or not you should take something out, be careful. Don't be too eager to win the argument. Ask the person, who insists that the information be included, what would happen if learners were not given that information. What would they not be able to do that they should, or what would they do that they should not? If the answer to both parts of that question is "nothing," then the content should go. Any other answer to that question may lead you to a redefinition of a task or a performance standard for some task that really should have been there all along, and the content stays. Notice verb in the question is "do;" it is not "know." That's not an accident on my part. Keep your focus on performance.

**Tip 16:** Don't mix and match terms

In other words don't call a device a *framus* on one page (screen, slide, or transparency) and a *dealybop* on the next - unless you specifically tell the learner that *dealybop* is another name for *framus* - or something like that. Very often in business environments there are many terms used to describe the same object or action. Interspersing new or different terms without properly introducing them degrades the training and gives some learners bad headaches. (It also, justifiably, wreaks havoc with "happy face" evaluation sheets!)

**Tip 17:** Integrate Job Aids and other support tools into the training.

Job aids and support tools including documentation and electronic performance support systems are put in place for several reasons. Among the reasons is to reduce the time spent on training someone to perform certain tasks. It's somewhat surprising that many training designers seem to shy away from

incorporating those job aids in applicable training and "hand those job aids out at the end of the class (or course)." Most of the time the excuse is "but I want them to really understand it." OK, think that through - maybe you have a point in your particular circumstance. Maybe they do need more detail. (I'd suggest you review the tip on restricting content.) But before you declare total victory on this one, keep in mind a couple of points. Some job aids, while being simply great, are not intuitive as to exactly how and when to use them. When those job aids are not included in the training, they can go unused thus eliminating the savings and efficiencies that justified their development. Don't fail to integrate teaching job aids or performance-support-tools and provide practice in using them.

### Summary of Tips for Lecture and Self-Paced Courses

(Click to review entire tip.)

- Tip 10:** Explain the relevance of each course segment, at the beginning of the segment.
- Tip 11:** Always state (or write) objectives in the terms that the learner will be measured in the training environment.
- Tip 12:** Disclose the respective objective(s) at the beginning segments (preferably immediately following the explanation of relevance).
- Tip 13:** Maintain congruence between objectives and job-tasks.
- Tip 14:** Maintain congruence among content, learner interactions, and objectives
- Tip 15:** Restrict content to that required to meet objectives and perform job-tasks.
- Tip 16:** Don't mix and match terms
- Tip 17:** Integrate Job Aids and other support tools into the training.

### End of Tips for Lecture and Self-Paced Courses

#### Tips - WBT and CBT (18-28)

**Note:** All General Tips (1-9) as well as the Tips for Lecture and Self-Paced Courses (10-17) apply to CBT courses.

**Tip 18:** Strive for stand-alone content, screen by screen.

Try to design screen content to avoid having to use several screens to present text on a single concept or thought. Many developers write material for screen presentation just as they would for printed material. While the writing effort, in this case is the same, the reading effort is altogether different.

In books, readers can easily scan previously read text on the page and even flip backwards several pages without a major break in concentration. With CBT screens, this becomes, for lack of more descriptive terms, a real pain in the neck! Although providing an easy means for "backing up" is essential to any CBT course, writing large amounts of text that spread the content of a single subject over many screens is simply not a good idea. Reading screen text (especially large amounts of it) is more difficult, for some people, than reading printed material, especially for those who wear bifocals. Minimize it where you can.

A good example of what not to do is this particular web site. I've presented many ideas, or tips, on this site and they are all in text. If you have tried to back up to review an idea or tip and



then tried to get back to your original place, you probably have some idea of what I'm talking about. Where your course-media needs include sizable amounts of text, consider printed matter as supplementary material for the course.

**Tip 19:** Design course navigation so that it is as intuitive as you can make it.

Keep this in mind — each time learners must think about what they have to do next to move ahead in the course, they break concentration with content. Make navigation and the structure of the course as transparent as possible to the learner. For instance, such cues as “click NEXT to continue” are great if you have a button labeled NEXT. That same cue is questionable if your “next button” has only a right-pointing arrow.

**Tip 20:** Where possible, avoid automatically timed screen changes, unless those changes are timed to follow an audio script.

An example of what-not-to-do is a silent screen where the designer wants to reveal points one at a time and chooses to do so with automatically timed changes. There is absolutely no way to know the reading speed of the learner. Here the learner is, midway on the first point and you pop on the second point and distract attention. But that's not enough - the learner is midway through the second point and here comes the third or maybe the fourth point popping on. Or even worse, situations that prompt learner's to say to themselves, “this thing is as slow as molasses in January!”

Automatically timed screen changes can disrupt concentration. Don't do it. Give the learner control over screen changes and presentation rate.

**Tip 21:** Provide clues so that the learner will have some idea of what will happen when they do something.

For example telling learners such things as “Click Next to continue” is great. But how about the situation where the next screen is the first screen of test? In this situation, directions such as “Click Next to continue to the section test” at least prepares the learner for what will happen next. Having surprises when taking CBT courses can result in learner anxiety. Anxiety is no friend of concentration. Consider potential learner anxiety with respect to the course itself and design to reduce that type of anxiety as much as possible. (Zero is a good and reasonable goal!)

**Tip 22:** Select screen and text colors for a reason, and use those colors consistently throughout the course.

Much has been written about using colors in CBT and I won't even attempt to cover all of that material here, there is simply too much. Just be sure to devote sufficient attention to color choices when designing content for CBT or WBT.

**Tip 23:** When applicable, display the screen's relative location in the learning event so the learner has an idea of “how much more before I'm finished with this section?”

Usually in either a CBT or WBT environment, learners may, at any time, look for answers to questions such as “can I finish this assignment or lesson before lunch?” In cases, where learners know they are one or two screens from the end of a learning event, they may decide to complete the lesson before

lunch. If, on the other hand, they know they have been on the lesson for a half an hour and are only half-way through the learning event, they may decide to sign off the course and pick up where they left off - after lunch. Unless you provide some guidance as to where learners are within the learning event, decisions of this sort are essentially made by a flip of the coin and may not be in the best interest of either the learner or the learning event. I believe that continually having to make coin-flip decisions can produce stress which is no friend of learning.

**Tip 24:** Provide “resume” function so that learners can restart from where they were when they signed off.

Not having a restart built into learning events means that learners must essentially “start over” when the learning event is interrupted regardless of the cause of that interruption. While lost time is an obvious result, there also can be a degradation of attitude and thus a secondary loss in learning.

**Tip 25:** Don't let the aesthetics of screen design compete with the message of the learning event.

A fancy border and background may look great at a distance but make text harder to read and small pictures more difficult to see. Don't let a zeal to produce Rembrandts get in the way of good instructional material. If you must rely on “bells and whistles” to maintain interest in your course, it could be a sign that there are severe problems with the course itself. Certainly, on the other hand, the lack of attention to screen aesthetics can very well impede learning.

**Tip 26:** Be cautious of humor.

Most humor is regional in nature. Keep in mind that what plays well in one region may be completely offensive in another. There is a fine line between humor and sarcasm. One elicits a smile, the other - anger. In most cases, we can detect the difference because of the body language, facial expression, or vocal inflection of the communicator. In a CBT environment, these distinguishing characteristics are usually not available. As a result, a comment intended as humor can be interpreted as sarcasm resulting in a combative attitude that can get in the way of learning. Most folks do not do all that well at learning when they're upset or angry. Don't let your course get between your learner and the content!

**Tip 27:** Provide easy access to a glossary throughout the learning event where applicable.

Will your CBT learning event introduce terms that may be new or have new definitions to all or part of your audience? If so, consider using hyperlinks so that learners can display definitions of new terms when necessary. In cases where it is reasonable to expect a term to be new to your entire audience, define and explain the term when you first use it. However, in cases where terms are new only to part of your audience, consider using a hyperlink that pops up a definition only when the term is clicked.

**Tip 28:** Consider DazzlerMax as an authoring system. If you have the opportunity to select an authoring system, consider using DazzlerMax 5. It's powerful, it's easy to use, and you can download it for a 30 day free trial from <http://www.dazzler.net>. Material produced with DazzlerMax may be packaged for distribution via CD, the Internet, or a company

intranet. All materials produced with DazzlerMax may be distributed royalty free. For a brief demo of the kinds of things that DazzlerMax can do, click here. (Please be patient, it may take 15 to 30 seconds to download.)

If you decide to take a look at DazzlerMax, be sure to also download the Quick Start training program. Quick Start is designed to show you enough about the program so you can make a purchase decision. If you live in North America, DazzlerMax Advanced Training is normally included for those who elect to purchase DazzlerMax.

### Summary of Tips for CBT

(Click to review entire tip.)

**Tip 18:** Strive for stand-alone content, screen by screen.

**Tip 19:** Design course navigation so that it is as intuitive as you can make it.

**Tip 20:** Where possible, avoid automatically timed screen changes, unless those changes are timed to follow an audio script.

**Tip 21:** Provide clues so that the learner will have some idea of what will happen when they do something.

**Tip 22:** Select screen and text colors for a reason, and use those colors consistently throughout the course.

**Tip 23:** Display the screen's relative location in the learning event

**Tip 24:** Provide "resume" function

**Tip 25:** Don't let screen design compete with learning

**Tip 26:** Be cautious of humor

**Tip 27:** Provide easy access to a glossary throughout the learning event where applicable

**Tip 28:** Consider DazzlerMax as an authoring system.

### End of Tips for CBT

## Tips - Structured OJT (29-38)

**Note:** All General Tips (1-9) apply to Structured OJT.

**Tip 29: Consider using structured OJT as the keystone of any job-task-training program,**

While certainly not a universal cure-all, one of the most cost-effective ways to provide job-task training for new employees is through structured on-job-training (structured OJT).

For many industrial jobs, a well designed, implemented, and maintained structured OJT program is the most efficient and effective way to train new employees. Examples are jobs where employees perform repeatable tasks and include the jobs of manufacturing and packaging operators, food handlers, and many, many others.

As defined in this web site, and simply stated, structured OJT is on-job-training where an "already experienced and successful employee" uses a company-standardized-checklist of tasks and performance criteria to train and certify new employees. Be aware that in this web site, the term "certification" refers to an in-house, company certification, and not an industry wide certification.

The usual alternative to structured OJT is sometimes referred to as "Follow-Joe Training." In essence, "Follow-Joe Training"

consists of a new employee simply being told to "Follow Joe and learn to do what he does." The next employee may be assigned to Joe, or maybe Sam, Susie, or who knows. Without structure, there is zero assurance that training will be consistent, effective, efficient, or even adequate.

With structured OJT, on the other hand, any experienced employee given minimal "trainer training" can train new employees. In a well-implemented and monitored structured OJT program, all new employees receive consistent, effective, and efficient training regardless of the trainer assigned to them.

**Tip 30:** Document structured OJT implementation plans in the design phase.

A well thought out and developed plan, poorly executed, is practically worthless! This is especially true with training programs. You will probably find that your plans associated with implementation and maintenance will dictate how you handle some of the details in the design of the training material itself.

After the trainee and trainer guides, along with the signoff sheet have been developed, the next step is to implement the program and actually use it to certify new employees.

In well-implemented programs, several areas must be addressed. Each organization must decide how they will handle the individual areas. While the tips that follow may not be complete, it represents some of the major items that must be addressed. Organizations implementing a structured OJT program must decide other areas that must be addressed and prioritize the resulting list.

**Tip 31:** Decide if structured OJT trainers are going to be expert production workers first and trainers second, or if, conversely, they should be trainers first and expert production workers second.

The decision must be made at some point (the earlier in the design phase, the better) about whether the people who train new employees at their work station should be production workers who normally do or have done that job, or people assigned to the training function. This is not an easy decision. There are pros and cons for either decision.

On one side, people formally trained and educated for the roll of trainer usually do a better than average in communicating. In addition, many production workers simply don't want to be bothered with having to train new folks. Production management is often unwilling or reluctant to authorize any loss of the skilled workers productivity due to that worker having to train a new-hire. (Don't let anybody kid anybody. There will be a loss of efficiency for production workers during the time they are training a new-hire. Face it, and deal with it; don't try to sell structured OJT as a painless cure-all.) In many cases, production workers are faced with the reality that there are no particular rewards, only grief, for training someone else. (In all too many cases, having training responsibilities in addition to normal production responsibilities is more of a punishment than anything else. This is an extremely bad situation, and certainly does not have to be true. Most companies who use expert workers as trainers in a successful structured OJT program provide extra compensation or rewards for training responsibilities.)

So far I've painted the case for structured OJT trainers to be members of a training department. Well, that's not a complete rose-bed either. In many jobs, the only way to stay proficient and keep up with changes is to perform that job every day. And besides, the skills required to teach some to do something in a job-setting on a one-on-one basis does not call for normally accepted instructor-like skills. This clearly tips the scales toward having expert production workers conduct structured OJT.

I recommend that structured OJT be conducted by expert production workers who are adequately prepared to do so.

**Tip 32:** Develop simple, but complete trainee and trainer guides.

To keep things simple, trainer and trainee guides should be, for the most part, identical. They should both list all of the tasks addressed by the structured OJT program. Each "task" should normally include the following four items:

- The task statement itself
- Statements of performance standards
- Safety precautions or procedures
- Conditions Statements
- For further explanation of each of these four terms, see the tip under "general tips" that address task analysis.

Repeat these four items for each job-task addressed by the training program and include them in both the trainer and trainee guides. Providing this information to trainees helps them set performance goals, early on, and continually answers for them the question, "What do you expect of me?"

An additional item I recommend including for each task in the trainer guide is a statement, or paragraph, listing areas to cover, or stress, when teaching the task. This is also a good place for any other task-related suggestions you might want to add. Corresponding items can also be placed in the trainee's guide to help them concentrate on the same salient points as the trainer.

**Tip 33:** Develop task sign-off sheets to record achievement for each trainee.

Don't underestimate how long it will take to do this, it takes longer than you might think.

As part of a structured OJT program, someone must design and develop the Task sign-off record. The task sign-off record provides a place for the trainer to date and sign-off each task when the trainee is observed performing the task, without assistance, while meeting all of the performance standards listed for the task. Task sign-off records may be integrated in either the trainee or trainer guide, or they may be on a separate sheet that simply lists the task statements and refers to the expanded task list in the trainer and trainee guides. Another option is to make each task, including its sign-off, a separate document.

Companies may also elect to have a second person evaluate trainees before sign-off is complete. Or, perhaps the procedure might include an additional review by management. Another option is to have sign-off records designed such that a separate sign-off record is used each time a trainee goes for "evaluation." Unsuccessful attempts will result in a recorded "failure" with the reason, or reasons, for failure listed by the evaluator. The exact design of the sign-off records as well as the nature of the sign-

off process itself should be given extremely careful consideration to eliminate exposures to favoritism, discrimination, unfair treatment, or false claims there of.

The evaluation process must, as well as the entire training process, be a manageable situation for the company, and that's one of the places where the difficulty comes into play. Deciding exactly who is going to sign the signoff sheets should be an extremely well researched and discussed decision. Should it be one person for each task? Two for each task? Should management sign off each task?

Every one of these possibilities could be the right choice for the right company. Here are a couple of things to consider when making these decisions:

The more the trainee is "tested," the more cumbersome the entire training process becomes. If left unchecked, skilled production workers, along with first line supervision can spend all their time evaluating new employees and production can plummet.

On the other hand, without "checks on the checker" a business is inviting eventual erosion of training quality. As one crusty, executive-level manager who I knew once said, "People do what you inspect, not what you expect!" That may be an overly cynical way to feel, but the older I get, the more I feel that way myself. You do what you think is best.

**Tip 34:** Identify the tasks and performance standards for the roll of OJT trainer for your organization.

People must be selected and adequately trained to perform the role of trainer. This means that tasks associated with the role of trainer, along with standards of performance for that role, must also be identified and documented. There are several companies offering training for non-trainers on how to train other people.

**Tip 35:** Consider requiring workers selected as trainers to demonstrate that they can perform the tasks associated with the roll of trainer and be company-certified as trainers.

Assuming you go outside your organization for help in training your trainers to train, they will probably be given some sort of completion certificate and maybe even a certification. However, that certification, although applying to the program they attended, may not address all of the things your company expects of its trainers. Consider establishing your own in-house, trainer certification program.

**Tip 36:** Consider requiring your trainers to be company-certified in the job they are teaching.

How to do this for the first wave of trainers will present some interesting situations that must be wrestled with and solved before trainer selection. Will Trainers certify each other? Will management do this? Regardless of who does it, I recommend that someone evaluate the job-task performance of prospective trainers and use the same criteria for certifying them that will eventually be used to certify new employees. Trainers should have a completed sign-off record in their training files before they ever attempt to train and certify others.

**Tip 37:** Consider assigning three areas of responsibility to structured OJT trainers.

As a trainer, a worker should be expected to perform three

primary functions if the training program is to be an ongoing success.

- Teach new employees how to perform all tasks in the training program. Essentially, the teaching process for any task consists of:
  1. Briefly explaining what the task is and when and why it is must be performed. Where applicable, the trainer must explain the impact of failing to perform the task according to the standards listed
  2. Demonstrating how to perform the task according to the listed standards of performance
  3. Allowing trainees to practice performing the task under trainer supervision until both the trainer and trainee are confident that the trainee can consistently perform the task and is ready for formal evaluation.
- Evaluate trainee performance and sign-off each task when trainees perform the task without assistance while meeting all of the standards of performance.
- Report all training material deficiencies to those assigned the responsibility of course maintenance so that training materials are always up to date and complete. I wish I could tell you how to develop a perfect training program, first crack out of the box. The truth of the matter is that no matter how good you think the program is, it will never be perfect. Although excellence should always be a goal, the real world of business needs and budgets will most likely not permit the endless days and months required for true perfection on the opening day of training. Having a workable plan for recognizing and quickly responding to problems is usually a workable strategy for maintaining quality of training.

One note about the trainer's responsibility for keeping the training materials up to date: This aspect of a trainer's responsibility must be monitored and enforced. There will be a temptation for trainers to add "their own" improvements to the training process. In each case, one of two conditions exists. Either the "improvement" is not really an improvement and no one should be doing it, or it is a true improvement and all trainers should be doing it. The only way to ensure and maintain consistency in training is to have all trainers accept their responsibility for keeping the training materials up to date. Perhaps an award or recognition system for training program improvements might help in this area.

**Tip 38:** Plan how to compensate workers who are given additional responsibilities of training and evaluation.

This issue must be addressed, head-on, by management and resolved.

Arguably, trainers and the design of the training program itself are the first and second most important aspects of any structured OJT program. When workers assigned the role of trainer do not diligently fulfill that roll, the training program falls apart at the seams. There are many reasons that any worker, even one assigned “trainer” duties, might not perform as expected and desired. Among these reasons are:

- There is no positive consequence for performance. Why Employees Don't Do What They're Supposed to Do, by

Ferdinand F. Fournies, published by Liberty Hall Press explores this in depth. I recommend the book.

- Performance can actually be not only non-rewarding, it can also be punishing. Analyzing Performance Problems by Robert F. Mager and Peter Pipe, published by Lake Publishing Company elaborates on this in detail. I recommend the book.

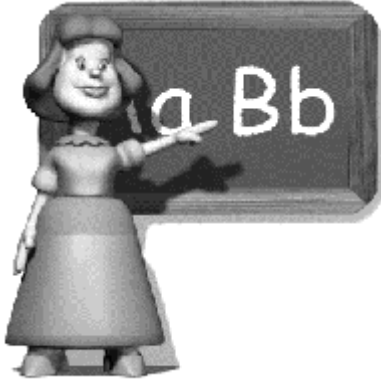
### Notes -

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## LESSON 21

### BASIC TEACHING AND PRESENTATION SKILLS

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#### Basic Teaching Skills

There are some basic teaching skills that are used by all instructors and the following is one that has been specifically adapted for computer training.

- Make sure you are well prepared for the class. Don't wait until you are covering a class exercise to find problems. Test the class exercises yourself before the class. Keep on schedule with what you should be teaching and when. Pace yourself so you don't run out of time when you should be covering valuable information. You can also refer to the section in this course manual about the 5 Steps to Teaching a Class to make sure you are really ready to teach.
- Cover the logistics of the training event in the beginning of the class. It's nice to put your name, the name of the class, and a brief schedule with break times for the day on the board where all participants can see it. A phone number where participants can be contacted is also helpful for those who may need to still be "on call" when in training, or for parents who need to leave an emergency number for children. Give instructions to the water fountains or snacks, and point out the location of the nearest restrooms.
- Take a few minutes up front to introduce yourself and the other participants by telling them the following about yourself and asking them to do the same:
  - their name
  - what they do (job functions, not job title)
  - any previous experience with the training material
  - what their expectations are for the training event.

This is a good way to determine the comfort and experience level of your participants and how they might be using what they learn from you on their job. It is also a good way for the participants to get to know one another, to realize they might have some things in common and to develop group connections.

Once you have heard their expectations for the training event, cover the event objectives, or what they will learn in the class, with them so that any false expectations can be cleared up before the class is over and it's too late. If you notice any discrepancies with their expectations and the event objectives, take the time to address individual concerns before they become problems. Sometimes just telling participants that you will take time during breaks, after class or at the end of the course to address individual concerns will clear up any potential problems.

- Speak slowly and clearly. After the class starts, check to be sure that everyone can hear you.
- Tell them when you are going to demonstrate and when you want them to follow along with you. Usually, demonstrating and then giving them time to practice is the most effective teaching technique. A common method of gently forcing them to watch a demonstration instead of working along with you is to jokingly tell them you want them to either sit on their hands or fold them on their keyboards. Make sure everyone can see what you are demonstrating.
- Don't touch participant's keyboards. Instead, help them to solve their problems. Point out things on the screens such as error messages and tips in the status bar or pop-up boxes. Help them to recognize the visual cues on the screen rather than to take over their machine. Enable self-paced work by giving a clear cue when they can have time for individually performing a task or exercise. Reinforce this by telling them you will be walking around to offer individual help if it is needed and that they should signal to you if they need assistance.
- When demonstrating on a screen, keep menus pulled down for a long time so students can see menu items. Slow down the movement of the mouse and increase the size of the mouse pointer or change it to solid black to make it more visible.
- Use practical examples that relate to the job when explaining something new.
- Ask answerable questions
  - to encourage students to think about the material
  - to test how well students are absorbing and understanding material
- Speak to the participants, not the to the board or to your computer. Look up frequently and take a few minutes to walk about the classroom when lecturing.
- Be respectful to all participants regardless of age, status or current mood. Yes, this means be nice to the participant who might demonstrate some hostility. There is a reason for most participant anxiety and it usually has something to do with being there for the training. More information on dealing with participant anxiety can be found in the section

of this manual titled Anxiety and Classroom Management that starts on page 12.

- If a participant asks you a question you can't answer, tell them you don't know the answer and let them know that you will find the answer during break or lunch and get back to them. You can also encourage other participants to provide a solution.
- Repeat all participant questions so that everyone can hear, or demonstrate the answer for everyone in the class when a participant asks a question that others may be thinking about but are hesitant to ask.
- Be aware of your body language, voice modulation and eye contact. Smile, change the tone of your voice from time to time and provide appropriate gestures occasionally. Don't direct your eye contact to one side of the room or to one participant.
- Solicit feedback from the entire class during the class so you keep up a good pace. Simply ask how the pace is and if you need to speed up or slow down, or if you need to repeat any material. Do a learning or comprehension check at the end of each concept presented. Walk around to see the participants performance, don't wait for them to say, "Excuse me, could you come over here for a minute?" Keep a watch on participant facial expressions when lecturing or demonstrating to make sure that no one is getting lost or confused.

### How to Develop and Deliver Concepts

In conceptual learning, participants learn new skills when they are shown or told how to do something, rather than giving them the steps to perform a task, which is procedural learning. The advantage to conceptual learning over procedural learning is that the participant understands a concept that can be later applied to other tasks whereas a set of instructions might not apply exactly to another circumstance and can easily be forgotten. Remind the participants that understanding the concept is more important than memorizing a set of instructions or steps in a task.

Concepts can be built in such a way that enables participants to gain an understanding of new ideas. When developing and delivering concepts, you "tell them what you are about to tell them, tell them, and then tell them what you just told them". The steps to effective concept building are Setup, Delivery and Follow-up.

**Concept Setup** - Before you can teach new material, you need to provide a context in which the concept might be appropriate. You determine what historical or background information that is relevant to the concept you want to deliver. State the problem or task clearly, use analogies if possible, give examples of the task or problem, state a possible solution and tell why and then build a transition to your concept delivery.

For example, when teaching participants about troubleshooting a computer that constantly freezes, you might want to stress the importance of preventative maintenance. You might tell them that a computer whose hard drive is fragmented results in slower machine performance and file errors contribute to application errors and machines that freeze. You then tell them

that using ScanDisk and Defrag in Windows or Norton Disk Doctor and SpeedDisk in Mac OS is a good place to start troubleshooting. You have just effectively set up the concept you are about to deliver.

**Concept Delivery** - There are several techniques to delivering a concept; Clarify the problem or task again by restating the problem using analogies and examples and giving relevant historical or background information. Once you are done giving them the new material, reinforce it by doing a hands-on exercise with instructions for completing the task.

In keeping with the frozen computer example, tell them how the operating system writes data to a disk, how over time, bits and pieces of data and files get scattered about on the disk, making it more difficult for the operating system to retrieve data and hence the machine responds more slowly. Explain that once a machine is compromised by slow operating system performance, machine hangs are more likely and hence file structure errors that result from a machine freeze happen. Explain that file structure errors further result in more freezes and file corruption and so on. Then give the participants a step-by-step exercise using the operating system utilities that clean up the machine and prevent the machine freezes.

**Concept Follow-up** - Follow-up involves summarizing the concept to bring closure to the new material presented. If the concept you just delivered is used to build the next concept, be sure to enable a smooth transition from one concept to another by linking where appropriate. This allows participants to see that there is a relationship between one concept and another.

In our example of troubleshooting a freezing computer, the follow-up might include restating the need to do preventative maintenance with computers using operating system utilities so that file corruption does not result. Once operating system files are corrupted beyond repair by utilities, the only solution is to reinstall the operating system or in some cases to recopy good files from another machine. Drawing a link between preventative maintenance and operating system file corruption helps the participant to understand computers can freeze and what can be done. Less emphasis should be put on the steps to running the utilities and more on the concept.

### Exercise : Developing and Delivering Concepts

Refer to the instructions shown in the Appendix for Exercise 3. The instructor will break the class up into groups. The groups will be presented with concepts that might be taught in a computer class. As a group, decide how to develop and deliver each concept. At the end, each group will present the concept to the other groups.

### Solution : Developing and Delivering Concepts

As a group, use your knowledge of effective concept setup, delivery and follow-up to address the following learning situations. Each group will be assigned one learning situation and will work together to determine how to develop and deliver the concept to the rest of the class. You will need to choose one or two group members to deliver the concept for the other class participants.

1. You need to teach your users the difference between built in functions and manually constructed formulas in Excel. The

underlying concept here is the “order of operations” in mathematical calculations.

2. You are training a group of co-workers in Microsoft Word. You need to explain how to use the indent feature of Word to align text in paragraphs. The underlying concept here is moving users from using a typewriter spacebar and tab key to align text to a word processing application’s concept of the document ruler.
3. In teaching a group of users about operating systems, you need to explain what disk formatting is and why it is needed to save data to disks.
4. You must describe to participants the method of copying and pasting text from one application to another. The concept to focus on here is OLE (object linking and embedding) and transferring data from a source document to the clipboard and finally to a destination document.

### **Exercise : Explaining with Clarity**

Refer to the instructions shown in the Appendix for Exercise 4. This exercise is used to demonstrate some of the complexities involved in explaining a concept to class participants and to get you thinking about how important it is to not overlook the basics when explaining a concept, and also why it is important to test your exercises before holding the first class.

### **Solution : Explaining with Clarity**

This exercise is used to demonstrate some of the complexities involved in explaining a concept to class participants and to get you thinking about how important it is to not overlook the basics when explaining a concept.

1. The instructor breaks the class into small groups. Each group will need a piece of paper to write on and will need a volunteer to be a scribe for the rest of the group.
2. The instructor asks each group to collectively write a set of instructions for making a peanut butter and jelly sandwich. Make sure the instructions are very clear and will allow someone with no prior experience making a peanut butter and jelly sandwich to accomplish this task.
3. When the groups are finished writing the instructions, each group will take a turn in guiding the instructor through the process of making the sandwich.
4. Class discussion will follow the completion of the exercise. What did you learn from the exercise?

### **The Components of Presentation Skills**

There are 5 basic presentation skills that a trainer needs to understand to effectively present new material to participants. They are:

**Voice** - Speak in a clear, firm voice and vary your volume and pitch when you want to emphasize something. Make sure that all participants can hear you easily but be sure not to shout or talk so loud that you sound angry.

**Tone** - Many people confuse voice and tone. Tone is the ‘feeling’ that emanates from voice and mannerisms. A tone that is confident and warm, and not dry or ego-centric works well in projecting a comfortable feeling to your participants.

**Vocabulary** - Stay away from unfamiliar terms and jargon as much as possible unless you are sure that your audience will

understand. If you need to introduce technical terms and jargon, take the time to define them for your participants. Acronyms fall into this category. If you use them, make sure you tell the participants what the acronyms stand for.

**Humor** - A trainer with a good sense of humor can actually help to create a more relaxed atmosphere for the participants. Humor in teaching has been known to liven up boring material and help to diminish the traditional idea that the teacher is dominant and the participants are subordinate. Too much humor can be detrimental. You want the participants to know that you take your work seriously so they will too.

You should never resort to humor at the expense of any of the participants. Appropriate forms of humor in computer classes might be cartoons or illustrations with a computer-related theme, or some of your past experiences where you are the target for the punchline.

**Body Language** - It is a known fact that participants respond better to a trainer who is moderately active and moves around the room to connect with participants. The trainer who stands at the board or sits at their computer all day does nothing to present an image of comfort in the classroom. On the other hand, getting too close to a participant’s personal space is not good either. You might want to try teaching from the back of the room when participants are doing exercises so that you can readily see if anyone is having problems without making them draw attention to themselves. Questions such as “how is it going” as you approach a workstation prevents you from startling the participant.

### **Exercise : Presenting Information**

Refer to the instructions shown in the Appendix for Exercise 5. The purpose of this exercise is to utilize some of the 5 components of presentation skills in presenting information to class participants.

### **Solution : Presenting Information**

The purpose of this exercise is to utilize some of the 5 components of presentation skills in presenting information to class participants.

1. The instructor breaks the class into small groups. Each group needs to assign one person the task of acting as the “instructor”. The rest of the group members will act as “class participants”.
2. Each group “instructor” will be given a drawing that she or he will refer to but will not show the “class participants”. The drawing can be any combination of two or three simple geometric shapes. The object is for the “instructor” to use a variety of presentation skills to explain what the drawing looks like to the “class participants” without actually showing them the drawing.
3. The “class participants” will each create a document that represents what they think the “instructor’s” drawing looks like.
4. The class will share comments and observations about the exercise.

## Checklist For Effective Lecturing

### Be Prepared

- Outline clear objectives for your lecture. An objective should not be “to cover material”

An objective is a reason why the material is important.

- Develop an outline; create effective visuals for the main points.
- Limit the main points in a lecture to three to five.
- Do not use lecture time to reiterate readings. Refer to them and highlight key points.
- Plan for diverse learners-use verbal, visual, and physical (hands-on exercises, simulations) approaches.
- If you're nervous, write out the first two-three minutes of the lecture. That will carry you until you loosen up.

### Engage Your Audience

- Focus attention early on using a quote, a snappy visual, an anecdote, or other appropriate material relevant to the topic.
- Share your outline. Emphasize your objectives and key points in the beginning, as you get to them, and as a summary at the end.
- Integrate visuals, multi-media, discussion, and small group techniques.
- Link information to students' prior knowledge (i.e., common experiences or previous course work).
- Exhibit enthusiasm for the topic and information. Remember, you are modeling your discipline.
- Give students time to think, and genuine opportunities to respond.

### Get Feedback

- Observe students' non-verbal communication: note-taking, response to questions, eye contact, seating patterns, response to humor. Are they “with” you?
- Use the “minute paper” (or other assessment techniques) (you'll be in the company of some of the most respected professors of our day): ask students to respond in one or two sentences to the following questions:
  1. What stood out as most important in today's lecture?
  2. What are you confused about?

Do this every lecture — it will take you 15 minutes to review the sheets. You'll learn an enormous amount.

- Give quizzes periodically on lecture objectives, not obscure material. Are they getting it? . Conduct mid-term teaching evaluations or simply ask the students for suggestions/ comments

### “Problem” Students

A sensitive approach to your work with your students can save you from many problems. If you phrase questions and criticism carefully, you can generally avoid defensive or hostile responses. If you are supportive, encouraging, and respectful of student ideas in class, then you can correct wrong answers, point out feeble arguments, or highlight weak points in a positive manner without discouraging your students. Rather than asking

what is wrong with a written paragraph or a problem solution, ask how it could be improved. Instead of asking what the weak point of an argument is, ask how well it applies to or uses the material for the session. Rather than dismissing an idea immediately, ask the student to clarify it using the material for the session. Don't, on the other hand, respond to student questions with “good point” when the idea was in fact poorly presented. Always show students the courtesy of attending to their answers when they offer an idea; don't be writing on the blackboard or scribbling on a note pad.

You are also more likely to work smoothly with your students if you resolve for yourself feelings that you may have about your authority as a teacher. Students are confused by and often alienated from a teacher who alternately acts as a friend or peer, then as a stem authority figure. You will also want to be careful about teasing or sarcastic humor since these are all too easily misinterpreted.

However careful you are, you may still run into some students who present problems. A few recurrent types-and ways to work with them-are discussed below.

### The Arguer

If a student insists that you are not “allowing him his opinion” (or her her opinion) when you disagree with a statement he has made, point out that you disagree because the statement does not correlate well with the session's material. If the student begins to disrupt the discussion, offer to talk privately after class or during office hours. Remain calm and nonjudgmental, no matter how agitated the student becomes. Always use evidence when disagreeing with a student. Using the authority of your position as teacher rarely proves anything in a disagreement and can inhibit discussion. You can largely avoid having students feel that you are putting them down by not beginning critical statements with “I”. Phrase criticism with reference to the material for the session or other commonly shared information from the course.

If a student is stubborn and refuses to postpone a disagreement until after class or office hours and completely disrupts a class, remain calm. If the student is agitated to the point of being unreasonable, ask him or her to carry the grievance to a higher authority. Make apparent your willingness to discuss the issue calmly, but do not continue trying to reason with a student who is highly agitated. If you remain calm in the presence of the group, the student may soon become cooperative again. In an extreme case, you may have to ask the student to leave the classroom, or even dismiss the section. Seek to make your response as calm as possible and avoid making an issue out of a small incident. The hardest part of such a situation is to maintain your professionalism and not to respond as if personally attacked.

### The Overtalkative Student

Over talkative students can deaden a class. If a student is dominating a section, try to elicit responses from other students. Call on someone else even though the over talkative student volunteers a response. Emphasize to the group that it is the quality, not the Quantity, of responses that most interests you. Make sure they see that you consider the group's project a



communal and not a competitive activity. If the student does not recognize the importance of listening to what other members of a group have to offer, talk with him or her about it privately. If the problem continues, talk to the student's advisor, dorm resident fellow, or both to try to develop a strategy for dealing with the over talkativeness. Do not ridicule an over talkative student or make comments to other students in the group, but try as tactfully as possible to keep the group's activity going without reinforcing the talkative behavior.

### **The Silent Ones**

The student who never speaks out in class also presents a problem. By making sure that all members of a class (if small enough) know each other by name and by trying to create a safe environment, you can sometimes overcome the silent student's fear of speaking. Occasional small group activities-where the students discuss issues in pairs, for example-can also make it easier for a shy student to open up. As with the over talkative student, do not ridicule or put the silent student on the spot, but do try to elicit answers from him or her at first once every session and later more frequently when he or she begins to appear more comfortable responding.

Talking with the student privately can also help. Reasons for being silent may vary. One silent student may merely enjoy listening. Another may lack confidence to contribute. The latter is very common among first year students. Some students simply have quiet personalities; others may be undergoing personal stresses that inhibit their speaking in class. Some may be unprepared. Even after you gently encourage them to speak, they may remain silent. This is their right, and ultimately you must respect their privacy. Requiring all students in your sections to come and talk with you during office hours at the beginning of the quarter and a second time during the quarter can help alleviate both over talkativeness and silence by putting students more at ease.

### **The" Grade Grubber II**

You may find that some students will unrelentingly pursue you if you give them a lower grade than they expected. Many faculty and TAs complain that they have had even A-'s vigorously contested! There are ways to minimize such incidents. Make it entirely clear from the beginning exactly what you expect in papers or tests. If possible, hand out guidelines for a good essay or examples of a superior exam answer. When you do put the grade down, note in some detail weak or strong points of the work and suggestions for a better performance next time. With papers, you can give students the option of initially handing in a draft that you will not grade but that you will criticize.

When students actually come to you to contest their grades, indicate that when you reconsider their marks, you retain the right to adjust them up or down. If you are the T A, advise students that in the case of sum solved differences, the professor will make the final decision. (Be sure to discuss this with the professor beforehand, however.) When no resolution is possible, brief the student on which office to turn to (such as the Ombudsperson) to pursue an appeal.

Although grade grubbers can discourage you and appear to undermine the academic enterprise, remember that this generation of students is under pressures you may not have had as an undergraduate. Competition for graduate and professional schools is fiercer than ever before. You will have more success if you listen to and respond to their anxieties as well as their complaints.

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The student who never speaks out in class also presents a problem. By making sure that all members of a class (if small enough) know each other by name and by trying to create a safe environment, you can sometimes overcome the silent student's fear of speaking. Occasional small group activities-where the students discuss issues in pairs, for example-can also make it easier for a shy student to open up. As with the over talkative student, do not ridicule or put the silent student on the spot, but do try to elicit answers from him or her at first once every session and later more frequently when he or she begins to appear more comfortable responding.

Talking with the student privately can also help. Reasons for being silent may vary. One silent student may merely enjoy listening. Another may lack confidence to contribute. The latter is very common among first year students. Some students simply have quiet personalities; others may be undergoing personal stresses that inhibit their speaking in class. Some may be unprepared. Even after you gently encourage them to speak, they may remain silent. This is their right, and ultimately you must respect their privacy. Requiring all students in your sections to come and talk with you during office hours at the beginning of the quarter and a second time during the quarter can help alleviate both overtalkativeness and silence by putting students more at ease.

### **The" Grade Grubber II**

You may find that some students will umelentingly pursue you if you give them a lower grade than they expected. Many faculty and TAs complain that they have had even A-'s vigorously contested! There are ways to minimize such incidents. Make it entirely clear from the beginning exactly what you expect in

papers or tests. If possible, hand out guidelines for a good essay or examples of a superior exam answer. When you do put the grade down, note in some detail weak or strong points of the work and suggestions for a better performance next time. With papers, you can give students the option of initially handing in a draft that you will not grade but that you will criticize.

When students actually come to you to contest their grades, indicate that when you reconsider their marks, you retain the right to adjust them up or down. If you are the T A, advise students that in the case of sum solved differences, the professor will make the final decision. (Be sure to discuss this with the professor beforehand, however.) When no resolution is possible, brief the student on which office to turn to (such as the Ombudsperson) to pursue an appeal.

Although grade grubbers can discourage you and appear to undermine the academic enterprise, remember that this generation of students is under pressures you may not have had as an undergraduate. Competition for graduate and professional schools is fiercer than ever before. You will have more success if you listen to and respond to their anxieties as well as their complaints.

## **Preparing to Teach**

### **Preparing to Teach**

- How do I limit the material due to time constraints? \* How do I define the goals for the course?
- How do I build a "state of the art" syllabus?
- How do I make a lesson plan?
- How much should I try to cover in one class?
- How do I limit material due to time constraints?

Begin by making a list of all the content that you WANT to cover. Now edit this list. What material is optional and what must be taught? Cover less and uncover more. The material remaining should pertain to the core concepts, basic theories, and underlying themes of the topic. The material should give students a conceptual framework on which they can later build. With a more manageable load of content, you and your students can concentrate on ways to think critically about what you do cover and how to apply it in a meaningful way. The critical thinking and application exercises will be retained far longer than any specific body of content. Until students have reached some level of integration and "ownership" of the material, it will truly go in one ear and out the other.

### **• How do I define the goals for the course?**

When generating course goals decide what set of skills, what knowledge you want your students to be able to demonstrate, gain, and understand at the conclusion of the course. It may also be important to consider what students' hopes and needs might be in relation to your course. What are students' motivations for taking your class? If you are unsure, ask them at the beginning and be willing to be flexible regarding their concerns. You may also want to consider the larger, more general skills students learn from your class-how to think critically about this content, how to do effective research in this area of study. Look at the broader life and academic skills your

class may have to offer. You may want to incorporate these into your course goals as well.

- **How do I build a “state of the art” syllabus?**

The more information that you can give the student the better. Do not be afraid of generating a long syllabus. However, if it does become more than a few pages, consider attaching a table of contents. Below is a list of information which students would love to see on their first day of class:

**Basic Information:** Course title, course number, number of credits, current year and term, meeting time and location, your name, location of your office and office phone number, e-mail address, office hours and whether appointments are taken, names, offices and phone numbers of any teaching assistants or GTF's. Prerequisites: Required classes or knowledge for this course.

Course's Purpose: What this course is about and why it is interesting to you. Learning Goals: What competencies/skills/knowledge the students are expected to demonstrate at the end of the course.

**Textbooks & Readings:** Titles, authors, editions and local booksellers who carry the titles.

**Additional Required Materials and Equipment:** Do the students need to buy a calculator, computer, computer software, art supplies, drafting materials, etc.? If yes, be specific about what brands or models. **Assignments, Term Paper, and Exams:** Be specific. Give nature and format of assignments. What format are the tests: short answer, essay, multiple-choice? What are the topics, expected lengths, and due dates of the term papers? Try to anticipate their questions, and the confusions that may arise later. **Grades:** Describe how you will calculate grades. Include here your policy regarding the marks “I”, “Y”, and “W”.

**Course policies:** How do you deal with tardiest absences, late homework, requests for extensions, make-up tests or assignments, cheating and plagiarism? Be very explicit and firm. Is the date for the final exam set in stone?

**Course schedule:** Provide a schedule of events which gives topic of discussion or lecture for each day and what assignments or readings should be completed for each day. Topics and activities may be tentative, but exam dates and required reading should be reasonably fixed. Students are attempting to manage their workloads for the term at the beginning and major last-minute changes in the syllabus can be very upsetting.

**Other things you might consider:** Give your students tips/advice on how to approach studying for this course. Recommend that they take a look at old exams if these accurately reflect your testing style for this course. Talk about how you feel about extra credit. Make suggestions on how students can make the most of an office visit.

If you wish, make your syllabus informal and friendly. Be encouraging and enthusiastic about the coming experience. Encourage students to visit you in your office and say hello. Assure them that you want to help them all succeed with the coming material.

- **How do I make a lesson plan?**

Ask yourself first what you want to accomplish during this particular class session. Students will walk in at and when they leave- what should they be able to do? What new knowledge should they have gained and be able to use and retain? What new skills will they have acquired and had a chance to practice and integrate?

Once you know clearly where you want to go with the class, then you can plan your lesson. Layout a sequence of activities which will lead you to your goals. Put a timeline on each component of your plan and determine whether the time you have is sufficient to do or cover what you intend. Be realistic here. Allow for things not going like clockwork.

Incorporate your teaching philosophy into your plan. If you believe in active learning, do not plan a full period nonstop lecture. If you believe in students being accountable for their learning, plan opportunities for them to demonstrate that they understand and can apply what you have attempted to teach them. Keep in mind the interests and abilities of your students.

Look at the organization of your plan. Does it make sense? Are there clear transitions from one component to the next? Have you built in time for questions, misunderstandings, additional examples, demonstrations and illustrations to make your points clear? If you have planned a small group activity, have you given it enough time to produce positive outcomes?

Think about beginnings and endings. Does your lesson plan have a good hook? How can you effectively bring your students' attention to today's topic? Also think about how you will end the class. Plan to end a few minutes before dismissal and summarize what has been covered and learned. Begin the next class with a review of this.

- **How much should I try to cover in one class?**

The better question to ask here is - How much do you want your students to learn, understand and be able to apply? You can talk nonstop and jam as much content into a class period as possible. But that's about all that strategy will accomplish. The better you know and understand your students, the more effectively you will be able to facilitate their learning in your course.

Some general guidelines are to generate two or three main topics or big ideas for each class session. Split the session into 10 or 15 minute “chunks” for each topic and expand on each with definitions, explanations, illustrations, and examples, leaving time for questions after each. Remember to restate the big ideas before and after each “chunk.” If you do this, you may cover less and uncover more.

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## LESSON 22

### TRAINING METHODS

#### **"Preferred Training Methods for Specific Objectives: Survey of Managers in Private Clubs**

A.J. Singh

Joe Perdue

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*This study was undertaken to assess how private club managers perceive the relative effectiveness of alternative training methods to attain specific types of training objectives. Data was obtained from 123 club managers who were members of the Club Managers Association of America (CMAA). While the research sample was industry specific, the results may be applied to other service industry segments. Participants rated the effectiveness of 16 alternate training methods for potential use in six different types of training situations. Training methods studied were case study, video tape, lecture, one-to-one, role play, games, computer simulations, paper and pencil, audio tapes, self-assessment, movies films, multi-media, audio, computer and video conferencing and sensitivity training. Training objectives studied were knowledge acquisition, changing attitudes, problem solving, interpersonal skill development, participant acceptance and knowledge retention. Analysis of data indicated that one-to-one training is the preferred method to attain all objectives except interpersonal skill development. (For this objective, sensitivity training is the highest ranked method; one-to-one training is rated second). For one other objective (problem-solving) one-to-one training was tied with case study as the preferred method.*

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#### **Background**

While most managers agree that training employees to do their jobs effectively is one of the most important tasks undertaken by management, very little is known about the effectiveness of training methods in achieving training objectives.

In 1971, Carroll, Paine and Ivancevich conducted a study on the relative effectiveness of different training methods. (Carroll; Paine, & Ivancevich, 1972) The results of this study are reported in virtually all major human resources management texts, in spite of the fact that the study is now almost 30 years old.

The Carroll et. al. study has also been heavily cited through the years. A recent examination of the Social Science Citation Index produced 287 citations of the study. It is likely that several hundred additional citations appear in business, hospitality, tourism and other journals not indexed by the Social Science Citation Index. (for example, of all hospitality management education journals, only the Cornell Hotel and Restaurant Administration Quarterly is included in the Social Science Citation Index).

In 2000, two of the present researchers replicated the Carroll et.al. study. (Perdue and Woods, 2000) The sample for this initial replication was drawn from members of the National Association of College & University Food Services. The current study is a replication of the Carroll et. al. study in private clubs. (Similar studies ~bout preferred training methods to attain

specific types of objectives are in process for hotel, restaurant and resort segments of the hospitality industry).

#### **Current Study**

The current study was undertaken to assess how private club managers perceive the relative effectiveness of alternative training methods to attain specific types of training objectives. Data reported in this article were collected from 123 club managers who were members of the Club Managers Association of America (CMAA). Of the total, 76 respondents held the Certified Club Manager (CCM) designation; the remaining 47 participants were not CCM's.

To create the survey population a random sample of 442 names were drawn from the CMAA membership list. Paper-and-pencil surveys were mailed to each of those on the random sample list. The 123 responses represent a return rate of 28%.

Each participant was asked to rate the effectiveness of 16 alternate training methods for potential use in six different types of training situations along with providing information about themselves and their clubs. The survey was, therefore, relatively time-consuming to complete. (We estimate that it took approximately 25-30 minutes to complete the 107 information items on the survey).

The 1972 study by Carroll, et. al. asked participants to rank the use of training methods judged most appropriate to attain specific types of objectives. Since our study included 16 training methods rather than the 9 used in the original study, we chose to ask participants to rate the methods on a seven point Likert scale (1=not useful for attaining the objective; 7=extremely useful for attaining the objective). This rating rather than ranking method was selected to make survey completion easier and to generate more complete information that would be useful for analysis and discussion.

Table 1 identifies the six training objectives addressed by the survey. Each had been utilized in the Carroll et. al. study. Table 1 is replicated from the survey instructions which provided! definitions which participants were to use as they rated each training method.

The participants were asked to rate 16 different training methods relative to their usefulness in achieving the six objectives identified above.

In other words, the survey participants were asked: "If you wanted to attain a specific training objective, how useful would each of the alternative training methods be?" The 16 methods (Table 2) include all nine methods used in the Carroll et. al. study (Table 3) along with (multimedia, computer-based, etc.) which were not available and for in common use 30 years ago.

An example of the survey form illustrating potential responses for the use of case studies in training is shown in Table 4.

## Results of the Study

Since we asked participants to rate the effectiveness of training methods to attain six different objectives, we were able to determine both the effectiveness of each method and its rank among other methods when used to attain the same objective. For example, if we assume that 3.5 is the midpoint on our seven-point Likert scale, we can assume that items rated below this number were considered less effective than those methods rated above 3.5. Therefore, the higher the score, the more effective the training method is perceived to be for the intended objective. Conversely, the lower the score, the less effective participants believed the method to be for the stated objective. Table 5 shows the results of the ratings.

Some of the important findings revealed in Table 5 include the following:

1. Methods that are interactive, involve human interaction, emotionally involve the participant, and connect the trainee with reality, are generally more effective training methods. Examples of these methods are case study, one-to-one, role play and sensitivity training.
2. In general, training methods, which are mechanical, focus on one-way communication, self paced, and stress human machine interaction, are generally less effective training methods. Examples of include lectures, computer simulation, paper and pencil programmed instruction, self-assessment, and audio and computer conferencing.
3. A distinction also needs to be made between effective methods and efficient methods of training. The results of the study also show that while some methods are more efficient (based on cost or ability to reach more participants), they may not be necessarily effective. For example, while lectures provide the trainer the ability to reach a large audience, hence reducing training costs, they are at best marginally effective.

We tested the two response groups (CCM and non-CCM) and found differences significant at the .05 level in only two cases: (1) using one-to one instruction to improve problem solving skills and (2) using multi-media to acquire knowledge. This suggests then, that respondents with differing years of experience and education (which are among the factors which certification addresses) have similar beliefs about the use of alternative training methods.

Another way to review the results is by ranking the methods considered most effective for each objective. (This is how the 1971 Carroll et. al. study presented results). While survey respondents were not asked to rank the methods, the researchers determined the rank by arranging the training methods in order from lowest to highest mean score. These data are presented in Table 6.

Some of the important findings revealed in Table 5 include the following:

1. Participants selected one-to-one training as the most effective training method, regardless of the training objectives. As this ranking shows, one-to-one training is the preferred training method to attain all objectives except, which emphasizes interpersonal skill development. (For this

objective, sensitivity training' is the highest ranked method; one-to-one training is rated second). For one other objective (problem-solving), one to-one training was tied with case study as the preferred method.

2. Conversely, regardless of the training objectives, some training methods were regarded as equally ineffective. These include Paper and Pencil Programmed Instruction, Audio Tapes, Self-assessment, Audio Conferencing, Computer Conferencing, and lectures.
3. Finally, some training methods are relatively more effective in their ability to achieve specific objectives. For example: - If the objective is to acquire knowledge videos (one way communication) are more effective than a lecture (also generally one way communication)  
- If the objective is to change attitudes, Sensitivity Training (Behaviourally experienced training) is preferred over Role Play, a form of vicariously experience learning.  
- Interestingly, while case studies and sensitivity training are both behaviourally experienced training methods, case studies are the superior method when it comes to problem solving objectives.

We previously noted that there were fewer training methods used in the earlier Carroll et. al. study. This is likely to be a major reason for the considerable differences between the rankings that club managers in the present study gave to training methods and those found in the Carroll et. al. study. Those differences are readily visible in Table 7 which compares the ranking of training method choices for different objectives between the two studies.

Major differences seen in Table 7 are remarkable and can be summarized:

- The most popular training method in the present study (One-to-One; most popular for four objectives, tied for most popular for a fifth objective and ranked second for the last objective) was the most popular method to attain only one training objective in the Carroll et.al. study (participant acceptance). With that exception, it was a much less popular choice to attain the remaining five objectives.
- Paper and pencil programmed instruction (the most popular method for two objectives in the Carroll study) was ranked as a least useful method for all objectives in our present study.
- Sensitivity training was the method that was most commonly popular between the two studies. It was the most useful method for interpersonal skill development in both the Carroll and present study. As well, it was the preferred method for changing attitudes in the Carroll study. (The method was the second choice for changing attitudes in the present study). Sensitivity training was also the third most popular choice of training methods for knowledge retention in both studies.
- Case study methodology should also be noted. It was a "top three" choice to attain four training objectives in both studies.

## Discussion

Table 8 identifies the most useful training methods identified by the private club managers. The highest rated (one-to-one) is listed first, followed by the next four best methods in descending order. As noted earlier, one-to-one training is considered the best overall method (and the best for all objectives except interpersonal skill development); the use of videotapes is considered the fifth best overall training method. In general, the common elements of the more useful methods include the human interface, interactivity, experiential learning and using multiple training mediums.

Table 9 reports the least useful training methods identified by the club managers. Each training method received the lowest rankings for each of the different training objectives. The list is presented in descending order, i.e., audio conferencing is the least useful method; paper and pencil is the second least useful method, etc. In general, the less effective training methods are characterized by one-way communication, and human machine interface.

## Discussion

One obvious finding of this research is the reliance that private club managers place on the effectiveness of some training methods. For instance, as seen in Tables 6 and 8 the survey respondents rated one-to-one training as an extremely useful method to attain all of the types of training objectives analysed.

Also obvious from this research is that private club managers do not perceive some methods to be useful for attaining any training objective. However, this finding does not *mean* the methods are not widely used in other industries. In fact, they are included on this list because they may be useful in other businesses.

### There are other findings, which are of interest.

For example, the two “best” methods to attain each of the objectives involve significant trainee participation/interaction (one-to-one, sensitivity training and case study). As well, the only instance in which one-to-one instruction was *not* judged “best” involves changing attitudes (which is the purpose of sensitivity training-the first choice of survey respondents).

### The study also raises interesting questions including:

- Were methods judged “best” because of the high rate of trainee acceptance and knowledge retention?
- Do a significant number of club managers actually *use* sensitivity training? (It was highly rated for four of six training objectives but the researchers could find about no mention of this methodology in club literature. As well, careful study of available training resource found no reference to this method.
- While paper-pencil instruction rated low for each training objective, it is frequently used in clubs (for manuals, handbooks, orientation materials, etc.).
- About 85% of club managers do not have difficulty finding training resources; 80% of club managers would do more group training if materials were available; are club-specific resources needed?

## Conclusion

The results of this study may assist private club managers to determine which training methods are considered by their peers to be most effective in attaining alternative training objectives. For instance, a method such as one to-one training, which was rated extremely useful for knowledge acquisition, might be a good choice if that objective (knowledge retention) is needed. On the other hand, managers should know that their peers perceive this method to be less useful if the purpose of the training is to change attitudes or to gain trainee acceptance. The results of this research supports the generally accepted training truism, which states, “People retain about 25 percent of what they hear, 45 percent of what they see and hear and 70 percent of what they see, hear and *do*.”

Until now there has been no good guide that private club managers could use to select the type of training method which might be most useful to accomplish different training objectives. These results can help provide the foundation that managers need to make decisions about how to effectively train their employees.

**Table- 1**

### Alternative Training Objectives and Definitions

Acquiring knowledge- Changing attitudes	- helps trainees acquire new skills or information useful in changing employee attitudes
Improves problem solving skills- Improves interpersonal skills- Participant acceptance- Knowledge retention-	useful in teaching trainees how to solve problems at work helps trainees learn to interact better with others how likely trainees are to enjoy this method of training trainees more likely to remember what they learn

**Table- 2**

### Training Methods and Definitions

Method	Definition
1. Case Study	Solving problems identified in scenarios
2. Instructional Video Tapes	Video tapes describing training
3. Lecture	Presentations to groups
4. One-to-One Training (Conference)	A discussion with small group or individual
5. RolePlay	Acting out the roles of participants in problems
6. Games	Computerized or person-to-person interactions
7. Computer Simulations	Computer-generated scenarios
8. Paper and Pencil Programmed Instruction 9. Audio Tapes etc	Trainees learning at their own pace using workbooks,
10. Self-assessments	Determination of own skills and goals
11. Movies/Films	Commercial and non-commercial films and movies with instructional examples
12. Multi-media Presentations	Use of several (computer, video, internet, etc.) methods in combination
13. Audio Conferences	Audio (only) teleconferencing
14. Computer-assisted Programmed Instruction	Trainees learning at their own, pace using computers etc.
15. Video Conferences	Video (and audio) teleconferencing
16. Sensitivity Training Instructional audio tapes	Confrontation and direct feedback by others (usually peers) in small group setting

### T Able- 3

#### Training Methods in Carroll et.al 1972 Study

- Case Study
- One-to-One Conferences
- Lecture
- Games
- Role Play
- Movies/Fi Ims
- Programmed Insti”uction
- Sensitivity Training
- Televised lectures (Now called video conferences)

TABLE 4  
Example of Survey Construction\*  
Training Method

Training Method	To Acquire Knowledge	To Change Attitudes	To Improve Problem Solving	To Improve Interpersonal Skills	Extent That Trainees Accept Method	Extent That Trainees Retain Knowledge by This method
Case Study (life-like scenarios)	1234567	1234567	1234567	1234567	1234567	1234567

TABLE 9  
Least Useful Training Methods

Training Method	Training Objective					
	Knowledge Acquisition	Changing Attitudes	Problem-Solving	Interpersonal Skill Development	Participant Acceptance	Knowledge Retention
Audio Conferencing	16	15	15	13	16	16
Paper and Pencil Programmed Instruction	12	16	12	16	15	14
Audio Tapes	14	12	15	15	14	15
Computer Conferencing	13	13	13	12	13	13
Self Assessment	15	10	14	10	12	11

TABLE 6  
Ranking of Effectiveness of Training Methods for Each Objective

Training Method	Training Objective					
	Knowledge Acquisition	Changing Attitudes	Problem-Solving	Interpersonal Skill Development	Participant Acceptance	Knowledge Retention
Case Study	2	4	1	4	2	2
Video Tape	3	7	7	6	3	7
Lecture	9	8	9	11	10	12
One-to-One	1	1	1	2	1	1
Role Play	6	3	4	3	7	4
Games	10	5	5	5	5	5
Computer Simulations	5	14	6	14	9	6
Paper and Pencil Programmed Instruction	12	16	12	16	15	14
Audio Tapes	14	12	15	15	14	15
Self-assessment	15	10	14	10	12	11
Movies/Films	7	6	9	6	6	8
Multi-media	8	9	9	9	8	9
Audio Conferencing	16	15	15	13	16	16
Computer Conferencing	13	13	13	12	13	13
Video-Conferencing	11	11	8	6	11	10
Sensitivity Training	4	2	3	1	4	3

TABLE-7  
Ranking of Training Method Choices for Different Training Objectives for Two Studies

Training Objective	Top Three Training Methods	
	Carroll et. al. Study	Present Study
Knowledge Acquisition	1. Programmed Instruction 2. Case Study 3. One-to-One	1. One-to-One 2. Case Study 3. Video Tape
Changing Attitudes	1. Sensitivity Training 2. Role Play 3. One-to-One	1. One-to-One 2. Sensitivity Training 3. Role Play
Problem Solving	1. Case Study 2. Games 3. Role Play	1. One-to-One 2. Case Study 3. Sensitivity Training
Interpersonal Skill Development	1. Sensitivity Training 2. Role Play 3. One-to-One	1. Sensitivity Training 2. One-to-One 3. Role Play
Participant Acceptance	1. One-to-One 2. Case Study 3. Games	1. One-to-One 2. Case Study 3. Video Tapes
Knowledge Retention	1. Programmed Instruction 2. Case Study 3. Sensitivity Training	1. One-to-One 2. Case Study 3. Sensitivity Training

TABLE-8  
Most Useful Training Methods

Training Method	Knowledge Acquisition	Changing Attitudes	Problem Solving	Interpersonal Skill Development	Participant Acceptance	Knowledge Retention
One-to-One	1	1	1	2	1	1
Case Study	2	4	1	4	2	2
Sensitivity Training	4	2	3	1	4	3
Role Play	6	3	4	3	7	4
Video Tapes	3	7	7	6	3	7

### Harnessing Multiple Mental Models as a Training Technique for Increasing Understanding of People Issues

Neharika Vohra

Bharati Sharma

This paper describes and evaluates the experience of using soft systems methodology (SSM), a problem structuring method of soft operations research (OR), to create learning opportunities about "people issues" among District Health Officers working in the government health system in India. A (one-day) workshop for District Health Officers from two states of India, Uttar Pradesh and Gujarat on human resource issues was facilitated using SSM. Rich picture building one of the tools of SSM was used for facilitating the workshop. The use of SSM helped generate a creative learning situation and provided an opportunity to understand human resource issues faced by those working in the government health department.

**Keywords:** Rich Picture Building, Training using Soft Systems

Methodology, Creating Learning Opportunities.

Training a group of highly qualified doctors and senior administrative staff in behavioural issues, perceived as a non-technical subject by the trainees, is a challenging task for any training. It is mandatory, for the programmed to be format, relevant, challenging, interesting, and stimulating. The paucity of time, perception of training as a non-serious and non-essential activity, lack of in-depth knowledge of the training: about the context of the trainees, and the in effectively ambiguous nature of the subject material, all hindrances in the way of designing an effective training programme.

A ten-day training programme titled "National Health Programmes and Management Issues in Health Organisations" was held for District Health Officers (DHOs) from states India, Uttar Pradesh and Gujarat in Ahmedabad. Out of the ten days the first author was requested to teach basics in people management in for sessions on one day. The method adopted was, conducting this one day long workshop and its effectiveness is described in this paper.

The paradigm adopted for this training programme was that of self-directed learning. In the self directed paradigm there is a facilitator or a team of facilitators and a client group within which each individual has his/her own perception of the nature of the problem and solutions to the problem (Dash, 1999; Lane, 1992). The goals of the workshop as identified by the facilitator were to co-ordinate discussion about people issues, to structure the issues identified, and provide opportunities for the client group to collaboratively find out solutions to the existing problems.

The paradigm chosen combines the techniques Systems Dynamics and the tools of Soft Operations Research (OR). Soft OR builds models prepared with the participation of the people involved in problem analysis and decision making. The models thus constructed reflect perceptions of the issues involved and are seen as subjective intellectual constructs. These models are then used for understanding the reality.

Different problem structuring methods (PSMs) have been proposed in soft OR. These include Hypergame Analysis, Interactive Planning, Metagame Analysis, Soft Systems Methodology (SSM), Strategic Assumption Surfacing and Testing



(SAST), Strategic Choice Approach (SCA), and Strategic Options Development and Analysis (SODA). The underlying aim of all the problem solving methods is to provide improved means for members of the group to interact, examine commonalities in perceptions, guide argument and debate among group members, develop images of a future acceptable to all group members, and lead group members towards an acceptable direction for action (Rosenhead, 1989).

SSM was developed to accommodate “messy, ill structured, real-world problems where methods used by systems engineering did not work (Checkland, 1985). Systems engineering requires defining of goals and objectives. However, in the real world problems, such as faced by managers, defining the objective may not always be possible. SSM seeks to introduce a process which is typically described as a continuous cycle of learning, which might be implemented at the level of an individual or a group (Checkland, 1985). SSM begins with finding out about a problem situation followed by developing root definitions (RD) using CATWOE elements. The CATWOE elements refer to the relevant human stakeholders in building the model. Conceptual models are then built based on the RDs. These conceptual models are used as the basis for debate and argument about the problem situation (Checkland, 1985). The debate is supplemented by comparing conceptual models with perceptions of the real world. This debate is used to find grounds for suitable changes that meet the two criteria: systematically desirable and culturally feasible (Checkland, 1985). Based on these comparisons and finding of Common ground the model is again changed to make it suitable for implementation (Checkland and Scholes, 1990). SSM assumes that there are multiple realities and individuals view them from their own experiences and assumptions. Thus, SSM attempts accommodation of conflicting interests.

A conceptual model built using SSM is not always expected to be implemented or operated on rather it is sometimes only used to facilitate a debate among the users and designers of the model. The models are rather used for appreciative enquiry (Checkland, 1985), as a learning system (Checkland, 1985), or a systems’ inquiry (Checkland and Scholes, 1990).

SSM was used in this training programme as a means to coordinate the process of “depreciation” and sharpening views (Checkland and Scholes, 1990). It was used as a method that would lead to an examination of problem situations in a way that it would lead to asking ‘what’ and ‘how’ level of questions (Checkland and Scholes, 1990).

### 1. Rich Pictures as a Tool for SSM

One of the tools used by SSM namely rich pictures was used during this workshop. In the past this method has been largely used with groups or task committees set up for finding solutions to specific problems (Ellis & Green 1996). Making rich pictures is a beginning of developing an understanding of all the factors influencing a given problem which is the first step for developing conceptual models in SSM. According to Flood and Jackson (1991), “a rich picture is...a cartoon-like expression which, in the spirit of such representation, allows for certain issues, conflicts, and other problematic and interesting features to be accentuated: (ppl72173, cited in Ellis & Green, 1996).

In the use of rich pictures the group draws a picture of what they think the problem is, what are the various factors that contribute to the problem, who are the main stake holders, and what are their roles. During this phase the group comes to a common understanding of all the aspects of the problem under discussion. They thus come up with a representative model.

In the training programme described in this paper the group did not go to the next step of articulating root definitions after drawing rich pictures. They rather moved on to the portrayal of the problem situation in a structured manner with the help of the facilitators to be able to articulate answers to questions such as “what are the things we can do about the issues faced by us”? “How would it be possible to change my situation”? “How do other address such issues in their workplace”. This was done because the goal of the workshop was not to find a solution to a given problem but to create an opportunity to learn about the human resource issues in the workplace and learn ways of handling some of them. SSM has been similarly adapted in a programme for facilitating discussion in a multi agency steering group (see Gregory & James, 1996).

### 2. Description of Participants and the Context of their Job

The District Health Officers or Chief Medical Officers (CMOs) are middle level managers responsible for the implementation of various government health programmes in rural areas at the district level. They are all qualified doctors. Many of them reach this post through promotions from the post of the Medical Officer of Primary Health Centres (PHCs).

Typically, a DHO is responsible for about 40- 50 PHCs of one district. The DHO has a team of supervisors at the district office level to provide ‘assistance in monitoring the activities of these PHCs. Their work involves numerous field visits to the PHCs. The health department in India is highly centralised. Most of the health programmes have a standard strategy and design sent from the centre to all parts of the country for implementation. The task of the district office is to compile reports sent in by the PHC and forward them to the State office. Till recently all the programmes were target driven and performance in each programme was assessed against targets given by the State.

The District Office also plays a major role in communicating the policies of the state to the local centres through meetings. The DHO is the link between the team working at the PHCs and the State Health Department. As a middle level management team the district office has to satisfy many stakeholders such as community members or clients who receive service, employees under the district office like the Medical officers, supervisors, PHC workers, elected members of the District Panchayat, and the State level authorities. The multiplicity of stakeholders and nature of task makes problems experienced by the DHOs very complex and with many inter-linkages with sub systems of the larger system.

### 3. The Workshop

The workshop began with a thirty-minute orientation lecture by the first author about the various themes that organisational behaviour traditionally studies. A quick-check to ensure that the topics mentioned were relevant to the DHOs was conducted by opening the floor for discussion. As was expected participants

enumerated how issues such as motivation, power and politics were very relevant in their context.

The DHOs were then asked to participate in a group exercise to introspect about and discuss the “People Issues” in their respective workplace and make a pictorial representation of all the issues to be later presented to the larger group. The participants were told that this exercise was designed such that rather than an expert telling them how to solve their “people problems”, they would be facilitated to think about the issues and offer solutions for some of the issues during the course of the day.

Participants were explained that they would work with assigned group members in small rooms where chart paper and coloured pens were kept ready for use. First, they were asked to think and take notes for ten to fifteen minutes individually about the people related issues that they faced at their respective work place. Second, after each individual in the group had finished making notes they were to share their notes and then collectively draw a picture that depicted the commonly shared people issues in their workplace. If there were some unique issues that were left out and were perceived to be important by the group then they could be listed in the corner of the chart and put up for discussion after the main picture had been presented. Third, the groups were asked to choose a spokesperson to present the picture to the larger group. Fourth, after completing their pictures they were to put up their charts in the larger room where the workshop had started in the morning.

A total of 90 minutes were given to complete the pictures. The charts with rich pictures were put up on the wall for all to see during lunch break and before the discussion started.

In order to make homogeneous groups, since two stages of India were represented, the Officers from Uttar Pradesh formed separate groups and so did the Officers from Gujarat. The Officers from each state were further divided into Officers from adjacent sub-districts with the assumption that their problems might be similar. The participants were thus divided into groups of 3 or 4 based on nearness of location of work. There were seven groups in all.

Both authors were available to answer questions. during the time allocated for drawing the pictures. The authors moved from one group to another and listened to the discussions in all groups. This served three purposes, (1) it allowed the authors to keep the discussion in the groups on track, (2) encouraged participants to use their “right brain” to draw the pictures, and (3) it also served as input for conceptualising and summa rising the discussion at the end of the day.

In the beginning the Officers were reluctant to draw pictures. They were worried about their poor skills in drawing but once they started they came up with creative rich pictures. Some groups made more than one picture. One group depicted their problems as thorns of a cactus plant. Another compared their organisation with an over burdened camel cart with deflated tyres. The pictures of some of the groups were more detailed compared to the others.

Each group was given approximately 15 minutes to explain their rich picture. However, most of groups took more than the allotted time. After each presentation the facilitators categorised

the . Important issues with inputs from the entire group. The categorisation was written on a blackboard. This helped in drawing up a comprehensive model of the issues raised by all the groups.

After all the groups had made their presentations and the categorisation was completed the participants were given a twenty-minute tea break during which the facilitators spent time thinking about how to structure the ensuing discussion. The objective was to make. the discussion useful and allow the group to leave with a better understanding and skills of handling people issues in their contexts. The issues brought out by the groups are sumI1\arised in Table-I. As is obvious from Table-I the participants did not strictly adhere to discussing “people issues” but expressed other organisational problems that they felt caused some of the people problems. Given the limited time available i for discussion and also the complexity of the issues presented by the participants it was decided that the problems listed would be classified as issues that the officers could solve at their level and issues that were not directly under their continue. It was thus decided that after dividing the list of issues as “under our control”

and “not under our direct control” a moderate~ discussion of how to address “under our control” issues would be lead with the first author bringing in theoretical inputs as and when required. It was decided that the discussion would focus on the extent, importance, and nature of the problem and DHOs would be invited to share their experiences of dealing with some of the issues. This stage was the second and adapted i stage of SSM where rather than developing root definitions the issues were structured, prioritised, and alternative solutions explored.

After the tea break the framework for discussion was described to the participants and they were asked to comment on it. The participants agreed to the framework and were enthusiastic to share some of their experiences at handling some of the issues.

ences. Energetic sharing’ of how some of them had solved it problem gave -ideas to others.

They expressed their willingness to tryout some of the solutions in their own context. The first author also provided theoretical inputs on motivation, trust building, team work etc. in a conversational style. Most participants agreed that they could make small changes and undertake efforts to ‘make a. difference- to their- working environment and thereby enhance their own productivity and satisfaction. The workshop ended at this point. Structured feedback was collected from the participants.

After deliberation five key chosen for discussion. These were:

- Building trust in the clients !improving the image of government health services
- Motivating the staff in the Primary Health Centres,
- Co-ordination with other related non health departments
- Garnering support and co-operation at the local level
- Finding ways of shielding themselves against unwanted intervention, by politicians

Other issues like improving the reporting system, improving the logistics and supply, filling up vacancies and bringing in greater decent translation into the system were some problems which needed long term interventions and cooperation from higher authorities. The participants decided that though they had valuable suggestions for all these “other:’ is did not have the power to take decisions and thus they would n)t discuss those in this workshop.

The participants and the facilitators pondered on various ways in which the issues under consideration could be addressed. Many participants were amazed at the commonality of experi-

**Table- 2 Overview of the One-day Workshop on People Issues.**

Activity	Time allotted
	minutes
Overview and introduction of topic	30
Dividing in groups and giving instructions	30
Drawing of Rich Pictures (tea was served while groups are drawing pictures)	90
Lunch (Charts put up in the	
large room for participants to look at after lunch)	45
Presentation of pictures by each group and also categorisation by facilitators	120
Teabeak (during which	
facilitators plan the discussion session)	20
Discussion session <b>ues but they.</b>	60
Feedback	15

Table 2 provides an Overview of the design of the workshop. The time spent on each activity is also specified.

## Discussion

### Choice of SSM over other methods of training

SSM was preferred over a simple discussion or a question answer session because the facilitators hoped that rich picture building would help generate a creative learning situation and also facilitate a deeper search and analysis of the problems being discussed. It would give the trainers a realistic understanding of the people problems from the perspective of the DHOs.

Use of SSM helped in bringing the 'dark situation right inside' the classroom. Using this methodology for training also did not require the facilitator to give the "ideal" solution to the problems but left it to the participants to search for a solution once the problem was identified and defined.

It must be noted that SSM was adapted to suit the requirements of the group and the overall programme design. It was used not to solve any specific problem but to explore problems, especially, “people issues” in health organisations with due help of the people involved and thus use it for appreciation in the “Vickerian” sense (Checkland, 1985). The exercise was stopped at the stage of creating mental models and then structuring them for discussion to answer pointed questions. This was done because of several reasons. First, the workshop itself was a small part of a larger programme designed as a refresher course. The group was not mentally prepared to focus on specific problems and prepare a conceptual framework to be implemented later. Second, the building of a conceptual model for implementation would not be viable because the model was not conceptualised by those who worked together at the workplace. However, collectively articulating the issues and discussing ways and means to solve the problems proved to be a fruitful exercise for the DHOs to explore and understand Human Resource issues in their contexts. It also helped the DHO’s to structure their thoughts about the problems they faced and realised how they all faced similar issues across regions within their state and also with other states. Drawing of pictures and discussing them triggered the process of sharing experiences about failures and successes of their attempts to handle the various people related issues in their work context. This sharing resulted in collective learning in the group. Collaborative learning has been ‘found to be much more superior to passive teaching and learning situations and it also enhances critical thinking’ (Gokhale, 1995; Rau & Hey1, 1990).

### Effectiveness of the training design

It was felt at the end of the programme that the design of the workshop had been successful and effective based on subjective and objective measures described below.

### Subjective measures

Having been with the group since morning it was not difficult to notice the increased cohesiveness among group-members at the end of the day. Even though it had been a long day most participants looked energised and enthusiastic as the workshop came to an end. The participants continued to discuss some of their experiences with others even after the workshop had ended.

### Objective measure

Analysis of the feedback and comparison with feedback from other sessions also revealed that the participants rated the

session as very good and expressed that they had learnt most from this one-day workshop.

It is argued that ownership by the participants and direct relevance of the discussion to their context made this training design more relevant and effective. In this workshop the facilitators only spoke in the beginning and at the end of the session. From the five hours of the total session time they spoke for a maximum of one hour. More than four hours were available to the participants to discuss, cross-question, draw and *to explain their viewpoint*. **It** also was a very rich learning experience for the facilitators. It was an opportunity to understand the world *of* the DHOs as they see it.

## Conclusions

The use *of* SSM was found to *be* successful with this group., This group comprised *of* qualified Medical Doctors who have many years *of* formal education and training in abstraction. It is not known *if* this method would work with people with less than 4 to 5 years of schooling. This is something that needs to *be* discussed and tried. .

Also it is felt that this design may be best suited with a group size of 15-30 participants and when there is more than one facilitator running the workshop. With much smaller or much larger groups it may not be possible to conduct an intensive workshop of this nature. Innovations to design would be necessary *if* one had larger or much smaller group's for training and or could only afford one facilitator.

### Notes -

[illegible]

## LESSON 23

### CRITERIA FOR METHOD SELECTION

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#### Introduction

There are different criteria which one can choose between different teaching and learning methods. For example these criteria could be learning objectives, learners' profile, and learner participation and availability of human resource and material resources for enabling training.

This section outlines several bases for such a choice. However, let it be argued that there is no single, simple criterion which one can use to select a method, but that it is nevertheless important to evaluate and use different methods rather than be wedded to a single one.

The first reading "Factors to Consider the Selection of. Methods" discusses human factors, objectives of teaching and training, subject area and time and material factors as important considerations

Another reading focuses on the Relationship between Principles of Effective

#### Learning and Teaching Methods.

Students are also advised to read the section on "Overview of Training Methodologies". The question "what methods shall we use?" at all phases of the design and instruction activity. The decision is multi-dimensional; hence no rigid compartmentation is possible or desirable.

#### Principles for Selection of Teaching and Training Methods Factors to Consider in the Selection of Methods

##### 1. Human Factors

###### The Teacher

The teacher's knowledge, managerial and teaching experience and personality are all factors of primary importance and are intentionally mentioned at the beginning. To put it bluntly: the teacher has to have a clear and significant message to pass, and his personality has to be acceptable to the students or trainees so that effective communication links can be established quickly and easily. If these conditions are fulfilled a well chosen and properly used method is likely to ease and stimulate learning. If they are not fulfilled unfortunately the method may become an end in itself.

Teachers are advised on teaching methods by their directors of studies, by senior colleagues in special "teaching methods" courses, through manuals, etc. But eventually each teacher has to assume personal responsibility for choosing the best methods for his particular teaching assignment. He ought to be able, therefore, to make a rational appraisal of his abilities and to try to employ methods likely to enhance-not reduce-the impact he hopes to make. Role-playing for example is an exercise requiring some knowledge of psychology. A lot of experience with various types of human problems in management-and the ability to react quickly in discussions. That is why

a teacher who does not possess these qualities, but has an analytical mind and experience in solving business problems. might give preference to the case study method.

In training trainers one should encourage teachers to use a greater variety of methods; but certainly not impose upon them which they would feel uneasy.

The Participants and the Environment from which They come

#### Methods of teaching must respect

- the intellectual level and educational background of the participants;
- the participants, age and practical experience; and
- the social and cultural environment.

For example., in training programmes intended for supervisors, middle managers, small entrepreneurs who have had only a basic education and who have been away from school for a long time, lectures should be replaced by short talks using visual aids, extensively; concrete. Examples should be given and no high-level theories presented; simplified case studies should be used instead of long and complex cases; simple programmed books should be recommended instead of the usual textbooks.

In regard to the participants' practical experience, a distinction must be made between young people with little or no management experience, who first learn about management in a university or other type of school and participants with practical experience, either from managerial functions or from specialist work in various functional departments.

In the former case, much of the information is new to the students and it is difficult to link the teaching process with any previous experience. However, these students are open minded and often more receptive to new ideas than the later group. In training people with experience, only possible but absolutely essential to make an appeal to the participants experience by relating the teaching to it. However, in this group some of the participants with practical experience may take the attitude of "knowing better in advance"; if so, the teacher's main problem may be how to change their air of self-complacency and make them aware of what they need to learn to do the it jobs better. In such cases it is rarely sufficient for the teachers to talk about new methods and techniques of management. Practical assignments, case study discussions or simulation exercises are more likely to help the participants realize that they have gaps in knowledge and skills and that training may be the answer.

Experienced Managers have the capacity to learn directly from each other provided a favorable atmosphere is created and method are used which stimulate this' learning. Discussion groups, working parties, syndicates, consultancy assignments and Practical projects carried out by groups of managers are well suited for this purpose.

The complexity of the problem is increased by social and cultural factors in the environment. It must be remembered that many of the participative teaching methods were developed in the United States- a country with its own particular social and cultural characteristics. High achievement motivation, little respect for formal authorities, priority given to action before contemplation -these and many other cultural factors may be absent in the country to which one or another teaching method is to be transferred.

Fortunately, educators are now aware of this problem and special studies are available on the question of transfer. A number of experts with considerable experience in developing countries have also confirmed that, in general any participative method may be used in any environment provided that it is instilled gradually with for knowledge of the environment, making the necessary modifications of the method and without hurting national pride.

## 2. Objectives of Teaching and Training

As a rule training needs and objectives of educational and training programmes in management are defined in terms of changes to be effected in knowledge, attitudes and skills-which should afterwards lead to improved managerial action. Various training situations will be concerned with various types and levels of knowledge, attitudes and skills. A preliminary analysis of needs will help to identify what objectives a particular programme ought to have. Methods will then be selected with regard to their ability to impart new knowledge. Influence attitudes and develop practical skills.

In this connection B. Hawrylyshyn has developed a simple but interesting model based on the experience of the Centre d'Etudes Industrielles in Geneva. In this model six participative methods are related to the general skills which a manager should possess whatever his special field of work or level may be in the hierarchy. Each method in the model. Can serve various purposes; however a method reaches its peak of effectiveness only in connection with a specific purpose. This can be well demonstrated with the case method; pertinent data are given to the trainee in the description of the case. He has to diagnose and analyze the problem, consider alternative solutions, discuss those solutions and modify them after hearing his colleague's views. He does not have to make decisions or implement them; consequently he is not trained in the skill of decision-making and there is no reliable feedback on the correctness of his solutions

The main lesson to be drawn from this model is that if training is intended to improve multiple skills (which is usually the case) a combination of teaching method~ must be used A similar type of analysis could be made to determine which methods are most likely to affect the managers' attitudes or impart a specific kind of knowledge.

Let us take the example of using specialist knowledge and experience in the preparation of management decision on complex business matters. It is of little use to lecture about the value of specialists to a manager who overestimates his own individual judgment and is not willing or perhaps able to use the specialist services which are available to him. Team work in syndicates, participation in business games or practical projects

might make such a manager aware of his drawbacks so that he will begin to change his attitudes towards team work and the importance of specialists. His interest in new knowledge and skills will undoubtedly be awakened.

On his. Leadership style, communication abilities. and behavior in general, a manager may get more direct and stronger feedback from other participants in sensitivity training or as a member of\ a team working on a group project than in years of work in a managerial position.

Obviously, knowledge, skills and attitudes are inter-related and this must not be overlooked when setting the objectives of training and choosing teaching methods. Furthermore they are related to certain specific management functions or subject areas or, in many cases to multi-functional situations and inter-disciplinary problems.

## 3. Subject Area

Various subject areas (finance, personnel, operations research, general management etc.) have their own specific features. For example, operations research techniques are based on the extensive use of mathematics and statistics. It is usually taught through a combination of lectures (using audio-video aids) and exercises during which the technique is practised. This may be supported by reading assignments. In certain cases lectures may be replaced or supplemented with programmed books- However, the main thing from the management point of view is not to know the technique itself, but to know when and how it can be used. This ability can be developed through practical projects simulation exercise, business games, case studies, etc.

In programmes concentrating on the behavioral aspects of management, communication, leadership and motivation, training methods may be selected and combined in ways which give the participants numerous opportunities to analyze human behavior and at the same time directly influence the attitudes and behavior of the participants themselves. These programmes use case studies dealing with the "human side of the enterprises", business games emphasizing communication and relation~ between participants. role playing, sensitivity training and various other forms of group discussions, assignments and exercises.

It should be noted that it is often possible to choose from several methods, if we want to deal with a particular subject or problem. Thus the analysis of a balance sheet can be taught through the case study method, a combination of case study with role playing, a-lecture, as a classroom exercise or by reading a text or a programmed book on the subject. This is possible because the principal methods are versatile enough to be made in teaching a number of different subjects. Lectures, discussion and case studies are being used in virtually all subject areas. However, in management education and training the principal problem is not how to deal with specific subject areas and functions, it is much more important to :

- explain the relationship between various sides and functions of the enterprises and show the highly complex character of the management process
- help the participants to avoid a one-sided and oversimplified approach to multi-dimensional situations

- promote general management skills, which essentially lie in an interdisciplinary approach to management. and to combine and co-ordinate the various functions of management.

Once again, a sound use of participative methods can be of great help. A senior management seminar, for example, may start with a complex case study illustrating a business problem from multiple angles and arousing the participant's interest in specific subject areas, methods and techniques which, if properly integrated, will help them to take the right action in a complex situation. This may be followed in the second phase of the seminar by a more detailed study of these specific subject areas, methods and techniques. The final phase may be devoted to the integration of specialist knowledge and skills in general management through another complex case, business game or similar exercise or if possible through working on a practical project which requires this interdisciplinary approach.

#### 4. Time and Material Factors

Decisions about the choice of teaching methods are not independent of time, financial resources and other factors.

**Preparation time** (which affects the cost of the teaching material as well) varies for the different teaching material as well) varies for the different teaching methods. As a rule complex case studies and business games require long and costly preparation which includes testing with teachers or experimental groups, and making necessary revisions

**The length of the course** predetermines the kinds of methods which can be used. The longer the course the better are the chances that the teacher will be able to use business games, complex cases and practical projects. This is not to imply that participative methods should be eliminated from short appreciation or survey courses, however, only methods which are not time consuming and are liable to quickly pass the message can be used in these courses.

**The time of day** is more important than many course designers would imagine. For example, in the post-lunch period (1400-1600) it is more desirable to have enjoyable and attractive sessions which require active involvement.

The teaching facilities may be a limiting factor in some institutes, or in courses given outside the institute e.g. in small towns. Factors such as the number of rooms available for group discussions or syndicates or the altered in advance.

#### Relationship Between the Principles of Effective Learning and Teaching Methods

Education and training for management like any other educational process fulfils its role only by creating situations which are favourable to learning in which learning actually takes place. That is why "all schemes for management education and executive development exploit or depend on the basic principles of human learning.

Of course, principles of learning are not put into effect through the teaching method alone. Motivation to learn for example, depends on a number of other variables, such as the challenge of the participants' present or future job, his own "achievement motivation quotient" or the stimulation provided by the environment. However, the methods used in teaching and

training can influence motivation to learn and therefore should be examined and applied with this in mind

Some selected aspects of the relationship between principles of learning and teaching methods are discussed in the following paragraphs.

#### 1. Motivation

The motivation to learn is enhanced if the presentation of the material is interesting, emphasises applicability and shows benefits to be drawn from application. To some extent this can be obtained through any methods are directly concerned with applying theoretical knowledge to real life situations. The diverse ways in which they can be combined and sequenced can add to the enjoyment of learning and minimise participant fatigue

#### 2. Active Involvement

The principle of active involvement is perhaps the main "raison d'être" of Participative teaching methods. As a rule, the deeper the involvement, the higher the motivation the more the participants retain and the better they are equipped to apply it. It should not be overlooked however that the method itself although considered as highly participative, does not assure that each person will be fully involved. Involvement also depends on organization of case study preparation, leadership style and other factors. The participant may also be passive if he considers the material to be of poor quality or the performance of the teacher to be below his own professional level.

#### 3. Individual Approach

On-the-job training is a method which can be based on the training needs of one individual with full regard to his present and future job. It has, however, many limitations and that is why group training programmes should also involve work outside the enterprise. They must take into account the fact that individuals have different capabilities and learn at different places, have personal styles of study and application and should be subject to individual control of performance. The over-all course design and methods of teaching have to provide, therefore, not only work in groups and teams, but also the opportunity for individual reading, thinking exercising and application of knowledge.

**This can be done through:**

- compulsory individual assignments (reading, exercises, projects etc.);
- use of teaching aids for individual learning like magnetic tapes, video-tapes, teaching machines, computer terminals accessible to individuals
- the breaking down of group assignments and projects into assignment for each individuals;
- voluntary additional work by the more capable participants

#### 4. Sequencing and Structuring

Some methods are better suited than others for introducing new topics and ideas, for correctly sequencing them or for explaining the structure of a vast and complex area. That is why in certain situations the teacher cannot be without lectures and reading assignments.

## 5. Feedback

Different types of feedback are needed and have to be provided in learning:

- feedback on one's competence and behaviour (as seen by the other course participants by the trainer and by the trainee himself
- feedback on what was actually learned, and one's ability to effectively apply it.

Direct feedback on the soundness of decisions is an integral part of business games, whereas in case discussions the only feedback on the individual's analytical abilities is the opinion of other participants and of the discussion leader. Strong feedback on behavior rural patterns is provided by participation in role playing business games and sensitivity training(group dynamics)practical exercises, consultancy assignments and application projects provide feedback on the practical usefulness learning.

## 6. Transfer

This principles requires that education and training help the individual to transfer what he has learned to live situations. Some teaching methods, like lectures, study of literature or discussions do not pay much attention to this transfer. On the other hand, in many participative methods the element of transfer is strong. For this reason the methods of simulation and practical application projects are considered by some teachers as the most effective ones.

Exhibit C shows one way to rate the potential of some teaching methods to apply the above-mentioned selected learning principles. A simple three point rating scale has been used and rating is based on the author's personal assessment.

Examining teaching methods from the viewpoint of principles of learning shows the necessity to properly sequences and combine various teaching methods in order to secure the greatest impact on learning. It also explains why there is a growing interest in certain methods; those with high motivational feedback and transfer capabilities. This, of course, does not eliminate other methods which are needed for different purposes. Neither should it lead to an overestimation of a sing\le method which in tact, may fulfill its role only in combination with other methods (business games) or serve only very special purposes (sensitivity training).

## Notes -



## LESSON 24

### COMPUTER BASED TRAINING (CBT)

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This unit has given you exposure to various training methods and techniques. Where they are used how they are used and which is the most effective techniques.

As the time change various new methods have come into existence one of those is COMPUTER BASED TRAINING.

After reading this lesson you will be able to

1. Understand and explain what is computer based Instruction.
2. Understand and explain what is computer based Training.
3. Conduct and design computer based training

### Computer Aided Instruction

#### Introduction

Computer aided instruction, Computer assisted learning or computer based learning is concerned with the use of computers to mediate in the flow of information in the process of learning. The main strength of the computer as learning medium is its ability to process information very quickly and accurately. It is learning with aid of computers rather than learning about computers.

Distinction might be made between computer based learning and computer based training on the grounds that the aims and methods of training are rather different from those of education. However both are concerned with learning and in practice there are more similarities than differences between the two. Most of the knowledge and skills of computer assisted learning (CAL) are equally appropriate in computer based training (CBT).

Application of computer technology in training has been a lure for trainers - almost every where. Training managers confront the phenomenon at various professional forums where they encounter a growing number of panels, presentations and exhibits devoted to computer based training. Does the astute training manager join this movement to CBT or ignore it?

This section is devoted to computer based training or computer aided instructions of training. The purpose is to enable the student-the trainer, training developer or training manager who is not an expert in technology -based training to have an appreciation of its potential for application to training requirements. This does not require much of "conceptual understanding" because fundamentally all that computers do-whether they are used for specific calculations, weather forecasting, banking or training, is to process information by moving it from place to place, combining it and comparing it according to a set of prescribed rules called a "programme". This is true both for mainframe computers and for small, personal microcomputers.

The first write-up of computer based training (CBT) examine the costs and effectiveness aspects of CST as also the limitations of its proliferation in training. It discusses the design consider-

ation~, development and implementations processes of a CBT system. Finally, it reflects on new capabilities of computer aided technology in training future trends and the reasons why the training community should feel optimistic about this technology.

A Message from a Computer is addressed to technical trainers, instructional designers and programmers. It emphasises on the basic need for good programmers that can optimise use of computer capabilities as well as build the learner's self-esteem and his motivation for learning.



### Computer-based Training

The training community is in the midst of turmoil concerning the application of the computer to support the profession. Technology has been a lure for trainers throughout the twentieth century. The successive introduction of motion pictures, television, video recorders, video conferencing and video discs suggested to trainers that the use of such technologies would bring considerable benefits. Conference proceedings .of the past 20 years particularly are replete with predictions about the ability of computers to decrease the cost and increase the effectiveness of training. Time magazine's selection of the computer as the "man of the Year" in 1984 symbolized the strong almost overwhelming, presence of computer technology in the business and government World. Training managers confront the phenomenon regularly at training association meetings where they encounter a growing numbers of panels, presentations and exhibits which are devoted to computer based training (CBT), and they are greeted by a plethora of catalogs, mailers and announcements descending up to their desk daily. Bells and whistles have always been used a substitute for effective training by the many "song-and-dance" artists of our profession. The careful craftsman has wisely subordinated technology to its role as supporter or enhancer of skill development. Does the smart training manager join this movement to CBT or ignore it? Have the predictions about the role of computer-based training come to pass? What are the possibili-

ties for the application of computer technology to the training requirements of your organization?

### **Why should organizations want to use CST?**

Let us begin the examination of computer-based training by considering its benefits. What results can training managers obtain that would justify a CBT investment to the management of their organization?

The decision to use computer-based training should occur only because it provides specific benefits which are important to your organization. You should concern a strategy that will obtain those benefits. If you are not focused on the benefits, your organization could waste resources as it acquires CBT to “just try it out”.

Computer-based training has the potential to provide two major benefits. It can reduce the cost of training and/or increase the effectiveness of training. Reducing the cost of training enables you to provide more training for the same cost. CBT has become particularly attractive to larger companies with dispersed work forces.

### **Reduced Costs**

- Reduced student travel and living costs. Students do not have to travel to class sites. In many cases the computer hardware can be placed in dispersed locations of that the students takes the training at or near his Of other work site. For large companies with a geographically dispersed work force this can become a very large saving.
- Reduced length of training. There is considerable evidence to support the industry's claim that students in CST programs complete the training in about 30 percent less time than if they had been trained in the same program in a classroom. This reduction in training time is primarily a function of the ability of each person to proceed at his or her own speed and not to be constrained to the pace of the slowest person in the class.
- More timely training. A CST training program can be provided to a student as soon as he or she requires it. New Hires do not have to wait for sufficient people to organize a class. They may begin a GST orientation program as soon as they join the organization. Timeliness also means that individuals may take CST programs at odd times during the day or night rather than during prescribed class hours. Timeliness make employees productive faster.
- Increased student to instructor ratio. Whether the reference is to an instructor or !acilitator who manages students on terminals in a classroom or to the instructor who is at the end of the phone to answer questions from students scattered across the country, the result is the same. The instructor or facilitator of a CST program can manage or support considerable more students, perhaps sevenfold more, than can the instructor in a more, conventional form of training. The result is a reduction in the instructor / facilitator staff for the same student load.
- Reduced amount of operational hardware. When a training program includes operational hardware which students are learning to operate or maintain, the amount of hardware

required to support training can be decreased significantly by the use of computer simulations. For instance, the copier company which teaches copier maintenance on a personal computer simulation generates considerably hardware savings. A classroom with six \$5000 enhanced personal computers and one \$40,000 copier can' produce the same training result as a classroom with, six \$40,000 . 90pier.

- Reduced equipment damage. When the student is learning equipment operations or maintenance, his or her mistakes are 'less costly on a computer simulation than when performed on .an expensive piece of equipment. The ultimate example is the airplane flight simulator on which pilots develop their skills rather than training on the more expensive airplane. The same principle applies, in a less dramatic fashion, when a technician learns to apply equipment, trouble shooting diagnosis and repair on a computer simulation rather than on the copier, the aircraft engine or the radio. If a student makes a mistake on the actual hardware, it could be costly. If he or she makes the same mistake on a simulation, only student pride may be damaged and he or she can learn from the error.

### **Increased Effectiveness of Training**

In addition to making training more efficient, CST can make the training more effective. The impact on effectiveness is seen in the following ways:

- Standardized delivery. Unlike the human instructor, the computer delivers the instruction the same way every time. It doesn't have good days or bad day&. Every day is the same. It is important to note that the standardized delivery is only as good as design and development behind it. Standardized delivery could be standardized poor delivery, if the program was ineffectively developed.
- Standardized feedback. Each time a student responds to a situation, the computer can provide standardized feedback.
- Individualized student program. CST can individualized student programs in three different ways. It can tailor an entire program to the capabilities of a student as determined by testing before the course begins. At pre determined places within a course, it can tailor the reminder of a course student based upon performance to that point in the course Finally it can tailor the work within a module or segment of a course based upon the student performance in the .beginning of the module. Individualization can be expensive because of the increased computer programming required both the computer memory required to handle individualization and tile programming costs have been the principal constraints to its being used more than it is.
- Increased performance practice. One of CST's major contributions to effectiveness is seldom recognized. The computer can offer each student sufficient opportunity to practice a skill until proficient. It is often difficult within instructor-delivered programs to provide each student, the opportunity to practice until proficient while delivering accurate, consistent feedback for each student attempt. CST can, and while doing so, guarantees a performance result. Once again that performance result reflects underlying training expertise required.

- These benefits are impressive. For companies with large work forces, and particularly where the work force is geographically dispersed, the cost savings can be considerably and the training more effective. However, a computer-based training solution for a program of any size provides risks as well as rewards. The key to success is the ability to 'perform a cost-benefit analysis is dependent upon a knowledge of CST benefits and their derivation.

### Computer-based Training Use

The cliché about “no free lunch” certainly applies to CST. Computer based training is usually a “high risk-high reward” venture, whose risk side is seldom appreciated. All the commotion about CST may lead you to believe that everyone, or at least a large number of companies, are using computer-based training and that its use represents a significant proportion of training budgets. This is hardly the case. Surveys of Fortune 500 companies over the past 4 years indicate that 40 to 50 percent of the companies employ computer based training in one form or another. Larger surveys, such as one Training Magazine conducts annually, indicate that 20 to 25 per cent of the surveyed companies use CST. The larger companies are more likely to try CST because they can afford to experiment with new forms of training or because their training requirements are sufficiently diverse that they can match some of their needs against commercial CST capabilities. However, surveys which addressed quantity or budget which employ CST, the budget devoted to that technology, or the amount of the company's training requirement addressed by it, varies from less than 1 to 10 percent. Hence the proliferation of CST is still very limited.

The important question for any organization considering CST is why its use is not more widespread. The short answer is there are enough failures and disappointments to prevent CST's growing by leaps and bounds.

The failure and disappointments with CST are similar in scope to those experienced, when other technologies have been uncritically applied to the training process. Infatuation with the technology saw CST applied to situations in which it was not appropriate much less a workable training solution.

Another reason for CST's present use is the small amount of generic CST available for off-the-shelf purchase. Only one community - data processing - can choose from among a significant amount of CST training materials. While the number of CST commercial niches is increasing, the number is small on a relative basis; and each niche supports only a fraction of the training, which is a large area in which it operates. An interesting example is sales training which is a large item in the training budget of any company with a sales force. Over the past 2 years commercial CST companies have developed a large number of disk-based training programs to support sales training. However, those programs address prerequisite skills or knowledge that the salesperson should have before beginning more traditional sales training programs or in other ways support the traditional programs.

If you can't buy CST off the shelf, you have to build it or contract to have it built. CST is expensive to develop. Where good training organizations may spend 20 to 40 development

hours for each delivery hour of conventional instruction, good development teams require from 50 to 500 hours to develop each hour of C.ST. The ratio swing depends on the training requirement, the form of CST, and the development approach chosen. This means that CST can cost from \$2800 to \$28,000 per hour to develop. How many organizations can afford this cost?

The corollary to the excessive initial cost of CST is the longer time required to develop it than to develop conventional training. A CST program may take several times longer to develop than would the same program developed for conventional.

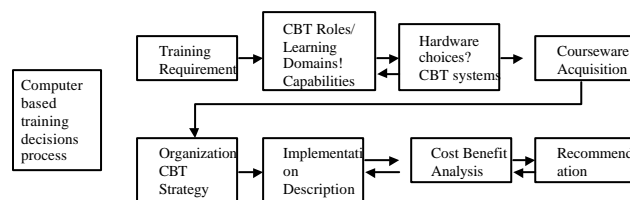
The history of training in the seventies and the early eighties includes a large number of CST prototype efforts which did not last through the early trails. Organizations who want to develop their own CST will quickly discover the risks described above. Despite these risks there are sound reasons for organizations to consider CST and to employ it. The benefits described earlier are real. The training community has considerable experience dealing with CST and understands its selection and development much better than it did a few days ago. In the remainder of this chapter we will examine a decision process to help organizations determine, whether CST is appropriate for them, examine the trends in the technology, and conclude with reasons why the training community should feel optimistic about this technology.

### CST Decision Process

The initial need for any organization considering CST is to have a systematic process that will take into account the major variables and issues necessary to good decision making. Shown in Fig. 1 is such a decision process to help you decide whether or not CST is appropriate for your organization. It will address the roles of computer-based training the development process provides a systematic approach to your assessing the viability of computer-based training for your organization.

#### Determine Requirements

Step one in the process is to determine the training requirement. In other words you must determine that you have a performance problem that training can correct and be able to define the training requirement in behavioral terms. Instructional technologists use a variety of terms to describe this process. “Needs analysis appears to be the term most frequently used”.



**Figure 1**

To convey the process envisaged. It is quite useful to conceptualize three processes occurring. One ought to begin with a performance analysis of the type described by Robert Mager. It will determine the performance problem or issue and lead to a conclusion concerning the role of training. Second a job to a conclusion concerning the role of training. Second a job analysis

of the specific job or function being addresses determines the array of job tasks to be addressed. Finally, a task analysis is used to define behaviorally each job task. The result of this first step is a set of behaviorally defined job tasks which describes the performance results the proposed training program should achieve. There is no incremental difference in time or cost in the process required to determine the training requirement for CST from the process always .required to generate behaviorally based systems training.

### Match needs with CST capabilities

Step two consists of three parts:

List appropriate CST roles.

Determine the learning domains inherent in the training requirement.

Determine the CST capabilities required by the learning domains.

You emerge from step two with a statement of CST capabilities required to train effectively inthe learning domains of the training objectives. You learn how much graphics capability will be required.

The beginning of step two is to determine what CST roles are appropriate for the training requirement described in step one. The computer can perform three roles. It can manage the training process deliver training or provide administrative support. The management of training is called “computer-managed instruction,” or CMI. Although CMI is less’ glamorous than the delivery role, it can provide major benefits. CMI keeps records of student activity and performance generates instructional prescription, and tests students. Organizations have used CMI to manage students in classroom settings where self paced materials were being employed. Hence, CMI can be used in conjunction with non CST training delivery.

Computer delivery of training is usually labelled computer-assisted instruction, or CAI. Listed below are examples of the way in which the computer can deliver instruction:

Drill and practice

Tutorial

Simulation

Games

Inquiry mode

Based upon the training requirement and the benefits you would like to obtain, make a list of those CST roles which would be appropriate. You are not making decisions at this stage, but rather constructing alternatives. If your primary interests are to reduce the cost of training, you will want to deliver training via the computer in order to reduce the length of training, reduce the demand for instructors, and be able to provide training at the job site. If you are interested in improving the quality of training, you have several alternatives. CMI can improve the quality of a training program through its ability to provide individualization. Computer-delivered instruction can improve the quality by providing increased performance practice, consistent delivery, and standardized feedback. None of the benefits or roles are mutually exclusive.

If you determine that computer-delivered instruction is necessary, you have to determine what capabilities is not well developed within the CST community. All objectives are not taught equally well by the computer. It facilitates the learning of certain objectives better than others. Moreover, the different forms of computer capability such as graphics are more critical to the learning of certain forms of objectives than to others. The general rule is that the more precisely you can define a training objective, the better the computer assisted instruction. The computer does not support vaguely defined objectives very well.

To determine the CBT capabilities that may be necessary, it is important to determine the learning domains inherent in the training objectives. Do the key objectives centre about the cognitive, affective, or psychomotor domain? Figure 2 arrays five types’ of training often found in the business sector, lists the skill contained therein and suggests the types of CBT required.

Functional area to be trained	Data processing	Technical Training	Sales skills management training communication skills
Learning domains	Cognitive skills	Cognitive skills psychomotor skills	Cognitive skills psychomotor skills
Types of CBT required	Any form CBT	Graphics supported CBT for simulations to support psychomotor skills  Any form for cognitive skills	Graphics supported CBT for psychomotor skills video supported CBT fulfills this best.  Any form of CBT for cognitive skills-which are usually the enabling tasks for this requirement

Figure 2: CST capabilities and learning objectives

The importance of Figure 2 is that it provides insights into the characteristics of the particular CST system required to support learning objectives of a specific type. This match of functional training area to domain to CBT capabilities reflects and early understanding within the profession of these relationships. It needs to be taken further and matched with the comparative CBT development effectiveness of the various CBT systems, Figure - 2 suggests that any form of CBT can support data processing training effectively, The implication of this sugges- tion is that cheaper, nongraphics CBT systems are quite sufficient for data processing’, More expensive graphic systems may contribute not much beyond increased cost. The procedure based skills which underline both data processing training and technical training can be taught effectively by CBT because of the precision of the performance objectives that can be developed.

	Main frame CAI non graphic	Main frame CAI with graphics	Mini computer CAI with graphics	PC developed CAI limited graphics	PC developed CAI simulation rich
Development ratio (hours of develop- ment per hour of delivery)	40-1 to 100-1	1 00- 1 to 300-1	50-1 to 200-1	30-1 to 50-1	1 00-1 to 500-1
Development cost per hour of delivery	\$2300 to 5600	\$5600 to 17000	\$2800 to 11200	\$1700 to 2800	\$5600 to 2800
Supports	Cognitive domain.	Psycho- motor	Psycho- motor increasingly easier	Psycho- motor	
	Affective domain				

Figure 3: CST development costs

Moving to the concepts and interpersonal skills inherent in sales training, management training and communications training one faces a very different situation. Training objectives in these areas lack the hard precision one finds in technical or data processing training. More important the terminal performance inherent to sales skills and management skills require interpersonal practice. On the other hand an examination of enabling skills and knowledge of sales and management terminal performances would quickly show that many if not most, of such subordinate skills could be taught and practiced by computer-based training. This observation means that the total program to provide any of the major terminal performances in sales or management training would require some instructor-delivered training in addition to CBT.

Figure 3 adds to the information contained in Fig. 2 by indicating which learning domains inherent in the training requirement you need to complete step two by constructing alternative concerning the CBT roles that you envisage and the implications for CBT capabilities. If you are going to deliver technical training you need graphics supported CBT can support the cognitive skills found in sales and management training. However providing the interpersonal situations critical to sales or management training requires video-supported training Computer-driven videodisc systems meet this requirement.

When you complete step two, you should ensure that you have determined alternative that will meet the training requirements in step one and provide the benefits considered important to your organization.

Step three has two components: hardware choices and CBT system. First specify viable hardware choices. Hardware choice is dictated by the training requirement, the features and functions it requires the location of the training population, the hardware available, and the CBT system necessary to support the requirement. Current hardware choices include mainframes, minicomputers, microcomputers, and networked systems. The changing nature of computer technology is blurring the distinctions among micro, mini and mainframe systems and creating new options. However, the following information will enable you to deal with the terminology and hardware categories being used.

**Mainframe.** A centralized mainframe system used in a time sharing manner was the early operational mode for CBT systems and is still used extensively. The mainframe provides a large amount of storage capacity for both management functions and courseware. Further, additional terminals can be added at small incremental costs. Mainframe systems have their drawbacks. When too many terminals are using the system at the same time the system's response is derided. Reliability is another concern. Any time the central processor ceases operation, all the terminals stop functioning also. An important issue when considering mainframes is whether graphics will be required. Some mainframe systems including the popular IBM instructional system (IS) do not provide graphics for instructional purposes. Other systems including control Data's PLATO system, do provide graphics. This is an example of the inter relationship of different mainframe capabilities and specific CBT systems. CBT systems will be addressed later.

**Minicomputers:** Minicomputers driving terminals in a timesharing situation are similar to timesharing mainframe systems. While Minis may lack the capacity of the large mainframe host, a minicomputer may be the correct business solution any time capacity requirement will not overload mini capabilities.

**Microcomputers:** Microcomputers or personal computers serving as stand-alone systems are increasing in popularity because of their flexibility, low cost and transportability. On the other hand they lack the ability management, and resource sharing capability of the mainframe system.

**Networked Systems:** One of the more popular hardware solutions is the networked system in which geographically distributed personal computers are linked to a mainframe. Instructional software can be transmitted to the micros and 'course results uploaded to a management system. Further, course revision can take place on the mainframe and then be downloaded electronically.

The evolving nature of computer hardware means that this is an area that will require close scrutiny. While costs are falling, power and capacity are increasing almost geometrically. The distinctions among different forms of computers described above may be meaningful only for a few more years. However some conclusions about hardware are still in order. If the students are geographically dispersed, you need either stand-alone personal computers or distributed personal computers networked to a mainframe or mini. The networked solution usually is more cost effective than stand-alone systems. A second critical issue concerns whether or not the training requirement will need graphics. Some mainframes and mainframe-based CBT systems provide graphical support and some do not. You have to research this issue when you consider CBT.

As a minimum, you should conclude your examination of hardware with tentative conclusions about whether you need a networked system, stand-alone micros, or timesharing mainframes or minis and whether graphic support is critical to the instructional success of your requirement.

### Select CST System(s)

The next step is to select one or more CBT systems that would be appropriate to your requirements. In early 1986 over fifty different CBT systems are available on the commercial market. Each system is built around an authoring system or a authoring language which constitutes the system software for the instructional system. Authoring languages and authoring systems enable courseware developers and development teams to the training material. Each language and system has its own strengths and weaknesses and set of features. Many are linked directly to specific hardware configurations: You have no choice but to research market availabilities and system capabilities. Significant new systems are being added almost every month. Selection of a CBT system begins by returning to the statement of the training requirements and determining exactly what capabilities are required of your CBT delivery system. Does it require graphic support? Will skills or knowledge or both be taught? How will student performance be evaluated? Can the program be delivered in a linear manner or will branching be

required? Several of the sources listed at the end of the chapter provide excellent checklists to help you.

The key in examining each CBT system is recognizing the embedded instructional system contained therein. The developer of an authoring language or system begins by formulating an instructional approach. The developer next builds a software package to ease the development of training materials that use that instructional approach. Further, the authoring language or system is -enhanced with additional features - to make the developer's job easier: An example of an additional feature is "screen capture" which permits the entire screen of an application software package to be captured and inserted directly into a CBT package with only one to two keystrokes rather than having to copy the entire screen. The embedded instructional system dictates the way in which the instructional program will be delivered. Some developer use high-level programming languages such as PASCAL to have more flexibility in their instructional delivery. At least two prices are paid to use high-level programming languages rather than authoring languages take longer for developers to master and may require several time more development time for a specific training program. On the other hand, certain graphics-rich simulation may be possible only in high-level programming languages. Enough advances have been made in more flexible authoring languages and systems over the past 2 or 3 years to make this an interesting area to explore as consider your CBT decision.

### **Acquire Courseware**

Step four is to determine how you will acquire courseware. Courseware is used to describe the CBT instructional software. It is the learning material. You buy courseware of the-shelf, contract for its development, or form an in-house development group. Each approach is the appropriate answer to certain situations. The major variables are cost time, maintenance of courseware, and requirements for continuing experience. If you can find off-the-shelf courses which meet your precise objectives and which will run on your hardware and operating systems buy them. The critical question is how closely the objectives of the off-the-shelf courseware match your learning objectives. More to the point, you probably will have great difficulty finding off-the-shelf. Except for certain specialized areas the number of lessons available will be small. In such areas as data processing training a sizeable CBT commercial industry has emerged. The commercial activity is strong because of the degree of standardization present among data processing operations in terms of hardware, software and training objectives. Similarly an increasing number of CBT lessons are becoming available to support personal computers and their standard software packages. Another recent growth area is CBT training to support important enabling knowledge's and skills and productivity tools in sales training and management training. You need to investigate the CBT vendors to determine what can be provided you.

Contracting for courseware development is an appropriate solution, when the organization lacks in-house capability, wishes to avoid the CBT development learning curve, and has a time-sensitive to avoid the CBT development learning curve, and has a time-sensitive requirement. Contracting may also be

the solution for a specific project which can be described well or for the first project of a company which is exploring CBT. Usually, a contracted effort will cost less than an effort provided by an in-house group in its early days. Finally, experienced CBT development" groups may contract to expand their capability during peak periods.

If an organization intends to make a long-term commitment towards a CBT program it may want to consider forming its own group. While it will have to pay for the learning curve of its fledgling in-house group, the organization will reap several benefits. All the experience gained goes directly into the skills of the in-house group. The in-house group will be able to bring its acquired experience to bear on new CBT challenges and provide new CBT solutions.

It is not unusual to see organizations use all three approaches to acquire courseware, not only when they are beginning their CBT program but even during the mature stage. Do not arbitrarily rule out, any of the three approaches. Each has its place.

### **Determine Business Strategy**

Step five is to determine a company CBT business strategy. The CBT planner must determine whether the initial CBT project will be a stand-alone effort in which experimentation is permitted or whether it will be the first project in larger system and hence must be compatible with the design of the eventual larger system. Experimental projects offer considerable advantages. They enable an organization to leap quickly into its first CBT effort since they do not put constraints upon the selection of hardware, software, authoring systems and operating systems. In the experimental project, the organization can experiment with the forms of computer-delivered instruction, the kinds of hardware, and the methods of developing the courseware.

In those instances in which the organization can define with confidence its eventual system and possesses sufficient in-house CBT expertise to understand what it is about, it makes sense to make the pilot effort compatible with the final system. The point is the organizations should not back into a decision concerning their choice of system and system design. They should make conscious decisions as to whether they are experimenting and for what purposes and as to when they intend to. develop a system design for their program.

### **Plan Implementation**

The next step is to describe the implementation which will occur. What training courses will be provided? Who is the target audience? Where are they located and where will they be trained? What will be their responsibilities? What will be the relationship between the CBT development group and the course instructors? What is the hardware upon which the training will take place? You will probably describe two or more different implementations to reflect the alternatives you are considering.

As an example you may be considering centralized training of software consultants in the COSOL language and you would like to establish a computer-managed instructional system to manage their individual progress through a self-paced course. You are interested in eliminating the travel costs of the stu-

dents; so you consider converting the self-paced course to computer-delivered instruction which is delivered at the job site. The CAI program is computer managed as well. Establishing detailed descriptions of the implementation of each alternative enables you the complete the cost-benefit analysis' which is the next step.

### Cost-Benefit Analysis

Once a company strategy has been outlined and the alternative implementations described, it is time to complete step seven, the cost-benefit analysis. Cost-benefit analysis are neither mysterious not exotic. Rather, they should be viewed as a commonsense examination to determine whether development and implementation of a specific CBT system makes business sense in a particular situation. The starting point of the cost-benefit analysis is the formula in Figure 4. Use of this formula and development of a cost-benefit analysis is well explained in the various works by Glen Head which are listed in the bibliography: Key to easy use of this formula is recognition that the primary benefits will be reduced student costs through shorter learning time and reduced travel costs and instructor costs through higher student to instructor ratios and shorter courses. In turn, these benefits must be weighed against the primary cost increases, which will be courseware and hardware acquisition, each of which should be amortized over a realistic period. Although hardware may appear to be the largest new expense, experience indicates that the courseware is the major new cost factor.

Training System Costs =  
 Student Costs  
 +  
 Instructor Costs  
 +  
 Facility Costs  
 +  
 Equipment  
 +  
 Administrative Costs  
 +  
 Courseware Acquisition Costs

**Figure 4: Cost-benefit analysis**

When the planner completes the cost-benefit analysis, he or she must engage in an interactive process of examining the effect of various assumptions on the alternatives examined. They should also consider qualitative issue in the context of the cost-benefit analysis. It may be impossible for a high-tech company to compute the value of providing computer-based training to its clients or being the first in the industry to do so, but the benefit may be sufficient to tip the scales when alternatives of similar value are being considered.

### Development

Because the development of CBT is a cross-disciplinary effort, it is important to highlight several sources listed in the bibliography provide detailed discussions concerning how to proceed with development.

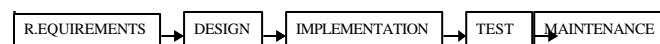
First, it must be recognized that computer-based training development is the morger of two complementary but different processes: the systems approach to training and the software engineering process. The systems approach to training is a structured way to manage the training process from requirement to implementation and evaluation. Figure 5 shows a generic model usually referred to as the "instructional systems development" or ISD process.

Several features of the ISD model are critical epitomize its purpose and use.

Analysis	Design	Development
Evaluation	Implementation	

**Figure 5: Instructional systems development process**

The model stresses the importance of an analysis phase that is based upon examining members of the target population in order to determine exactly the target requirement and then conducting a behavioral analysis so that the requirement can be expressed in behavioral terms as performance objectives with tasks; conditions, and standards. The design and development follows a standardized process, but the key is the systematic testing or validation of increasingly larger components of the training on typical members of the target population to ensure that the training works. The ultimate test of the training itself occurs in an evaluation phase to test the students to ensure that they have acquired the skills and test the students to ensure that they have acquired the skills and knowledge that are the purpose of the training Finally, evaluation occurs on an on going basis with the results fed into each phase of the model to revise the program.



**Figure 6 : Systems engineering process**

Different forms of the system approach to training appear, but they are all quite similar to the generic model pictured above and share the characteristics described above.

A second process is the systems engineering process which is .the approach necessary to develop any computer software program. The process is outlined in Figure 6. The critical point of any system engineering process is the requirements phase. Many unsuccessful software programs owe their downfall to the absence of a good requirement descriptions document reflective of sufficient work in the requirement phases. One particular point to note is the extra time required in the testing phase to ensure that program runs on the computer exactly as it is supposed to run.

Another major issue in development is the form of the development organization. The computer-based training effort, during its early period in any organization, requires a management approach that will treat the effort in a .holistic fashion. The management choices are functional management, project management and matrix management. A case can be made for each in certain situations depending upon the decision criteria emphasized. However, our concern for the most part, is not with the upgrade of existing CBT systems or the development of single experimental prototypes. These are both simple projects that probably can be handled by functional manage-

ment approaches. The larger challenge is the organization which makes a conscious decision to establish a computer-based training system and to begin the development of courseware. The expenses involved the sophisticated nature of the technology, the time length of the project and the probable size and cost are all factors that may combine to defeat a functional organization. "Business as usual" will destroy an emerging CBT system.

Project management with its lines of control but its cross-functional capabilities may have the best potential to cope effectively with the challenge of building a CBT system. The project manager must build a carefully balanced staff that includes all the disciplines covered by the project. Planning, development, implementation and evaluation of a CBT project is a truly inter-disciplinary effort,

Another key aspect of the management challenge is to ensure that the expectations of the different parties agree. Most military CBT efforts of the 1970s failed because the research and developments expectations of the developers differed substantially from the operational expectations of the users upon whom the products were imposed. Early phases of any large CBT effort will by their nature include more development and evaluation aspects than may be included later in the project. The potential users must not only understand this; they must share in the development and evaluation. Finally the project manager must adhere to a serial development of critical components during the early phases of the program. Hardware and software environments must be stabilized before courseware is developed. Unfortunately, parallel development is often used because of time constraints. It leads to situations in which hardware and software shortcomings create courseware errors and ultimately slow and make more expensive the courseware development.

Another development issue concerns the choice of programming environment. Authoring languages and systems and high-level programming languages were discussed earlier.

### Implementation

A great deal has been written about implementing CBT systems. Several of the items cited in the bibliography contain excellent detailed discussions of CBT system implementation. Planning must address both beginning the implementation and maintaining it. Key areas include management of the instructors, maintenance of the courseware, "administration and reports, budgeting program reviews and relationship with contractors.

However, the most important implementation issue addresses people relationships. The principal challenge in implementing a new CBT system is one of transferring computer-based training technology and comfortable is its characteristics to a group of users who wonder what strange apparition is about to be imposed upon them and upset the order and stability of their world. Instructors, trainers and administrators must be won over. They must be continuously involved so that they feel they "own" the program. *This* means that the principal user groups especially the instructors and facilitators, must be included in the initial planning groups as the organization first considers CST

If they own the students and will be in the forefront of continuously refining and updating it to improve it.

### New Capabilities

**Videodisc-Based Training:** The technology combines the capability of the video disc to random access 54,000 still frames of information or 330 minutes of motion sequences with a personal computer's text and graphics and its capability to control the interaction between the information on the videodisc and that on the personal computer. The capability to display actual photographs and video sequences provides the training developer new opportunities.

Videodisc were first used in training in the late 1970s. Early applications were primarily in Defense Department technical training programs and in nuclear industry operator training. *The last 3 years have seen* considerable growth in the number of videodisc-based training programs in both the Defense Department and private sector. The major areas of use at present seem to be in those training requirements which can employ machine simulations and in interpersonal skill training. Commercial programs have been developed for both sales and management training. They use video sequence of interpersonal activities to enable the student to draw conclusions about certain activities, to practice *categorizing* behaviors or to see the consequences of his or *her* selection of a course of action.

Student reaction to videodisc-based training programs is usually so much more favorable than it is to more conventional CBT that we should see increasing use of this technology as a component of training programs. Videodisc-based training is more expensive than CBT and takes considerably longer to produce. These shortcomings will remain for some time.

**CD/OD ROM:** Compact disc read only memory (CD-ROM) and optical disc read only memory (DO-ROM) are new technologies that can provide an incredible increase in storage capacity to computer systems. CD-ROM is a small, laser-read disc, about the size of personal computer floppy disc drive, that can provide a storage capacity that is the rough equivalent of 250,000 pages of text. Currently, this technology is being used in electronic publishing but it should soon be used in training to provide quantum increases in personal computer storage capability.

**Expert systems/Artificial Intelligence :** This technology combines advances in the cognitive science with the large increases in computer computational power to create tools to help workers in job situations. The expert system makes original judgements about a situation based upon the general facts and rules programmed in its database and the responses of the user to a series of questions. Expert systems can be used to create an investment portfolio to solve an electronic troubleshooting problem, to receive medical symptoms and generate a diagnosis, or to perform an intelligence analysis. Although some rule generating programs are being marketed for personal computer use, the general understanding of expert systems is that the term applies to complex endeavors that will require very large database to program the knowledge and rules that define a particular context. The expert systems assistance in helping the worker to solve a problem is not the result of a program but rather of a series of inferences by the system. This requires far



more computer capacity than is found in today's personal computer. Eventually expert system should be found in support of the more difficult technical training requirements as well as being part of job package in sophisticated, procedurally oriented jobs. Several trends are having a significant impact on the future of CBT. Probably the first trend that should be noted is the increased realism concerning the use of technology based training that can be seen in the professional training community. Trainer and developers increasingly see CBT as another useful and important tool in their bag of capabilities rather than as a panacea. They ask tough questions of the CBT vendors and display a business oriented approach to CBT purchases.

Second, the pervasiveness of the personal computer in both the office and home has a major impact. A larger portion of the business world is becoming computer literate which means they should be more receptive to using computers in training and more capable of using them the increased presence of personal computers in business has spawned a strong CBT market niche. Hundreds of floppy disc-based CBT programs have been created to train people to use personal computer applications like word processing and spread sheet programs. While many of these programs are unsophisticated page turners, many exhibit sound instructional design. The CBT tutorials marketed with major new PC application programs have become increasingly effective and sophisticated. In the process they both acclimate more users to CBT and generate certain expectations concerning its effectiveness. These CBT tutorials may begin to serve as a benchmark for measuring training effectiveness in other areas by computer literate management.

**Authorizing Systems.** The increasing number of authoring systems being sold and the features and sophistication displayed in the recent entries in this field should raise the quality of the CBT that is being build. There is no reason not to expect this trend in improved authoring systems to continue.

**Networking:** Commercial data communications networks have become an important part of the information services industry. It is becoming increasingly easier for companies to consider networked solutions to their CBT training system and to have several commercial choices.

**Mixed programs:** Increasingly, we should see CBT as a component of a training program rather than as the entire training program. For example, prerequisite work for classroom training should be provided via CBT. Student completion of prerequisites should be computer tested. Interpersonal skill programs especially in sales and management can mix CBT programs with instructor-intensive components. Technical training programs can employ video-disc-based simulations to cause the technician to master a troubleshooting procedure before he or she performs it once on a real piece of hardware to validate the performance on CBT. The options are endless once the trainer and developer perceive CBT as another important tool and not the solution.

## Web-Based or Computer-Based Training

Computer-based training has been around for a while but web-based training is a fairly new training delivery method. Both training types involve self-paced learning with the participant getting course material from a computer tutorial with multi-media elements. Run-time simulations of software or actual software integration in the training material allows for the completion of exercises in the tutorial and tend to make the participant feel less anxious about making mistakes.



The difference between web and computer-based training is that computer-based training media is usually a CD or diskette, while web-based tutorials are delivered through an Internet connection from a web site. An example of web-based training here at Cornell is the CBTWeb tutorials, while an example of computer-based training would be the PTS (Personal Training Systems) tutorials.

The advantages of this type of training is that varying skill levels and topics needed can be addressed by having participants work at their own pace in an open lab session that focuses on many applications. Each participant can work on the topic and tutorial skill level that best suit their individual needs.

The disadvantages of this type of training delivery method is that the participants must be self-motivated to complete the required training on their own and if taken on the job, ringing phones and co-worker interruptions can lead the participant away from the training. Boredom that comes from the lack of instructor and co-participant interaction can also be a negative factor in the effectiveness of this type of training.

### FLEX

A FLEX or Facilitated Learning Experience is another relatively new training delivery method and involves the use of web or computer-based training in a lab, supplemented by the presence of a subject-matter expert (SME) or facilitator. The participants complete the web or computer-based tutorials on their own as the facilitator periodically supplements the learning experience with lecture, demonstrations or question and answer sessions. Class discussions or 1 on 1 attention from the facilitator are possible additions to the training since the facilitator is not constantly involved in delivering the training in a traditional lecture fashion.

This type of training has new potential for addressing some of the common problems associated with traditional instructor-led training such as variable participant learning pace and style, and the instructor is free to give more personal attention to individual participants or facilitate group discussions and exercises.

### Activity and Assignment

1. What is computer based Instruction
2. What is computer based training
3. What is web based training
4. What are the major requirements of computer based training.
5. What are draw backs of computer based training.

## Distance Learning

In contact training programmes trainers and learners are face to face. This limits the number of participants in a programme. Distance learning can respond more readily for the need to train large numbers and with the introduction of new technologies, is becoming increasingly important. It can reach participants wherever they are and hence spread new information rapidly. It also incorporates the advantage of keeping people on the job setting them learn at their own pace and greatly simplifying requirements for different organizations to collaborate in training.

The rapid spread of electronic technologies such as video taping, closed circuit and responsive television and rapid data processing using computers for virtually instantaneous feedback have made distance learning highly attractive.

Distance training of all kinds start with coming to the training needs of a cohort and preparing relevant curricula for meeting their needs. Later steps include selecting an appropriate media mix, preparing a series of modules to be used by an individual or small groups of participants as graduated learning experience preparing ways of review in the progress of participants and giving feedback to them on what they have been able to learn well and where they need to improve further, supplementing cognitive learning with other methods and reviewing the final learning outcome.

After reading this lesson you should be able to understand

1. the concept of distance learning
2. the characteristics of distance learning
3. the ways distance learning can fill the training needs of today and
4. the key factors influencing distance learning

Distance learning can be taken to be the delivery of appropriately designed training material so that a trainee can use it on his or her own, probably with local support and central coordination. The comment is frequently made that this could also be taken to be a definition of correspondence teaching. This is quite correct. The simple text material with crude feedback and advice systems used by many correspondence schools are at one end of the distance learning spectrum. The art of teaching at a distance has evolved considerably in the twenty years and while many of the distance of simple correspondence courses, they bear little resemblance to their ancestors. Today's distance learning programmes benefit from:

- more developed theories of training and learning,
- more comprehensive educational design techniques,
- availability of varied and advanced media for delivery and,
- more developed mechanism of support.

Another term which is frequently used is Open Learning Systems. This is the provision of education and training on open access, without barriers. Normally this implies that there are no educational prerequisites for undertaking a course of study. The Materials, teachers trainers etc. will be available on demand allowing flexibility of timing.

Any type of method can be used in Open Learning Systems. To sum up, it can be said that a correspondence course is a subset

of Distance Learning can be a part of Open Learning, though this does not have to be the case.

## 2. Characteristics of distance learning

- i. Neither Distance nor Open Learning methods should be viewed as a replacement for the more traditional methods of training. There are a number of clear characteristics of residential, face-to-face, group and practical methods which would be difficult to duplicate in any system of individual study particularly, where this study may be carried in parallel with normal work experience.
- ii. Effective as the traditional methods may be for many activities they fall short of the present requirement for training and retraining. It has been estimated that approximately 80% of the managers and supervisors have received no training for their positions, or training of such short duration and erratic nature as to make it worthless. Industry and the need to keep abreast of the changes in the new business environment poses considerable problems for the training system. .
- iii. The new techniques provide a complement to the more usual tools of the trainer, through which many present and future training programmes can be addressed They can provide a mean of:
  - Supplementing a limited resource at low cost.
  - providing a cost-effective mass training resources for special requirements.
  - Offering alternative methods of study.
  - allowing greater flexibility in terms of time, style, and location of training.
  - maintaining a uniform high standard presentation of concepts.
  - Ensuring an adequate level of preparation in order to make most effective use of other training methods.

At the very least, Distance Learning can provide some basic training where for reasons of scarce resource, cost or location, it can be provided by other means. Where it is used as a part of well planned comprehensive training scheme, it can embrace the general levels of training available within an organization.

## 3. Advantages of distance learning

1. Distance Learning is a method of training which breaks down some of the traditional barriers-location, inflexible schedules, cost and style.
2. It comprises specifically designed material created through the latest educational techniques. The programmes are delivered through a variety of media-diagrams, text, audio and video. Some programmes also have optional computer and interactive video-disc components.
3. All course elements are completely integrated and each has a vital role to play.
4. This type of training is available on demand.
5. There are no present starting and finishing dates imposed from outside; programmes can be studied as and when suitable to the individual or to the organization.

6. The costs tend to be considerably lower than equivalent training carried out through traditional training methods.
7. It provided an opportunity to increase the productivity of the training function by providing proven high quality reliable materials than can reach a large audience.
8. Good distance learning is deal for training today's managers. The tough competitive conditions of today's business environment demand managers who have developed a high level of skills in many different disciplines. Unfortunately, the very pressures that are creating this demand made it difficult to release manager for traditional. residential or even in-house training programmes. Distance learning programmes provide access to training materials for on site or home study. In addition they are of a quality that would be prohibitively expensive for most organizations to develop for themselves.
9. The courses can be used by trainers and line managers in a wide variety of ways to suit the needs of each company/ individual.
10. Where one or two managers needs training in a particular skill, the programmes can be used individually, with regular tutorials and reviews. .
11. Where large numbers require training in a particular location, in-company group exercises and discussions can be incorporated with the basic material.

#### 4. Distance Training in Context

1. Distance learning is not a panacea for all types of training needs. While it is certainly true that it has several advantage over other forms of training in certain circumstances, trainers appreciate the dangers of over-claiming the benefits of these courses or any other training medium.
2. Distance learning should not be viewed simply as a replacement for more traditional training methods. The characteristics of residential face-to-face, group methods are difficult to duplicate in any system of individual study. Studying by distance learning within the ambit of a company, however, rather than a lone student, may compensate for lack of group activity with student gatherings, joint performance of exercises and involvement of in company experts. These activities should be designed to help towards the motivation with the consistent quality of the courses themselves will ensure sustained student interest.
3. One of the hallmarks of good training is that it should be enjoyable. It is believed that students would find these courses fun to do, and trainers derive considerable pleasure and satisfaction in setting up and supporting distance learning schemes.

#### 5. Organizational Response to Eexternal Pressures

1. The business environment is changing fast. Knowledge and skills are becoming ever more perishable. In the past, required levels Of knowledge and skills remained more or less static across the career span of an average employee; occasional booster shots were usually considered sufficient to top them up. This is no longer true. Some industries are

now going through radical upheaval every five to ten years and few organizations find themselves immune to the pressure to change; because changes in technologies processes, national and international policies. . . all have led to greater competition in the market place.

2. Traditional training policies are no longer tenable. There is growing recognition that training must become a life-long activity. This affects all levels of organizations from the shop-floor to the board room. A career will no longer be planned to last from school leaving to age of retirement. People will change their jobs more often and need to change their skills too, whether they stay within one firm or move between many.

#### 6. Need for New Strategies in Learning: Key Factors

1. Such prospects of uncertainty offer both exciting opportunities and major problems in distance learning. Education and training will need to he structured in entirely new ways. Key factors for strategies for today are:
  - a. Cost
  - b. Relevance
  - c. Flexibility and
  - d. Accessibility
2. These key factors require some elaboration
  - a. **Cost:** It is beyond the financial resources of organizations to make training courses available to all those who might benefit from them. However, one of the advantages of new technologies and techniques is that they can reduce the overall costs of training. For example, a unit in the health sector had a requirement for a small group of managers and made a comparison of the relative costs of a residential programme and the use of distance learning materials. The comparison brought out the point that the distance learning programme clearly cost less than 50% of any equivalent residential programme, even if the programme is to be supported internally. It also offered some other benefits: it was more extensive more directly related to the workplace and tore flexible to use. Other cost factors have to be taken into account. Traditional progammes have hidden costs: key personnel need training as they need to take on new tasks. Their loss for the period of an external course represents a high opportunity cost element which is often more important than the basic cost of a programme.
  - b. **Relevance:** Increasing levels of training would place additional demands on the individual. To cope with this pressure students must be highly motivated and this state would last only as long as they are able to recognize any training programme to be directly relevant to their circumstances and needs. The question of relevance is not simple. It is much more than matching the method of training to suit the students study requirements and availability -indeed it goes without saying that distance learning must always be designed to cater for a very wide range of different learning styles: relevance must also be assessed by a complete understanding of training needs and these are complex.

choice of media: have all contributed to make the distance learning system more effective,

- ii. In training if cost relevance, flexibility and accessibility are the key considerations, then trainers would find Distance Learning to be extremely useful. Finally, regardless of the view that distance learning is not a panacea for all types of training needs, nor does it replace the traditional training methods the system has its own distinct advantages and applications. As a training tool and technique, distance learning would always be of profound interest to trainers.

## Activity and Assignments

1. Write note on distance learning.
2. How distance learning is new tool for learning.
3. What are modern ways of learning
4. Discuss major factors effecting distance learning.

- ## Notes -

- [illegible]

d. **Accessibility:** Format qualifications are no longer the only or even the best indicator that individual should receive training. They can often simply mean that a person has demonstrated the capacity to learn, and possibly perform certain skills within a specific and frequently limited domain. This may mean that he or she can undertake new learning activities, but it does not necessarily signify that he or she can benefit from training in a different area. Considerations of more importance may be relevant experience and motivation and the identification of the training needs through formal or informal appraisal.

- i. Distance learning or 'distance education is an innovative system. It has come as a result of consistent efforts to develop a non-conventional and alternative channel for imparting education. Distance education has always been open to all teaching methods and media. It is a teaching—learning system which combines both teaching and learning activities. The induction of the concept of two way communication between teacher— student, integration of modern technological (Communication) devices and, wide

## LESSON 25

### EVALUATION OF TRAINING

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#### Introduction

Dear Students,

In previous units you have been exposed towards various steps in training process.

Evaluation of training is the last step in training process or cycle.

Remember students like communication process is incomplete without evaluation in same way evaluation process is incomplete without proper evaluation or feedback.

And hence evaluation of training effectiveness is not assessed.

This lesson is going to help you in

1. Understanding the Evaluation of training and learning
2. The significance and process of evaluation
3. Feedback process and forms
4. Action plans and follow-up

#### Concept

Evaluation means the assessment of value or worth. Evaluation of training is the act of Judging whether or not it is worthwhile in terms of set criteria (objectives).

A comprehensive and effective evaluation plan is a critical component of any successful training programme. It should be structured to generate information of the impact of training on the reactions; on the amount of learning that has taken place; on the trainees' behaviour; and its contribution to the Job/organisation. Therefore evaluation of training is a Measure of how well it has met the needs of its human resources. An index of contribution of training to organisational success through evaluation strengthens training as a key organisational activity.

#### Definition

Hamblin (1970) defined evaluation of training as: "Any attempt to obtain information (feedback) on the effect of training programme and to assess the value of training in the light of that information for improving further training."

#### Need for Evaluation

Since evaluation is an integral part of the whole process of training and development the details have to be conceived much before the actual training activity; rather than its ritualistic tagging at the end of training. The trainer should be fairly clear of :

How to evaluate

What to evaluate

When to evaluate

Answers to these questions are dependent on the need for evaluation.

#### Why Evaluate

Evaluation of training could be multipurpose

1. To determine the extent and degree of a training programme fulfilling its set objectives and interalia indication
2. The suitability and feasibility of the objectives set for training
3. Provide feedback on the performance of the trainees, and training staff, the quality of training, other facilities provided during training
4. Identify and analyse whether the training inputs, training techniques and methods were in line with the objectives intended to be achieved through training
5. Enable improvements in the assessment of training needs
6. Aid the learning process of the trainee by providing knowledge of results
7. Provide a self-correcting feedback system to improve the design and implementation of current and future training
8. Highlight the impact of training on the behaviour and performance of the individual
9. Determine the cost benefit returns from training investment
10. Judge the impact of training for organisational benefits

Unfortunately most organisations assess training outcome in terms of the number of courses carried out, numbers trained cost incurred on such training and the reaction of the participants towards the course, the faculty and the overall training facilities.

Obviously, multiple evaluation objectives call for different evaluative procedures and strategies. What to be assessed, when and how, depends on the type of data required through evaluation. Therefore, it is always desirable to be clear of the criteria and objectives of the evaluation while setting the objectives of training rather than postpone it to a later date.

#### Principles of Evaluation

Suchman, E.A. describes evaluation as an integral part of an operating system meant to aid trainers/training managers to plan and adjust their training activities in an attempt to increase the probability of achieving the desired action or goals. In order to integrate training practices with business policy and objectives evaluation has to be based on sound principles such as :

1. Trainer/ Evaluator must be clear about the purpose of evaluation to be able to set the standards and criteria of evaluation.
2. For an objective evaluation, the methodology and criteria of evaluation should be based on observable and as far as possible measurable standards of assessment which have been agreed upon by the evaluators and the users of the training system.
3. Evaluation has to be accepted as a process than an end product of training.
4. As a process, it has to be continuous. The 'one-spot' assessment cannot guide trainers for improving subsequent

programmes, therefore it has to begin before the actual training activity and end much after the conclusion of visible training activity.

5. The training objectives should be an outcome of overall organisational goals to permit tangible evaluation of training results.
6. Evaluation data should be directive rather than conclusive. It must be comprehensive enough to guide trainers in the collection of information that will enable them to comment on current training effectiveness and to improve subsequent training.
7. A good evaluation system is tailor-made and should provide specific data about its strength and weakness. Generalisations drawn from one training activity may be in-applicable for training across different levels and to meet different standards. Besides, they should refrain from using single instances for conclusions and generalisations.
8. A good evaluative system should provide sufficient scope for self-appraisal by the trainer/evaluator.
9. The Evaluative data should try to balance quantitative and qualitative information.
10. Role of the evaluator needs tone based on sound working relationship with the participants, trainers, senior line managers and policy makers. Normally a researcher or a fresher is attached to the trainer to carry out end of the course evaluation. This evaluator may have the expertise of developing and designing-evaluative tools and techniques but it would be insufficient in promoting utilisation of evaluation results. Evaluators acceptance by the participants and interpersonal sensitivity and trust for frank sharing of feedback is a must. This would modify their role as one of giving and receiving feedback rather than just receiving feedback. They have to be proactive than argumentative.
11. Effective communication and coordination are essential. Training and evaluation plans should be discussed so that there is commonality of purpose amongst the trainers, the evaluators and those sponsoring the trainees.
12. Reporting system of evaluative data should be simple, clear, adequate and available for interpretation. It requires the , evaluator to be sensitive to the feelings of the audience, has to be tactful and honest. As far as possible terminology used should be concise and free from jargons.
13. Realistic targets must be set. A sense of urgency no doubt is desirable but deadline that are unrealistically high will result in poor quality.
14. Finally, a trainer who is sincere about training, evaluation would always insist on complete, objective and continuous feedback on the progress and deficiencies of training to be able to maintain the momentum of the training programme, its evaluation and subsequent improvement.

### Cycle of Evaluation (Evaluation Design)

As a self-correcting aid to training, evaluation, it was mentioned in the previous chapter, is an integral part of training. Having deliberated on the need (why) for evaluation in that chapter, it was stated that the trainer ought to know - what to evaluate?

When to evaluate? and how to evaluate? The present chapter, while responding to these three questions presents the evaluation design and methodology.

Different typologies of evaluation have been described by various authors, while some differ in terms of the actual design others are a mere change of terminology. A particular methodology appropriate for in-company training may not be relevant for external programmes. An evaluation design may be applicable from one organisation to another; one situation to another while the results are not. It is therefore necessary that the evaluation design is tailor-made to suit the situation within the broad frame-work of seeking to assess:

- i. What needs to be changed/modified/improved
- ii. What procedures are most likely to bring about this change
- iii. Is there demonstrable and concrete evidence that change has occurred

### Typologies of Evaluation Design

Level/ Stage	Hamblin (1)	Kirpatrick (2)	Warr (3)	Virmani & Premila (4)	
1.	Reaction	Reaction	Context	Context	Pre-Training
2.	Learning	Learning	Input	Input	
3.	Job-Behaviour	Behaviour	Process	Reaction	
4.	Functioning	Results	Outcome	Learning	Post-training
5.				Job-improvement	
6.				On-the-job	
7.				Followup and transfer	

To mention you W Leslie Rae has written over 30 books on training and the evaluation of learning - he is an expert in his field. His guide to the effective evaluation of training and learning, training courses and learning programmes, is a useful set of rules and techniques for all trainers and HR professionals.

There have been several 'surveys' on the use of evaluation in training and development. Results initially appear heartening; many trainers/organizations responding about the extensive approaches they use. However when more specific and penetrating questions are asked, many professional trainers and training departments are found to use only 'reactionnaires' (general vague feedback forms), including the invidious 'Happy Sheet' where, for example, questions such as 'How good did you feel the trainer was?', and 'How enjoyable was the training course?' are used. Even well-produced reactionnaires do not constitute validation or evaluation.

For effective training and learning evaluation, the principal significant questions should be:

- To what extent were the identified training needs objectives achieved by the programme?
- To what extent were the learners' objectives achieved?
- What specifically did the learners learn or be usefully reminded of?

- What commitment have the learners made about the learning they are going to implement on their return to work?

And back at work,

- How successful were the trainees in implementing their action plans?
- To what extent were they supported in this by their line managers?
- To what extent has the action listed above achieved a Return on Investment for the organization, either in terms of identified objectives satisfaction or, where possible, a monetary assessment.

Organizations commonly fail to perform these evaluation processes, especially where:

- The HR department and trainers, do not have sufficient time to do so, and/or
- The HR department does not have sufficient resources - people and money - to do so.

Obviously the evaluation cloth must be cut according to available resources (and the culture atmosphere), which tend to vary substantially from one organization to another. The fact remains that good methodical evaluation produces a good reliable data; conversely, where little evaluation is performed, little is ever known about the effectiveness of the training. evaluation of training

There are the two principal factors which need to be resolved:

- Who is responsible for the validation and evaluation processes?
- What resources of time, people and money are available for validation/evaluation purposes? (Within this, consider the effect of variation to these, for instance an unexpected cut in budget or manpower. In other words anticipate and plan contingency to deal with variation.)

### **Responsibility for the Evaluation of Training**

Traditionally, in the main, any evaluation or other assessment has been left to the trainers “because that is their job...” My (Rae’s) contention is that a ‘Training Evaluation Quintet’ should exist, each member of the Quintet having roles and responsibilities in the process (see ‘Assessing the Value of Your Training’, Leslie Rae, Gower, 2002). Considerable lip service appears to be paid to this, but the actual practice tends to be a lot less.

The ‘Training Evaluation Quintet’ advocated consists of:

- senior management
- the trainer
- line management
- the training manager
- the trainee

Each has their own responsibilities, which are detailed next.

### **Senior Management - Training Evaluation Responsibilities**

- Awareness of the need and value of training to the organization.
- The necessity of involving the Training Manager (or equivalent) in senior management meetings where decisions are made about future changes when training will be essential.
- Knowledge of and support of training plans.
- Active participation in events.
- Requirement for evaluation to be performed and require regular summary report.
- Policy and strategic decisions based on results and data.

### **The Trainer - Training Evaluation Responsibilities**

- Provision of any necessary pre-programme work etc and programme planning.
- Identification at the start of the programme of the knowledge and skills level of the trainees/learners.
- Provision of training and learning resources to enable the learners to learn within the objectives of the programme and the learners’ own objectives.
- Monitoring the learning as the programme progresses.
- At the end of the programme, assessment of and receipt of reports from the learners of the learning levels achieved.
- Ensuring the production by the learners of an action plan to reinforce, practise and implement learning.

### **The Line Manager - Training Evaluation Responsibilities**

- Work-needs and people identification.
- Involvement in training programme and evaluation development.
- Support of pre-event preparation and holding briefing meetings with the learner.
- Giving ongoing, and practical, support to the training programme.
- Holding a debriefing meeting with the learner on their return to work to discuss, agree or help to modify and agree action for their action plan.
- Reviewing the progress of learning implementation.
- Final review of implementation success and assessment, where possible, of the Return on Investment.

### **The Training Manager - Training Evaluation Responsibilities**

- Management of the training department and agreeing the training needs and the programme application
- Maintenance of interest and support in the planning and implementation of the programmes, including a practical involvement where required
- The introduction and maintenance of evaluation systems, and production of regular reports for senior management
- Frequent, relevant contact with senior management
- Liaison with the learners’ line managers and arrangement of learning implementation responsibility learning programmes for the managers

- Liaison with line managers, where necessary, in the assessment of the training

### **The Trainee or Learner - Training Evaluation Responsibilities**

- Involvement in the planning and design of the training programme where possible
- Involvement in the planning and design of the evaluation process where possible
- Obviously, to take interest and an active part in the training programme or activity.
- To complete a personal action plan during and at the end of the training for implementation on return to work, and to put this into practice, with support from the line manager.
- Take interest and support the evaluation processes.

N.B. Although the principal role of the trainee in the programme is to learn, the learner must be involved in the evaluation process. This is essential, since without their comments much of the evaluation could not occur. Neither would the new knowledge and skills be implemented. For trainees to neglect either responsibility the business wastes its investment in training. Trainees will assist more readily if the process avoids the look and feel of a paper-chase or number-crunching exercise. Instead, make sure trainees understand the importance of their input - exactly what and why they are being asked to do.

### **Training Evaluation and Validation Options**

As suggested earlier what you are able to do, rather than what you would like to do or what should be done, will depend on the various resources and culture support available. The following summarizes a spectrum of possibilities within these dependencies.

#### **1. Do Nothing**

Doing nothing to measure the effectiveness and result of any business activity is never a good option, but it is perhaps justifiable in the training area under the following circumstances:

- If the organization, even when prompted, displays no interest in the evaluation and validation of the training and learning - from the line manager up to the board of directors.
- If you, as the trainer, have a solid process for planning training to meet organizational and people-development needs.
- If you have a reasonable level of assurance or evidence that the training being delivered is fit for purpose, gets results, and that the organization (notably the line managers and the board, the potential source of criticism and complaint) is happy with the training provision.
- You have far better things to do than carry out training evaluation, particularly if evaluation is difficult and co-operation is sparse.

However, even in these circumstances, there may come a time when having kept a basic system of evaluation will prove to be helpful, for example:

- You receive have a sudden unexpected demand for a justification of a part or all of the training activity. (These demands can spring up, for example with a change in management, or policy, or a new initiative).
- You see the opportunity or need to produce your own justification (for example to increase training resource, staffing or budgets, new premises or equipment).
- You seek to change job and need evidence of the effectiveness of your past training activities.

Doing nothing is always the least desirable option. At any time somebody more senior to you might be moved to ask "Can you prove what you are saying about how successful you are?" Without evaluation records you are likely to be at a loss for words of proof...

#### **2. Minimal Action**

The absolutely basic action for a start of some form of evaluation is as follows:

At the end of every training programme, give the learners sufficient time and support in the form of programme information, and have the learners complete an action plan based on what they have learned on the programme and what they intend to implement on their return to work. This action plan should not only include a description of the action intended but comments on how they intend to implement it, a timescale for starting and completing it, and any resources required, etc. A fully detailed action plan always helps the learners to consolidate their thoughts. The action plan will have a secondary use in demonstrating to the trainers, and anyone else interested, the types and levels of learning that have been achieved. The learners should also be encouraged to show and discuss their action plans with their line managers on return to work, whether or not this type of follow-up has been initiated by the manager.

#### **3. Minimal Desirable Action Leading to Evaluation**

When returning to work to implement the action plan the learner should ideally be supported by their line manager, rather than have the onus for implementation rest entirely on the learner. The line manager should hold a debriefing meeting with the learner soon after their return to work, covering a number of questions, basically discussing and agreeing the action plan and arranging support for the learner in its implementation. As described earlier, this is a clear responsibility of the line manager, which demonstrates to senior management, the training department and, certainly not least, the learner, that a positive attitude is being taken to the training. Contrast this with, as often happens, a member of staff being sent on a training course, after which all thoughts of management follow-up are forgotten.

The initial line manager debriefing meeting is not the end of the learning relationship between the learner and the line manager. At the initial meeting, objectives and support must be agreed, then arrangements made for interim reviews of implementation progress. After this when appropriate, a final review meeting needs to consider future action.

This process requires minimal action by the line manager - it involves no more than the sort of observations being made as



would be normal for a line manager monitoring the actions of his or her staff. This process of review meetings requires little extra effort and time from the manager, but does much to demonstrate at the very least to the staff that their manager takes training seriously.

#### 4. Training Programme Basic Validation Approach

The action plan and implementation approach described in (3) above is placed as a responsibility on the learners and their line managers, and, apart from the provision of advice and time, do not require any resource involvement from the trainer. There are two further parts of an approach which also require only the provision of time for the learners to describe their feelings and information. The first is the reactionnaire which seeks the views, opinions, feelings, etc., of the learners about the programme. This is not at a 'happy sheet' level, nor a simple tick-list - but one which allows realistic feelings to be stated.

This sort of reactionnaire is described in the book ('Assessing the Value of Your Training', Leslie Rae, Gower, 2002). This evaluation seeks a score for each question against a 6-point range of Good to Bad, and also the learners' own reasons for the scores, which is especially important if the score is low.

Reactionnaires should not be automatic events on every course or programme. This sort of evaluation can be reserved for new programmes (for example, the first three events) or when there are indications that something is going wrong with the programme.

Sample reactionnaires are given after this lesson.

The next evaluation instrument, like the action plan, should be used at the end of every course if possible. This is the Learning Questionnaire (LQ), which can be a relatively simple instrument asking the learners what they have learned on the programme, what they have been usefully reminded of, and what was not included that they expected to be included, or would have liked to have been included. Scoring ranges can be included, but these are minimal and are subordinate to the text comments made by the learners. There is an alternative to the LQ called the Key Objectives LQ (KOLQ) which seeks the amount of learning achieved by posing the relevant questions against the list of Key Objectives produced for the programme. When a reactionnaire and LQ/KOLQ are used, they must not be filed away and forgotten at the end of the programme, as is the common tendency, but used to produce a training evaluation and validation summary. A factually-based evaluation summary is necessary to support claims that a programme is good/effective/satisfies the objectives set'. Evaluation summaries can also be helpful for publicity for the training programme, etc.

Example Learning Questionnaires and Key Objectives Learning Questionnaires are included in the set of evaluation tool given at the end of this lesson.

#### 5. Total Evaluation Process

If it becomes necessary the processes described in (3) and (4) can be combined and supplemented by other methods to produce a full evaluation process that covers all eventualities. Few occasions or environments allow this full process to be applied, particularly when there is no Quintet support, but it is the ultimate aim. The process is summarized below:

- Training needs identification and setting of objectives by the organization
- Planning, design and preparation of the training programmes against the objectives
- Pre-course identification of people with needs and completion of the preparation required by the training programme
- Provision of the agreed training programmes
- Pre-course briefing meeting between learner and line manager
- Pre-course or start of programme identification of learners' existing knowledge, skills and attitudes, Interim validation as programme proceeds
- Assessment of terminal knowledge, skills, etc., and completion of perceptions/change assessment Completion of end-of-programme reactionnaire
- Completion of end-of-programme Learning Questionnaire or Key Objectives Learning Questionnaire
- Completion of Action Plan
- Post-course debriefing meeting between learner and line manager
- Line manager observation of implementation progress
- Review meetings to discuss progress of implementation
- Final implementation review meeting
- Assessment of Return on Investment

#### Conclusion

**Do something:** The processes described above allow considerable latitude depending on resources and culture environment, so there is always the opportunity to do something - obviously the more tools used and the wider the approach, the more valuable and effective the evaluation will be. However be pragmatic. Large expensive critical programmes will always justify more evaluation and scrutiny than small, one-off, non-critical training activities. Where there's a heavy investment and expectation, so the evaluation should be sufficiently detailed and complete. Training managers particularly should clarify measurement and evaluation expectations with senior management prior to embarking on substantial new training activities, so that appropriate evaluation processes can be established when the programme itself is designed.

Where large and potentially critical programmes are planned, training managers should err on the side of caution - ensure adequate evaluation processes are in place. As with any investment, a senior executive is always likely to ask, "What did we get for our investment?", and when he asks, the training manager needs to be able to provide a fully detailed response.

#### The Trainer's Overall Responsibilities - Aside from Training Evaluation

Over the years the trainer's roles have changed, but the basic *raison-d'être* for the trainer is to provide efficient and effective training programmes. The following suggests the elements of the basic role of the trainer, but it must be borne in mind that different circumstances will require modifications of these activities.

1. The basic role of a trainer (or however they may be designated) is to offer and provide efficient and effective training programmes aimed at enabling the participants to learn the knowledge, skills and attitudes required of them.
2. A trainer plans and designs the training programmes, or otherwise obtains them (for example, distance learning or e-technology programmes on the Internet or on CD/DVD), in accordance with the requirements identified from the results of a TNIA (Training Needs Identification and Analysis) for the relevant staff of an organizations or organizations.
3. The training programmes cited at (1) and (2) must be completely based on the TNIA which has been: (a) completed by the trainer on behalf of and at the request of the relevant organization (b) determined in some other way by the organization.
4. Following discussion with or direction by the organization management who will have taken into account costs and values (eg ROI - Return on Investment in the training), the trainer will agree with the organization management the most appropriate form and methods for the training.
5. If the appropriate form for satisfying the training need is a direct training course or workshop, or an Intranet provided programme, the trainer will design this programme using the most effective approaches, techniques and methods, integrating face-to-face practices with various forms of e-technology wherever this is possible or desirable.
6. If the appropriate form for satisfying the training need is some form of open learning programme or e-technology programme, the trainer, with the support of the organization management obtain, plan the utilization and be prepared to support the learner in the use of the relevant materials.
7. The trainer, following contact with the potential learners, preferably through their line managers, to seek some pre-programme activity and/or initial evaluation activities, should provide the appropriate training programme(s) to the learners provided by their organization(s). During and at the end of the programme, the trainer should ensure that: (a) an effective form of training/learning validation is followed (b) the learners complete an action plan for implementation of their learning when they return to work.
8. Provide, as necessary, having reviewed the validation results, an analysis of the changes in the knowledge, skills and attitudes of the learners to the organization management with any recommendations deemed necessary. The review would include consideration of the effectiveness of the content of the programme and the effectiveness of the methods used to enable learning, that is whether the programme satisfied the objectives of the programme and those of the learners.
9. Continue to provide effective learning opportunities as required by the organization.
10. Enable their own CPD (Continuing Professional Development) by all possible developmental means - training programmes and self-development methods.

11. Arrange and run educative workshops for line managers on the subject of their fulfillment of their training and evaluation responsibilities.

Dependant on the circumstances and the decisions of the organization management, trainers do not, under normal circumstances:

1. Make organizational training decisions without the full agreement of the organizational management.
2. Take part in the post-programme learning implementation or evaluation unless the learners' line managers cannot or will not fulfil their training and evaluation responsibilities.

As a final reminder, unless circumstances force them to behave otherwise, the trainer's role is to provide effective training programmes and the role of the learners' line managers is to continue the evaluation process after the training programme, counsel and support the learner in the implementation of their learning, and assess the cost-value effectiveness or (where feasible) the ROI of the training. Naturally, if action will help the trainers to become more effective in their training, they can take part in but not run any pre- and post-programme actions as described, always remembering that these are the responsibilities of the line manager.

## Article

### Stephen M. Brown, Ed.D.

Dean of the Center for Adult Learning, Lesley College

We are re-inventing government, reforming education, restructuring organizations and re-engineering businesses. These environmental and organizational changes are creating new demands on training, as well, altering whom we serve, how we serve them, and why we serve them. We are experiencing a shift from training the individual to meeting organizational objectives, and we are expected to serve our customers well. These changes create a need to look at the evaluation of training differently. Evaluation of training must be multi-level, customer-focused, and support continuous improvement of training.

### Changing Expectations of Training

Organizational expectations for training have shifted dramatically. The most pronounced change is a new and vigorous justification of the cost of training based on return on investment (ROI) and organizational impact. This transition has been driven by the competitive nature of the international economy and resulting changes in organizational structure, which produce flat, thinner, and fewer administrative cost centers.

In addition, training professionals are being asked to do more and play an important role in the strategy of the organization. The ability to generate and apply knowledge is a competitive advantage and source of new products, services, and revenue.

The nature of training itself is undergoing a transformation. Trainers no longer hold the privileged position of "all knowing" content expert. Groups being trained often contain individuals with more depth of knowledge about, more experience applying, or more time to access current knowledge on the subject of the training. The training professionals thus become facilitators of learning and guides to available knowl-

edge instead of content experts who bring “the info” into the training room with them. Trainers no longer “own” the knowledge. Instead, they synthesize and provide resources to clients who also have access to the knowledge.

As training has moved from satisfying trainees to improving organizational performance, the definition of customer has broadened. Trainees themselves are still among the “customers” of training - and the trainee’s evaluations are important sources of feedback for continuous improvement and quality - but the trainee’s organizational unit and the organization as a whole are now part of the client system. Training is performed to solve the business problems of the unit and have a positive impact on the organization.

### Evaluating Training - Recent Models

Business changes have resulted in increased pressure on training professionals to demonstrate their worth. Do they do a good job? What is their impact on our work? Is there a cheaper way to do this? What is the value added? What is the effect on our profitability - that is, will we have a return on our investment in training?

The literature of training evaluation provides a framework to answer these questions and has addressed many of the current issues for trainers. Some time ago Donald Kirkpatrick (1975) provided a framework of four levels of evaluation:

- Level I - the effectiveness as perceived by the trainee
- Level II - measured evaluation of learning
- Level III - observed performance
- Level IV - business impact.

More recently, Jack Phillips (1991) has written that evaluation must go beyond Level IV and focus on real measurement of ROI. Dana Gaines Robinson, whose writing (1989) redirected the attention of trainers to business impact, now (1995) exhorts trainers to become “performance consultants” and de-emphasizes training as an intervention. Robert Brinkerhoff (1988) uses data gathering and evaluation to make the training function more customer-focused and practice continuous improvement.

### A New Way of Looking at Evaluating Training

However, these approaches do not, in the author’s opinion, represent choice. Kirkpatrick’s Level I data is still needed to get feedback on the trainee’s perceptions of the experience. Level II evaluation has probably become less important in today’s business environment. Level III evaluation is all important to both trainees and their business units. Individual performance (Kirkpatrick’s Level III) is not a level in itself; it is a focus only when individual performance is the solution of a business problem or is integral to customer satisfaction. Level IV evaluation - the impact on the business problem - probably provides the most important data to the unit and organization. Evaluators must respond to the new requirements by implementing all these concepts and evaluating at multiple levels. These levels will measure training’s success at completing its business tasks.

1. **Customer Satisfaction:** The evaluation of customer satisfaction may be multi-dimensional for two reasons. First,

the definition of training has expanded to include the trainee’s unit manager, the unit, and the organization - not just the trainee in the classroom. Second, we are measuring perception of quality, convenience, and value. This information is crucial to continuous improvement.

2. **Impact on the Business Problem:** This level is usually the most important to the business unit manager. It answers the question, “Did the training make a positive difference in the business problem I have?” You work with the business unit manager to identify the business problem up front, not what needs to be taught, delivery or trainees to be serviced. This level of evaluation also makes trainers think of training as one problem-solving intervention among many.
3. **Return on Investment.** Training professionals have no choice but to demonstrate the effects of their work on corporate profitability in today’s organization. This is true of every unit in the organization. Whereas it was once considered impossible to measure the ROI of training, many organizations now are doing so. The knowledge to achieve this goal is readily available to the practitioner, although the goal is still difficult, complex, and dependent on a long-term perspective. Discussions with cost accounting experts are helpful. However, the goal is reachable, and once you begin to measure ROI your process will improve.

The challenges to justifying investments in training are significant, and more meaningful methods of evaluation will provide solutions. Training professionals are being asked to do more, to meet an expanded definition of “customer.” But these changes and the changing organizational context have created new roles and opportunities for training.

### Conclusion

This lesson has exposed you about Training and Development Evaluation.

WHY

WHAT

WHEN

WHERE

HOW

WHOM

In coming Lessons of this unit you are going to study in depth about each of the following aspects and by the end of this unit you will be in position to apply the same in your training programs.

### Activity and Assignment

1. What is the significance of training evaluation in training process.
2. What are various methods of training evaluation.
3. Which method of training evaluation will you use for soft skill training.

## LESSON 26 AND 27: EVALUATING TRAINING AND RESULTS

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Hi Friends

In this chapter we are going to discuss about the last step in training process. As it is said that no communication is complete without feedback similarly no training is complete without its evaluation.

In following lesson you will get exposure towards:

### **Perspective on Evaluating Training** **Basic Suggestions for Evaluating Training**

You will be able to :

1. Identify crucial factors pre and post training
2. Carry out evaluation of training
3. Explain the need for evaluation of training
4. Design various types of evaluation
5. Take a project on training evaluation in an organisation

### **Introduction**

Evaluation includes getting ongoing feedback, e.g., from the learner, trainer and learner's supervisor, to improve the quality of the training and identify if the learner achieved the goals of the training.

### **Perspective on Evaluating Training**

Evaluation is often looked at from four different levels (the "Kirkpatrick levels") listed below. Note that the farther down the list, the more valid the evaluation.

- a. **Reaction** - What does the learner feel about the training?
- b. **Learning** - What facts, knowledge, etc., did the learner gain?
- c. **Behaviors** - What skills did the learner develop, that is, what new information is the learner using on the job?
- d. **Results or effectiveness** - What results occurred, that is, did the learner apply the new skills to the necessary tasks in the organization and, if so, what results were achieved?

Although level 4, evaluating results and effectiveness, is the most desired result from training, it's usually the most difficult to accomplish. Evaluating effectiveness often involves the use of key performance measures - measures you can see, e.g., faster and more reliable output from the machine after the operator has been trained, higher ratings on employees' job satisfaction questionnaires from the trained supervisor, etc. This is where following sound principles of performance management is of great benefit.

### **Basic Suggestions for Evaluating Training**

Typically, evaluators look for validity, accuracy and reliability in their evaluations. However, these goals may require more time, people and money than the organization has. Evaluators are also looking for evaluation approaches that are practical and relevant.

Training and development activities can be evaluated before, during and after the activities. Consider the following very basic suggestions:

#### **Before the Implementation Phase**

1. Will the selected training and development methods really result in the employee's learning the knowledge and skills needed to perform the task or carry out the role? Have other employee's used the methods and been successful?
2. Consider applying the methods to a highly skilled employee. Ask the employee of their impressions of the methods.
3. Do the methods conform to the employee's preferences and learning styles? Have the employee briefly review the methods, e.g., documentation, overheads, etc. Does the employee experience any difficulties understanding the methods?

#### **During Implementation of Training**

1. Ask the employee how they're doing. Do they understand what's being said?
2. Periodically conduct a short test, e.g., have the employee explain the main points of what was just described to him, e.g., in the lecture.
3. Is the employee enthusiastically taking part in the activities? Is he or she coming late and leaving early. It's surprising how often learners will leave a course or workshop and immediately complain that it was a complete waste of their time. Ask the employee to rate the activities from 1 to 5, with
5. Being the highest rating. If the employee gives a rating of anything less than 5, have the employee describe what could be done to get a 5.

#### **After Completion of the Training**

1. Give him or her a test before and after the training and development, and compare the results?
2. Interview him or her before and after, and compare results?
3. Watch him or her perform the task or conduct the role?
4. Assign an expert evaluator from inside or outside the organization to evaluate the learner's knowledge and skills?

### **Measuring Training Effectiveness/Impact**

#### **Training can be Measured in a Variety of Ways Including**

##### **I - Prior to Training**

- The number of people that say they need it during the needs assessment process.
- The number of people that sign up for it.

## II - At the End of Training

- The number of people that attend the session.
- The number of people that paid to attend the session.
- Customer satisfaction (attendees) at end of training.
- Customer satisfaction at end of training when customers know the actual costs of the training.
- A measurable change in knowledge or skill at end of training.
- Ability to solve a “mock” problem at end of training.
- Willingness to try or intent to use the skill/ knowledge at end of training.

## III - Delayed Impact (non-job)

- Customer satisfaction at X weeks after the end of training.
- Customer satisfaction at X weeks after the training when customers know the actual costs of the training.
- Retention of Knowledge at X weeks after the end of training.
- Ability to solve a “mock” problem at X weeks after end of training.
- Willingness to try (or intent to use) the skill/ knowledge at X weeks after the end of the training.

## IV - On the Job Behavior Change

- Trained individuals that self-report that they changed their behavior / used the skill or knowledge on the job after the training (within X months).
- Trained individuals who’s managers report that they changed their behavior / used the skill or knowledge on the job after the training (within X months).
- Trained individuals that actually are observed to change their behavior / use the skill or knowledge on the job after the training (within X months).

## V - On the Job Performance Change

- Trained individuals that self-report that their actual job performance changed as a result of their changed behavior / skill (within X months).
- Trained individuals who’s manager’s report that their actual job performance changed as a result of their changed behavior / skill (within X months).
- Trained individuals who’s manager’s report that their job performance changed (as a result of their changed behavior / skill) either through improved performance appraisal scores or specific notations about the training on the performance appraisal form (within X months).
- Trained individuals that have observable / measurable (improved sales, quality, speed etc.) improvement in their actual job performance as a result of their changed behavior / skill (within X months).
- The performance of employees that are managed by (or are part of the same team with) individuals that went through the training.
- Departmental performance in departments with X % of employees that went through training ROI (Cost/Benefit ratio) of return on training dollar spent (compared to our

competition, last year, other offered training, preset goals etc.).

## Other Measures

- CEO / Top management knowledge of / approval of / or satisfaction with the training program.
- Rank of training seminar in forced ranking by managers of what factors (among miscellaneous staff functions) contributed most to productivity/ profitability improvement.
- Number (or %) of referrals to the training by those who have previously attended the training.
- Additional number of people who were trained (cross-trained) by those who have previously attended the training. And their change in skill/ behavior/ performance.
- Popularity (attendance or ranking) of the program compared to others (for voluntary training programs).

## The Ten Rules for Perfect Evaluations

### On Choosing Between Training Excellence and Great Evaluations

by Jay McNaught

(Originally published by Data Training Magazine in May of 1991)

Among trainers, Joe Rogers was legendary. You would hear his name whispered whenever trainers gathered to discuss evaluations. A trainer among trainers, they said. The instructor with perfect evaluations. They claimed that he had never received less than a perfect evaluation from any of his students.

As a new trainer, I had to know how anyone could be so good that he always scored perfect evaluations. During a business trip, I found myself in the town where he worked, so I decided to give him a call and ask if he could meet with me to give me some pointers.

He turned out to be more than a well-evaluated trainer. He was a generous one as well, and he invited me to sit in on one of the famous training sessions in which I could watch Mr. Rogers’s Rules for Perfect Evaluations in action. He even promised to give me an in-depth explanation of what he had done after the session was over.

The day of class, I arrived very early. I didn’t want to miss anything. Rogers was already there. From all appearances, he had been in the classroom for some time and was busy preparing. He obviously left nothing to chance. Thick manuals were placed at each seat. I introduced myself, and Rogers told me to have a seat and observe. He pointed out that the work of gaining perfect evaluations required preparation, preparation, preparation.

### 1. Perfect Order Makes Perfect Evaluations

Cardboard name tents were already placed neatly in front of the manuals. They were hand-lettered in tasteful calligraphy.

”This is incredible,” I said. “Who does the lettering on these name tents?”

”Oh, I send those out,” he said. “It costs a lot, but the effect is worth it.” He placed each manual a precise distance from the

name tent, and each name tent was a precise distance in front of a color computer terminal.

That was what drew my attention to the terminals. I had never seen a clean computer terminal. Yet each terminal in this training room was spotless. The screens were free of dust, and the keyboards were missing the typical sludge that develops over years of use by greasy fingers. I spotted a bottle of cleaner and a rag, and I began to understand.

I sat down and began thumbing through a manual. I was amazed at the detail and was becoming engrossed in the depth of the material, when my thoughts were interrupted. "Please, don't be moving that manual now," said Mr. Rogers. He looked at me over the top of his horn-rimmed glasses and I felt as if I were back in grade school. I set the manual down and walked nervously to a corner of the room where I had spotted refreshments earlier. As I poured a cup of coffee, I noticed him moving the manual back to the precise location where it had been before I violated it.

Satisfied with the placement of the manual, he looked up at me. "Perfect evaluations require perfect attention to detail," he said simply. "When the students are asked if the classroom was neat and orderly, the effort of arranging these manuals will be rewarded."

At this point I noticed the refreshments. Not only was there coffee, but there was juice and soda pop. Also included on the lavish refreshment tray were donuts, Danish, fresh-baked cookies, fresh fruit, and rolls. This was nothing less than a complete breakfast.

## **2. Good Evaluations can be Bought.**

He noticed the way I was staring at the refreshments. "The shortest path to a good evaluation is through the student's stomach," • • he said. "Never let a student sit down to an evaluation form with an empty stomach." Then he walked over to the clock on the wall, pulled it down, and began resetting it.

When he replaced the clock on the wall, I noticed that he had set it a full five minutes earlier than the true time.

When the students began arriving a moment later, they would look up at the clock and then hurry to their seats. You could hear them say things like, "Goodness, I didn't realize it was so late."

## **3. A little guilt Never Hurts.**

I took him aside and asked him why he had altered the time. His response was straightforward. "Make it obvious when you are right," he said, "especially if the student is wrong. You'll notice when you see the evaluation form that one of the questions asks if the instructor began the class on time."

"I don't understand," I said. "Why not just start the class on time?"

"I used to always start classes on time. But students never noticed what time it was when I started, so invariably, one or two students would just assume that the class had started late and mark the evaluation accordingly. I have learned that your good work gains you very little if you don't call attention to it."

When about half of the students had arrived, he began teaching the class. "The clock on the wall says that it is eight

o'clock, so let's go ahead and get started. My name is Joe Rogers, and this class is titled, 'Using the Inventory System.'"

At that moment, several other students walked in. Rogers stopped his remarks and stared as they entered. "Welcome to class. The class started at eight, so we went ahead and started without you, but you haven't missed much yet." The new students all seemed to turn the same shade of red.

Rogers continued his introduction. "I have been working with the new inventory system for about a year now. I was actually one of the founding members of the project team which developed the system. I have a master's degree in system development and a Ph.D. in inventory systems."

## **4. Evaluations Start with Student Impressions.**

I was impressed, and I could see that the students were, too.

Rogers continued, "If you'll take the manual on your desks, I will give you a moment to familiarize yourselves with the extensive documentation of the system which I have prepared. Pay special attention to the chapter headings and the table of contents." The students began thumbing through the thick manuals. Rogers quit talking while they read. More students entered, and there was some hubbub as they took their seats. Rogers began strolling around the room. When he came past my chair, he whispered:

"Impressions count. Look at this manual. The impression is that it is very detailed and rich in content. I have been using this manual now for a year, and it has helped me to get perfect evaluations. Look closely. The chapter headings are all accurate. And the first paragraph of every chapter is authentic. But the rest of it is simply the text of those first paragraphs, repeated over and over again in different formats." He rolled his eyes upward. "Thank heaven for word processing."

"Doesn't anybody complain about the content?" I said.

"Oh, come now," he said. "Have you ever met anyone who has read a manual? Excuse me. I don't want to give them too much time to browse it."

## **5. Teach to the Evaluation.**

Rogers turned his attention to the classroom. "Now that you have had a chance to get acquainted with the manual, let's take an opportunity to get to know each other. Would you mind introducing yourself one at a time, and telling what experience you have had with the inventory system?"

The introductions took several minutes. There were 20 students in the classroom, and as each student introduced himself, Rogers would move close to the student, stand only a few feet in front of him, and stare intently at him while he spoke.

With the introductions complete, Rogers launched into a lengthy dissertation on the goals and objectives of the class. His explanation took over 15 minutes. I noticed that he repeated himself several times during this explanation. Evidently, the students noticed this as well. About the fifth time I heard him repeat, "So the primary goal for the class today is to make you very familiar with the manual and to inform you about the inventory system," it became apparent that the students were no longer paying any attention to him at all. Rogers recognized

this as well. “Does anyone have any questions concerning the goals and objectives for this course?”

His question was greeted with total silence.

“Please do me a favor and turn to page five in your manual.” He waited while the students obliged. “Now look about half way down the page and circle the section titled ‘Goals and objectives of the class.’”

The students all followed his instructions.

“Now, are there any questions concerning anything we have done so far?”

One student raised his hand, “Why does this class last only two hours? How are we going to learn all of this material in only two hours?”

Rogers took 10 minutes to answer the question. He went into theories on adult attention span and talked about the interactive nature of the inventory system. He discussed his theories on adult learning and told how the on-line inventory help facility was so powerful that they could no doubt use the system with no training at all. By the time Rogers had finished his response, the student had clearly forgotten the original question. “Did I answer your question?”

“Yes.

“Are you sure that I thoroughly answered your question?”

“Oh, yes, I’m sure.”

Much later, during our private, in-depth discussion, I was able to ask Rogers why he had begun the class in this fashion. His response was straightforward. “I’m not going to waste my time doing anything that won’t be directly reflected on my evaluation,” he said. “Question two on the evaluation asks ‘Were the goals and objectives clearly stated at the beginning of the class?’ Question three asks, ‘Were the students allowed to introduce themselves?’ Questions four asks, ‘Did the instructor have good eye contact?’ And question five asks, ‘Did the instructor adequately answer any student questions?’ The students in this class may learn absolutely nothing, but they will know that I had them introduce themselves, that I told them the goals of the class, that I had good eye contact, and that I thoroughly answered their questions.”

## **6. Good Breaks Lead to Good Evaluations.**

After his lengthy answer to the student’s question, Rogers must have sensed that it was time for a break. He went into great detail explaining where the restrooms were as well as phones and even nearby fax machines. “Now, we still have a lot to cover, so let’s hurry back from break. I want to get started again promptly in 25 minutes.”

The students didn’t waste any time in leaving. Again, I was curious, and when Rogers and I were alone in the room, I asked him about it. “Isn’t a 25-minute break a bit excessive for a two-hour class?”

“The highlight of any class is the break,” he said. “From the moment the student first sits down, he is wondering when the break will be. I am convinced that the longer the break, the better the evaluations!”

Eventually the students returned.

## **7. Don’t Let the Learning Get in the Way.**

“I want to begin the second half of the class by giving you a quick orientation to the classroom and showing you how to use some of the equipment,” said Rogers. “To begin with, you are sitting in special chairs designed to accommodate a variety of preferences and physical needs.” He showed them how to adjust the chairs for maximum comfort.

“I want to point out that these terminals are also specially designed to afford maximum comfort and total student control.” He pointed out the ergonomically correct keyboards and the special non-glare monitors. He showed them how to adjust the contrast for maximum eye comfort. “Now these terminals may be nothing like the terminals you have at your work location, but I do want you to be comfortable in class.” The students were very impressed.

“I also want you to note our state-of-art projection equipment.” He showed them how it worked, and how he could project a computer image on the wall that they could all see. No doubt this would help them in understanding the new inventory system, since they would be able to see the system demonstrated.

But then a student, whose name tent identified him as Sam, asked the question that I was wondering about, “Why are you wasting time showing us this equipment?”

Rogers launched into another of his flowery explanations, emphasizing the importance of using the right equipment in training, and how he was dedicated to quality instruction.

After the session, he told me the real reason. “There is a lot more at stake here than any of these students understand,” he said. “I can’t afford the risk of a lot of instruction when other things could affect the evaluation.”

“Risk?” I said.

“Every year my boss gives me a performance review,” he said, “and it is based entirely on how well I do on student evaluations. My boss doesn’t care if the students learned anything or not. He only cares that I do well on the evaluations, because those evaluations are what he reports to his boss, and they are the basis for my boss’s own performance reviews. If he gets a good performance review, then I get a good performance review, and we both get big raises. I can’t jeopardize the welfare of so many people by spending a lot of time on something that counts for very little in the evaluation process.”

## **8. Absent students don’t complain.**

His explanation to Sam about quality instruction and good equipment was still hovering in the air when the telephone rang. Rogers apologized for the interruption and quickly picked up the receiver. He had a brisk and hushed discussion. “I see. I’ll tell him right away.”

As he hung up the phone, Rogers turned to Sam, “That was your office. They said something about an emergency project. They want to know if you can leave class early and get back to the office right away.”

Later, during our review discussion, I remarked on his good fortune. “It was lucky that Sam had to leave before you gave out

evaluations. I had the feeling he didn't like you and might have given you a bad evaluation out of spite."

Rogers grinned and shook his head. "A good instructor leaves nothing to chance."

It took a moment for the implication of his remark to sink in. "You mean you planned to have the student taken out of your class?"

"It's an easy thing to program my personal computer to ring the classroom telephone every day right before I hand out evaluations."

### 9. Timing is Everything.

"Well, we only have 20 minutes left," said Rogers after Sam left. "I am hoping that we can wrap this class up a little early, so I'm going to hand out the class evaluation forms now. This way we can make sure that you won't have to rush to finish them." He handed out the forms. As the students began marking the forms, Rogers continued talking. "After you return your class evaluation form to me, I will give you your plaque, stating that you have successfully completed this class."

As the students began filling out the evaluations forms, we were able to have another of our hushed conversations.

"Why now?" I whispered. "Why not wait and let the students do a class evaluation after they get back on the job? It would seem to me that they could better evaluate the learning once they actually started using the inventory system."

Rogers looked like he was going to laugh out loud, but he caught himself and looked around at the students. "You're so hung up on learning," he said. "If I really wanted to know if the students had learned something, I would wait at least three months before doing an evaluation."

That seemed reasonable to me.

"I don't want my success tied in with the student's ability to learn," he continued. "What if I did wait to do the evaluation and then discovered that a student couldn't do anything he had learned in the class? What if the student was a total moron and just plain could not learn anything anyway? It would reflect poorly on me. So I give the evaluation immediately after the class, while everything I did is still fresh in the student's mind. This way, my performance in the classroom is all that is being evaluated. You might have heard this kind of evaluation form called a smile sheet. Well, to the extent it proves to my boss what a great trainer I am, it makes me smile!"

### 10. Ask the Right Questions Right.

I watched the students fill out the evaluation forms. I was somewhat dazed by all that I had witnessed. I picked up an extra copy of the evaluation form and was enlightened concerning his tenth and final rule: Just ask the right questions and ask the questions right.

As I read over the evaluation form, I was sad to see that it mentioned nothing about what the student had learned. Of course, that was because the students had learned nothing. Then I remembered that Rogers said that I was too hung up on learning. I noted the way he had phrased the questions. There was no room here for ambiguity, no space provided for

comments. In each case, the answer Rogers desired was the only one possible.

Later, I asked one final question. "Is that all there is to it?" I said. "Don't you do anything to measure performance?"

"Most definitely," he said emphatically. "After each class, I send a glowing letter to each student's supervisor. I tell how well the student did, and how confident I am for expert performance on the inventory system."

"Isn't that a lot of work?" I said.

"Sure it is," he said, "but it's worth it. A report like that puts the onus on the student to meet performance expectations."

I realized then that he was both determined and tireless in his pursuit of perfect evaluations, and he wasn't about to let student learning stand in the way.

Class Evaluation Form

Class: Using the Inventory System

Instructor: Joe Rogers

Student Name:

1. Were the classroom facilities adequate? Yes/No
2. Were the goals and objectives clearly stated at the beginning of class? (Refer to page five in your manual.) Yes/No
3. Were the students allowed to introduce themselves? Yes/No
4. Did the instructor have good eye contact? Yes/No
5. Did the instructor adequately answer any student questions? Yes/No
6. Was the class too in-depth? Yes/No
7. Did the instructor begin the class on time? Yes/No
8. Did the instructor state his name at the beginning of class? Yes/No
9. Were the refreshments adequate? Yes/No
10. Were the handouts adequate and thorough? Yes/No
11. Was the classroom neat and orderly? Yes/No
12. Was the instructor knowledgeable about the subject? Yes/No

## Evaluating Training

### There is No "Cookbook" Approach

This is a close-to-the-original version of an article prepared for a 1992 ASTD Tool Kit edited by Karen Medsker and Don Roberts. The original version was published in three separate pieces. This one is more or less intact.

### Evaluate What and Why?

Evaluate? Evaluate what? Training? What do we mean by training? What's to be evaluated? A particular training course? The trainees? The trainers? The training department? A certain set of training materials? Training in general?

More to the point, why evaluate it? Do we wish to gauge its effectiveness, that is, to see if it works? If so, what is it supposed to do? Change behavior? Shape attitudes? Improve job performance? Reduce defects? Increase sales? Enhance quality?

What about efficiency? How much time does the training consume? Can it be shortened? Can we make do with on-the-



job training or can we completely eliminate training by substituting job aids instead?

What does it cost? Whatever it costs, is it worth it? Who says? On what basis? What are we trying to find out? For whom?

The preceding questions illustrate the complexity of any effort to evaluate training and emphasize the importance of being clear about the purposes of and the audiences for any such evaluation.

It is the central thesis of this article that the evaluation of training poses a problem for many trainers, managers, executives, and other professionals with an interest in training. Further, it is my firm conviction that these problems are most productively addressed by examining their underlying structure. As Dewey (1910) wrote, “A difficulty clearly apprehended is likely to suggest its own solution (p. 94)”. This article, then, will examine various elements in the structure of the problem of evaluating training.

The centerpiece for the collection of articles comprising the ASTD Tool Kit for which this paper was originally written is Donald Kirkpatrick’s well-known framework for evaluating training, frequently referred to as “Level One,” “Level Two,” and so on. Much has changed since Kirkpatrick’s framework first appeared and it might help to better understand and appreciate the truly seminal nature of his work if we attempt a very brief review of some of the major changes in the training and development world since then.

### **A Brief Historical Perspective: 1960-1990**

Donald Kirkpatrick set forth his four-level approach to the evaluation of training in a series of articles appearing in the journal of what was then known as the American Society of Training Directors. The first of these four seminal articles was published in November of 1959. The remaining three articles were published in the succeeding three months, with the fourth and final article appearing in February of 1960. These articles can be found in *Evaluating Training Programs*, a collection of articles compiled by Kirkpatrick from the pages of the ASTD Journal and published by ASTD in 1975.

In 1959, when Kirkpatrick launched his views, the American Society of Training Directors (ASTD) was about as close-knit a “good old boys” network as one could find. Since its inception in the 1940s, ASTD membership had consisted primarily of training directors, known also as training officers. Even as late as 1969 (the year in which I took up the training profession), ASTD was still dominated by training directors. That the members of ASTD were in fact “old boys” is amply demonstrated by some figures from the 1969 ASTD national conference, which was held in Miami, Florida (Reith, 1970): Only nine percent of the attendees were 29 years of age or younger. Fully 59 percent were 40 years old or older. Only nine percent of the attendees were females. To elucidate the obvious, 91 percent were males. Any group consisting of more than 90 percent males past the age of 40 certainly seems vulnerable to charges of being a bunch of “good old boys.”

Changes, however, were already evident. Of the 1,081 full-time attendees filling out the Miami conference feedback form, almost half or 49 percent were attending their first ASTD

national conference. More than 77 percent had been in training assignments for more than three years and roughly 40 percent had been in training assignments for more than 10 years. But, at the same time, more than 50 percent of those attending had been in their present jobs for less than three years.

Elsewhere, the training business was stirring. The likes of Bob Mager, Susan Markle, Tom Gilbert, Geary Rummier, Joe Harless and Karen Brethower were shaking up the training establishment and would continue to do so for several more years. The development business was stirring too. Rensis Likert, Chris Argyris, Douglas McGregor, and George Odiorne were shaking up the management mindset and a new term had entered our vocabulary: “Organization Development (OD).”

The board of governors of the American Society of Training Directors, perhaps sensing some kind of shift in the tide of human and organizational affairs, changed the name of the society from the American Society of Training Directors to the American Society for Training and Development, and moved its headquarters from Madison, Wisconsin to the Washington, D.C. area (Alexandria, Virginia).

Other changes affecting the training and development worlds were taking place during this same time period. Behaviorism flowered for a while then wilted in the face of the shift to knowledge work. Peter Drucker, in book after book, beginning with *Landmarks for Tomorrow* (1959) and continuing through *The New Realities* (1989), kept reminding us that the center of gravity in the employed workforce was shifting from those who worked with their muscles to those who worked with their minds. By 1980, the shift to knowledge work was more or less complete and, three years later, I spelled out some of its consequences for training and trainers (Nickols, 1983).

As perceptions of the locus of working gradually and painfully shifted from the workers’ muscles to their minds, the focus of managerial control over work and working shifted from the exercise of direct control over overt physical behavior to a search for ways and means of influencing covert mental processes. In short, the cognitive view gained sway (and it is likely to hold sway for the foreseeable future). Nevertheless, behaviorism, mostly through the efforts of Bob Mager, did give us this central question pertaining to the evaluation of training: “What is the trainee supposed to be able to do as a result of training?” — and the training business hasn’t been the same since.

Programmed instruction blossomed for a while too, and was then displaced by its own progeny: self-instructional materials, job aids, and performance technology. Another society, the National Society for Programmed Instruction (NSPI), moved its headquarters from San Antonio, Texas to Washington, D.C., and changed its name to the National Society for Performance and Instruction. (It has most recently become the International Society for Performance Improvement.)

Systems concepts and the systems approach came rushing at us from two very different angles. We didn’t stand a chance; we were overwhelmed by superior forces. Systems engineering, apparently obeying the biblical command to be fruitful and multiply, gave us the systems approach to this, that, and the other. Its primary legacy consists of (1) the instructional systems development (ISD) model originally developed in the

military and (2) the computer systems development process found throughout business and industry.

General systems theory (GST) was fertile and prolific too, mostly on the organizational side of things. The concepts of “open” and “socio-technical” systems came into vogue and stayed. “Systems thinking” is with us still, so pervasive now that we hardly give it a second thought. Human relations was a burgeoning movement in this same period. Years earlier, Elton Mayo had given us the “Hawthorne effect” and, in the 1960s and 1970s, his legatees gave us sensitivity training, T-groups, and organization development (OD). One of Mayo’s philosophical descendants, Len Nadler, coined the term “human resources” and people haven’t been looked upon as people since.

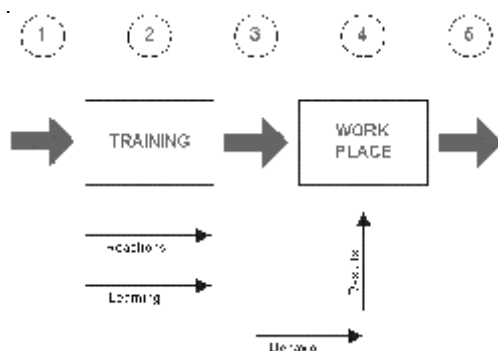
Technology was at the heart of much of what was going on from 1960 through 1990. For 10 of those years (1965 to 1975) a brief war was waged between “educational technology” and “instructional technology.” It was a civil war, of course, and like a lot of recent wars it ended in a draw; there weren’t any clear-cut winners, but at least the hostilities came to an end.

Donald Kirkpatrick’s four-level evaluation framework has survived all this turbulence. One might even say that it has prospered. At the very least, one must acknowledge its staying power — and rightly so, for, although his framework might not be the last or latest word in the evaluation of training, it certainly comes close to being the first word on the subject.

Let us now shift our focus from the past to the present and begin our examination of the evaluation of training problem. Our starting point is with the structural relationship between training and the workplace.

## Training and the Workplace

Most training takes place in an organizational setting, typically in support of skill and knowledge requirements originating in the workplace. This relationship between training and the workplace is illustrated in Figure 1.



**Figure 1 - The Structure of the Training Evaluation Problem**

Using the diagram in Figure 1 as a structural framework, we can identify five basic points at which we might take measurements, conduct assessments, or reach judgments. These five points are indicated in the diagram by the numerals 1 through 5:

1. Before Training
2. During Training

3. After Training or Before Entry (Reentry)

4. In The Workplace

5. Upon Exiting The Workplace

The four elements of Kirkpatrick’s framework, also shown in Figure 1, are defined below using Kirkpatrick’s original definitions.

**1. Reactions.** “Reaction may best be defined as how well the trainees liked a particular training program.” Reactions are typically measured at the end of training — at Point 3 in Figure 1. However, that is a summative or end-of-course assessment and reactions are also measured during the training, even if only informally in terms of the instructor’s perceptions.

**2. Learning.** “What principles, facts, and techniques were understood and absorbed by the conferees?” What the trainees know or can do can be measured during and at the end of training but, in order to say that this knowledge or skill resulted from the training, the trainees’ entering knowledge or skills levels must also be known or measured. Evaluating learning, then, requires measurements at Points 1, 2 and 3 — before, during and after training

**3. Behavior.** Changes in on-the-job behavior. Kirkpatrick did not originally offer a definition per se for this element in his framework, hence I have not enclosed this one in quotation marks. Nevertheless, the definition just presented is taken verbatim from Kirkpatrick’s writings — the fourth and final article. Clearly, any evaluation of changes in on-the-job behavior must occur in the workplace itself — at Point 4 in Figure 1. It should be kept in mind, however, that behavior changes are acquired in training and they then transfer (or don’t transfer) to the work place. It is deemed useful, therefore, to assess behavior changes at the end of training and in the workplace. Indeed, the origins of human performance technology can be traced to early investigations of disparities between behavior changes realized in training and those realized on the job. The seminal work in this regard is Karen Brethower’s paper, “Maintenance: The Neglected Half of Behavior Change” (see the references section).

**4. Results.** Kirkpatrick did not offer a formal definition for this element of his framework either. Instead, he relied on a range of examples to make clear his meaning. Those examples are herewith repeated. “Reduction of costs; reduction of turnover and absenteeism; reduction of grievances; increase in quality and quantity or production; or improved morale which, it is hoped, will lead to some of the previously stated results.” These factors are also measurable in the workplace — at Point 4 in Figure 1.

It is worth noting that there is a shifting of conceptual gears between the third and fourth elements in Kirkpatrick’s framework. The first three elements center on the trainees; their reactions, their learning, and changes in their behavior. The fourth element shifts to a concern with organizational payoffs or business results. We will return to this shift in focus later on.

## Thinking about the Evaluation of Training

The diagram shown in Figure 1 not only depicts Kirkpatrick’s evaluation framework, it also indicates the points at which it takes measurements, collects data, and so forth. We can create

other possibilities for evaluating training by altering the points at which these same measures are taken.

Trainee reactions, for instance, could be assessed at Point 4, after the trainees have been on the job for a while, instead of so soon after the completion of training. In a slightly different vein, we could compare Points 2 and 4, which essentially amounts to comparing the training environment with the workplace environment. From such a comparison we might be able to gauge the “authenticity” of the training, that is, how closely the training environment matches or resembles the workplace environment and, from this, draw some conclusions about the likelihood of a phenomenon known as the “transfer of training.”

We can “get outside the box,” so to speak, and pick points not even shown on the diagram. Moving all the way to the left of Point 1, for instance, we can speculate that trainees arrive at Point 1 as a result of some kind of selection process. In the course of evaluating training, we (or someone else) might wish to measure the effect selection has on success in training. Moving all the way to the right, beyond Point 5, we can inquire as to where people go when they leave the workplace, perhaps at the end of the day or perhaps at the end of a career. One answer is that they go home. Another is that they reenter the larger community in which the organization is embedded and from whence they came. From this perspective, one might ask, “What good or harm comes to the community as a result of the organization’s training and workplace practices?” Alternately, “Is the organization turning out skilled, self-supporting members of the community, or is it simply chewing up people and spitting out dull-eyed, unthinking, uncaring automatons who are of no further value to themselves or to society?” In short, by moving all the way to the right in Figure 1, we begin examining the societal impact of organizations — and of the training they provide — or don’t provide, as the case may be.

Another way to make use of the structure depicted in Figure 1 is to change the time perspective being used. Kirkpatrick’s “Reactions” element is a retrospective or after-the-fact view. The trainees are looking back at the training (to the left from Point 3). Why not substitute a perspective of looking forward? At Point 3, the notion of looking forward raises the possibility of asking the trainees to provide their predictions regarding the nature of the workplace they’re about to enter. In other words, we might consider assessing the image of the company and the workplace that is communicated by the training experience.

As seen earlier, learning is typically assessed through before and after measures. This is a point-to-point measurement and comparison, it spans a “chunk” of the framework. By varying the points used, we can identify other “chunks” and come up with other evaluation issues. We could, for instance, create a span encompassing all of Figure 1 — Points 1 through 5 — and this might suggest larger learning issues that involve training and development in an integrated fashion. How do training and workplace developmental experiences dovetail, for instance, in mapping out career paths?

Create a span from Points 1 through 3, the same span used in gauging learning, but take the perspective of the manager of the people who are going through training. A couple of likely

evaluation issues from this perspective can be expressed in two terse questions: “How long is it going to take? What is it going to cost?”

Let’s pick yet a different audience for the evaluation of training: The professional training community. And let’s use Point 2, the training process, as our focal point. It could well be the case that an evaluation for this audience at this point in the structure we are using would center on matters like adherence to standards for design and delivery, that is, the “professionalism” of the training.

Stay at Point 2 and adopt the trainees’ perspective. Perhaps the chief evaluation issue in this case can be expressed in a single question: “How does all this (the training) relate to my job?”

Suppose we go to Point 1, adopt a looking forward (to the right perspective), and put on our executive’s hat. What might we be interested in from that perspective? One quick answer is the results that can be expected in the workplace, at Point 4. Another is the resources required to achieve those results.

Training, like all organizational functions, must compete for resources. Moreover, resources must be allocated before any effort can be undertaken. From this it follows that resource allocation decisions must be made before the resources can be expended. Consequently, from the resource allocation perspective, the case to be made regarding the results of training must be made before the training is conducted, not after.

The preceding examples of evaluation possibilities were arrived at by varying elements of the structure of what might be termed “the evaluation of training problem.” One of the elements varied was the point or span of points in the process at which measurements might be taken. Another element varied was the audience for the results of the evaluation. Yet a third element varied was the time perspective employed. Varying these elements, singly or in combination, permits us to identify some of the many purposes for evaluating training. In turn, the purposes for evaluating training are inextricably bound up with the purposes of the training being evaluated.

### **The Many Purposes of Training**

Almost 20 years ago I wrote a brief article addressing what I saw as the need to adopt a “strategic view” of training (Nickols, 1981). My aim then, as now, was to point out that “training is a management tool, not the private domain of those who specialize in its development or delivery, nor of those who make its development and delivery contingent upon some other methodology.” By “some other methodology,” I mean performance technology, which seems to me to view training as little more than an occasionally useful remedy for skill or knowledge deficiencies.

As a management tool, training serves many masters and many purposes. In the article just mentioned, I presented and explained examples of three such purposes (the first three in the list below). Additional purposes for or uses of training are given in the list below. It is not my intent here to elaborate upon these many purposes. Instead, I wish merely to prompt you to think about how the evaluation of training might vary with the purpose or use of the training itself.

1. Focusing energy on issues.
2. Making work and issues visible.
3. Supporting other interventions.
4. Legitimizing issues.
5. Promoting change.
6. Reducing risk.
7. Creating a community based on some shared experience.
8. Building teams.
9. Indoctrinating new staff.
10. Communicating and disseminating knowledge and information.
11. Certifying and licensing.
12. Rewarding past performance.
13. Flagging “fast trackers.”
14. Developing skills.

Given the diverse array of purposes listed above, it seems reasonable to conclude that the results sought from the training would also be diverse. And so they are. It is time now to return to the issue postponed earlier; namely, the fourth element in Kirkpatrick’s framework, the results of training.

### The Results of Training

When we speak of measuring the results of training — and we mean results beyond those of simply equipping people with the skills and knowledge necessary to carry out their assigned tasks and duties — we are redefining training as an intervention, as a solution to some problem other than equipping people to do their jobs.

In cases where skill and knowledge deficiencies are leading to mistakes, errors, defects, waste, and so on, one might argue (and many do) that training which eliminates these deficiencies and in turn reduces mistakes, errors, defects, and waste, is a solution to a performance problem. This argument is extended to assert that the reductions in mistakes, errors, defects, and waste, as well as the financial value of any such reductions constitute the “results” of training.

The logic of this argument has a certain superficial appeal but it is far from impeccable and even farther from compelling. In short, it does not withstand serious scrutiny. It is frequently pointless to ask “What business results were achieved as a result of training?” because the goal of training is generally one of preventing mistakes, errors, defects, and waste, not correcting them. Thus, by a strange twist of circumstances, the only way to prove that such training is successful is to shut down the training. As is the case with some other things, it is sometimes the case with training that the true measure of its value lies in its absence, not its presence, but shutting down training is hardly a practical way of testing that proposition.

At this point, it seems worthwhile to see if the evaluation of training problem can be cast in a more practical light. To accomplish this aim, we will use a completely fictitious, hypothetical, situation, one in which an equally fictitious executive, Lee Resnick, will play a central role. In short, let’s pretend.

### Let’s Pretend

Pretend you are Lee Resnick, senior vice president for systems and operations at the Cowardly Lion Insurance Company. You are cutting over to a new, multi-million dollar insurance policy administration system in just a few months and your neck is on the line to the CEO for a “smooth, problem-free introduction” of the new system. You know that’s a joke and so does the CEO — there’s no such thing as a “problem-free introduction” of a new system — but the underlying message is also clear: If things get too screwed up, it’ll be you that gets the ax, not the CEO.

The new system radically alters the way the clerical staff members do their jobs; indeed, the jobs themselves have been radically restructured. Obviously, the people need to be re-trained. They need to know how the new system works and how to carry out the many new and different procedures they’ll encounter. They’ll also have to be sold on the new system, so as to reduce the friction at installation time. Moreover, you don’t need some training consultant to tell you all this. You also know that, given enough time, the clerical staff wouldn’t need much in the way of formal training at all. Sooner or later, they would figure out how to make the system do what it was supposed to do. In short, they would learn how to do the job even if they weren’t trained how to do it. But you don’t have time. And you can’t afford to live with the financial and political costs of the error rates you’d encounter in a world where people are learning solely from their mistakes. You don’t need to be told this, either. So, you know you’re going to spend some money on training. The primary issue facing you is how much? How much money and for how much training?

Depending on the riskiness of the situation, your personal circumstances, your career ambitions, and a host of other factors, you might be inclined to go for the minimum amount of training and the minimum expenditure of cash or, conversely, the cost and length of the training might be no object. Which of these is the case is more or less immaterial because your choice, in either case, will be governed by what is essentially the same criterion: Of the options available to you, which seems most likely to serve your purpose?

When you follow up, which you’re very likely to do, you’re likely to make do with a few phone calls, a few questions, and a few answers. Formal, structured, and expensive after-the-fact evaluations are of little use and could even pose an inadvertent threat. What would you do, for instance, if you commissioned the kind of evaluation the training people are pressing for and it revealed that the money you spent on training was wasted? Now how’s that going to look come performance appraisal time? (Fortunately, you can always hang the blame on the trainers.)

As Lee Resnick, you can probably relate very quickly to item six in the list of training purposes presented earlier: Reducing risk. Your primary motive in providing the training is simply to ensure that the lack of training doesn’t create a problem during cutover. Training, in this case, is insurance; prevention as much or more than intervention.

### Let’s Pretend Some More

Suppose now that you are a new general manager and that your

department heads have a long history of isolation and compartmentalism, a history of not talking to one another. Further, suppose you decide to use some training sessions as a means of bringing them together and getting them started talking with one another. How would you evaluate this training?

Suppose instead that, historically, a deaf ear has been turned to laments and complaints about the company's performance appraisal system. A new CEO, charged with changing the corporate culture, is willing to modify it. How could training be used in support of this objective? Which of the purposes in the list above might this kind of training serve? How would you evaluate this training?

Suppose, finally, that the officers of the company are dissatisfied with the quality of their own training and education and decide to institute an advanced management program. First, they attend. Next, some but not all the of senior managers in the pool from which the officers are selected also attend. What's going on here? Which purposes are being served? How would you evaluate this training?

The root word of interest in this article is a verb: "Evaluate." To evaluate some thing is to determine its value, to find its strength or its worth. To evaluate training is to determine its value. Value is relative. What is of great value to one person is of little or no value to another. In evaluating training, then, it is important to know one's audience — the person or persons for whom the determination of value is to be made. As noted earlier, there are several possible audiences for evaluation results. These include the trainees, their managers, the trainers and their managers, the executives of the organization wherein the training is taking place, members of the training profession and even, as we saw at one point, members of the larger community in which the organization is embedded.

Because the definition and perception of value varies from person to person, so do the purposes of evaluation. Moreover, the various audiences for evaluation frequently act as their own evaluators. If you look carefully about you, or if you reflect upon your own experiences as a "trainee," you will quickly discover that training is being evaluated every day, but by trainees, managers, and executives — and in accordance with their criteria and purposes.

## Conclusion

The concluding point to be made here is very, very simple and very, very important: There is no "cookbook" approach to the evaluation of training. To properly evaluate training requires one to think through the purposes of the training, the purposes of the evaluation, the audiences for the results of the evaluation, the points or spans of points at which measurements will be taken, the time perspective to be employed, and the overall framework to be utilized.

## Evaluation Tools

### Evaluation Matrix

- Although by all appearances, the "Evaluation Matrix" is a very simple tool, it has a powerful purpose. It helps you to consider a wider range of data collection methods than you might otherwise consider in relation to each of the questions

addressed by your evaluation. Evaluators sometimes get into the habit of using one or other data collection method, e.g., an end-of-training questionnaire, without considering the advantages of alternative methods. This tool prompts you to consider each evaluation question and to decide which of the many data collection options have the greatest potential for providing the desired information.

### Instructions For Use

- The "Evaluation Matrix" tool will help you consider the most appropriate and feasible data collection method for each of the questions identified in your evaluation plan. (Remember that evaluation is different from assessment in that evaluation is focused on the effectiveness and worth of programs or products whereas assessment is focused on estimating student learning.)
- List your questions on the vertical side of the matrix.
- List the feasible data collection methods on the horizontal side of the matrix.
- Consider each question carefully and choose the most appropriate data collection method.
- To make your own matrix, copy the matrix below and paste it into a new ClarisWorks file using the "Drawing" option in the "New Document" dialog box.
- In the "Drawing" option, the elements of the matrix can be edited.

### Evaluation Matrix

Evaluation Questions	Data Collection Methods											
	Anecdotal Records	Expert Reviews	Implicit measurements	In-Basket Exercises	Instructor Interviews	Observations	On-Line Data	Portfolios	Tests	User Interviews	User Logs	User Questionnaires
a. What knowledge was learned by trainees?							X	X	X	X		
b. What skills were developed by trainees?						X	X	X	X	X		
c. What attitudes were formed by trainees?						X				X	X	X
d. What were trainee reactions to the IMM?	X									X		X
e. What were instructor reactions to the IMM?					X	X						

### Anecdotal Record Form

- Evaluation data does not have to be reported as "cold hard statistics." Often you will want to tell the "human story"

involved in your development or implementation project. One way of capturing those important stories and critical incidents that provide the human story is the “Anecdotal Record Form.” Participants in an interactive multimedia design project can use this instrument to describe a noteworthy event and to offer their own interpretation of its relevance. It is very important to try to complete an Anecdotal Record Form as soon as possible after a critical event has occurred so as not to forget critical information. It is equally important to separate your description of the incident from your interpretation of it!

### Anecdotal Record Form

Evaluation data does not have to be reported as “cold hard statistics.” Often you will want to tell the “human story” involved in your development or implementation project. One way of capturing those important stories and critical incidents that provide the human story is the “Anecdotal Record Form.” Participants in an interactive multimedia design project can use this instrument to describe a noteworthy event and to offer their own interpretation of its relevance. It is very important to try to complete an Anecdotal Record Form as soon as possible after a critical event has occurred so as not to forget critical information. It is equally important to separate your description of the incident from your interpretation of it!

#### Instructions:

1. As a participant in an interactive multimedia design project, you will observe incidents or listen to reports of incidents which relate to the development and impact of the program. It is important that this kind of anecdotal information be systematically recorded so that the story of the development and outcomes of this project can be understood. Therefore, you should complete an Anecdotal Record Form whenever you witness or hear of a significant incident relating to the progress and accomplishments of project. An anecdotal record is a verbal account which exhibits these characteristics:
  - a. Each anecdote should be limited to a single incident.
  - b. It should contain a factual, non-inferential description of the observed or reported incident. (For example, “The trainees said ‘I’ve never enjoyed using a computer before.’” instead of “The trainee expressed satisfaction with the training system.”)
  - c. It should include a description of the situation in which the incident occurs so that the meaning of the behavior can be understood.
  - d. It should be written as soon as possible after witnessing or hearing about the incident so that all important details can be included.
  - e. It should include a separate section describing your interpretation of or feelings about the anecdote. Your personal evaluation is important because your judgments about the project are valued highly.
2. A copy of a blank Anecdotal Record Form as well as a sample completed form appears below.

### Blank Anecdotal Record Form

DATE: \_\_\_\_\_ PLACE: \_\_\_\_\_

NAME OF OBSERVER: \_\_\_\_\_

Description of the incident:

Interpretation:

### Sample Anecdotal Record Form

DATE: July 23, 1992

PLACE: Beta Site 2

NAME OF OBSERVER:

Lucy Schweitzer

Description of the incident: About two hours into the course, one of the trainees suddenly got up and left the class. I followed him out into the hall and asked if anything was wrong. He replied: “I can’t waste my time sitting in the class because I don’t intend to use the new system.” I asked him why and he answered: “Computers don’t work for me. As soon as I touch one, the program blows up. You’ll be glad I won’t use your system because it would just fall apart if I did. It’s nothing against you or your course, I just know it won’t work.”

I tried to talk to him more, but he indicated that he had to make some phone calls and left.

Interpretation: The “(Insert name here.)” course training is innovative and user-friendly in our eyes, but in the eyes of a person with high anxiety about technology, it is just another threatening computer program. I suspect that this person strongly fears computers and that he has an unusually strong degree of “learned helplessness” with respect to them. It may be worthwhile to conduct some sort of a pre-assessment with respect to “techno-phobia” and makes special efforts to help those who express high anxiety. Also, this person indicated before the beginning of the course that he was only there because his boss insisted that he attend. We may need to clarify the enrollment procedures for this and other clients.

#### Expert Review Checklist

- Expert review is one of the primary evaluation strategies used in both formative (How can this multimedia program be improved?) and summative (What is the effectiveness and worth of this multimedia program?) evaluation. It is often a good idea to provide experts with some sort of instrument or guide to insure that they critique all of the important aspects of the IMM program that you want reviewed. This “Expert Review Checklist” has been designed for use by an instructional design expert. You would employ different sorts of Expert Review Checklists with different types of experts such as a content expert or a human computer interface expert.

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the IMM program that you want reviewed. This “Expert Review Checklist” has been designed for use by an instructional design expert. You would employ different sorts of Expert Review Checklists with different types of experts such as a content expert or a human computer interface expert.

#### Instructions:

1. The “Expert Review Form” is a tool that will help assure that the experts reviewing your interactive program focus on the variables of most interest to you. (Of course, they will usually provide you with additional aspects of the program. That’s why they are called experts!)
2. A sample “Expert Review Form” appears on the next page.

### Expert Review Form

#### Expert Review Check List for Interactive Multimedia

**REVIEWER:** Dr. Lynn Knowitall **DUE DATE:** June 10, 1994

Please circle your rating and write comments on each aspect of the interactive multimedia (IMM) package. 1 represents the lowest and most negative impression on the scale, 3 represents an adequate impression, and 5 represents the highest and most positive impression. Choose N/A if the item is not appropriate or not applicable to this course. Use additional paper for comments.

NA=Not applicable 1=Strongly disagree 2=Disagree  
3=Neither agree/nor disagree 4=Agree 5=Strongly agree

#### Area 1: Instructional Design Review

1. This IMM provides learners with a clear knowledge of the program objectives. N/A 1 2 3 4 5
2. The instructional interactions in this IMM are appropriate for the objectives. N/A 1 2 3 4 5
3. The instructional design of this IMM is based on sound learning theory and principles. N/A 1 2 3 4 5
4. The feedback in this IMM is clear. N/A 1 2 3 4 5
5. The pace of this IMM is appropriate. N/A 1 2 3 4 5
6. The difficulty level of this IMM is appropriate. N/A 1 2 3 4 5

#### Area 2: Cosmetic Design Review

7. The screen design of this IMM follows sound principles. N/A 1 2 3 4 5

8. Color is appropriately used in this IMM. N/A 1 2 3 4 5
9. The screen displays are easy to understand. N/A 1 2 3 4 5

#### Area 3: Program Functionality Review

10. This IMM operated flawlessly. N/A 1 2 3 4 5

#### Focus Group Protocol

- Focus groups are a powerful means of collecting data about learner or instructor reactions to a new interactive multimedia program. However, focus groups need to be carefully planned so that you get the kind and quality of information you are seeking. This “Focus Group Protocol” is a brief example of a list of questions that might be addressed

during a focus group regarding an interactive multimedia program.

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#### Instructions:

1. The tool below is merely a template. You should modify it as needed for your distinct purposes.
2. Using an focus group is a type of survey activity. Conducting a survey should be done systematically. The overall steps in the survey process are:
  - a. Organize the survey team.
  - b. Determine the survey goal.
  - c. Select a representative sample.
  - d. Generate the questions.
  - e. Construct the instrument (questionnaire, interview protocol, or focus group protocol).
  - f. Test the instrument.
  - g. Administer the instrument.
  - h. Analyze the data.
  - i. Share and use the results.
3. Consider collecting evaluation data with more than one method if time and resources allow. For example, a questionnaire can be used to collect information about global reactions to an interactive multimedia program. Then, either interviews or focus groups can be used to collect more detailed information. Alternatively, interviews or focus groups might be used to identify the most important evaluation issues that will be included in a questionnaire sent to many people.
4. A sample focus group protocol begins on the next page.

#### Evaluation Focus Group Protocol

# of participants: \_\_\_\_\_ Host: \_\_\_\_\_

Date: \_\_\_\_\_ Site: \_\_\_\_\_

1. What is your opinion of the interactive multimedia system used to deliver this information?
2. Was the interactive multimedia system available at times and places convenient to you?
3. What is the word on the shop floor about this interactive multimedia system?
4. What could be done to improve the interactive multimedia system?
5. What other types of information or training should be available via interactive multimedia?

- The “Formative Review Log” is a simple instrument that can be used by anyone you have asked to review your program in its formative stages. The instrument has three columns, the first for recording the screen or format sheet number that the person is reviewing, the second for writing down observations (e.g., errors, confusing points, or ideas), and the third for recording what actions have been taken in reaction to the feedback provided by members of the project team. Using an instrument like this with many different types of users will probably have the greatest pay-off for formative evaluation throughout the life of the project.

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1. In addition to space to record who is doing the evaluation, when, etc., there are three main columns that should be in the Formative Review Log:
  - A column for indicating which part of the program is being review (e.g., a screen number, format sheet number, script version, etc.);
  - A column for recording the reviewer's reactions, questions, errors, etc., and
  - A column for recording what was done as a consequence of the feedback provided by the user.
2. Keep copies of formative reviews that have been done in the project notebook or diary.
3. As an interactive multimedia program nears completion, it is sometimes useful to watch a user and fill out the log for the user so that the user can concentrate on interacting with the program.
4. A sample "Formative Review Log" appears on the next page.

(IMM Module)      (Reviewer)      (Date)

[illegible]

- It is one thing to plan and develop a good interactive multimedia program. It is entirely another thing to implement it as planned. Many training innovations have failed because implementation factors (such as instructor motivation) were not considered. It is essential to make every effort to collect information regarding the actual use of an interactive multimedia program as compared to the planned use. The “Implementation Log” tool has been designed to make that comparison a little more systematic.

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1. In addition to space for indicating what program is being implementing and other types of site-specific information, an implementation log should include the following:



- a column for describing what is planned to happen during the implementation,
  - a column for describing what actually happened,
  - a column for commenting on the differences between planned and actual activities (if any), and
  - spaces for additional questions that might be important in the context.
2. A sample implementation log appears on the next page.

### Implementation Log

**DATE:** 10/2-3/94 **PLACE:** Chicago **TIME:** 9:00 - 5:00  
**TRAINER:** Larry R Jones **NUMBER OF TRAINEES:** 15

Time	Recommended Activities	Actual Activities	Comments
09:00-09:15	Introductions of participants and review of agenda. (Leader-led)		No changes.
09:15-09:30	Overview of "New Course." (Leader-led)		No changes.
09:30-12:00	Trainees begin Module 1. (multimedia systems)	One system failed to function because someone removed system files.	I need to check all systems personally before course begins.
12:00-01:00	Lunch Break	Two trainees chose to skip lunch and keep working.	
01:00-05:00	Trainees continue working through the modules.		No changes. Frequently had to refer trainees to help routine.

1. What training activities would you like to modify the next time you conduct this course?

I will personally check each one of the multimedia systems to insure that the modules function as designed.

2. How can the training materials used in this course be enhanced?

Trainees pointed out several errors in the data communications module. See attached list.

### Interview Protocol

- Interviews are a powerful means of collecting data about learner or instructor reactions to a new interactive multimedia

program. However, interviews need to be carefully planned so that you get the kind and quality of information you are seeking. This "Interview Protocol" is a brief example of a list of questions that might be addressed during an interview regarding an interactive multimedia program.

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Interviews are a powerful means of collecting data about learner or instructor reactions to a new interactive multimedia program. However, interviews need to be carefully planned so that you get the kind and quality of information you are seeking. This "Interview Protocol" is a brief example of a list of questions that might be addressed during an interview regarding an interactive multimedia program.

### Instructions:

1. The tool below is merely a template. You should modify it as needed for your distinct purposes.
2. Using an interview protocol is a type of survey activity. Conducting a survey should be done systematically. The overall steps in the survey process are:
  - a. Organize the survey team.
  - b. Determine the survey goal.
  - c. Select a representative sample.
  - d. Generate the questions.
  - e. Construct the instrument (questionnaire, interview protocol, or focus group protocol).
  - f. Test the instrument.
  - g. Administer the instrument.
  - h. Analyze the data.
  - i. Share and use the results.
3. Consider collecting evaluation data with more than one method if time and resources allow. For example, a questionnaire can be used to collect information about global reactions to an interactive multimedia program. Then, either interviews or focus groups can be used to collect more detailed information. Alternatively, interviews or focus groups might be used to identify the most important evaluation issues that will be included in a questionnaire sent to many people.
4. A sample interview protocol begins on the next page.

### Evaluation Interview Protocol

Name: \_\_\_\_\_ Interviewer: \_\_\_\_\_

Date: \_\_\_\_\_

1. What is your specialty?
2. How many years and months in present position?  
 \_\_\_\_\_years \_\_\_\_\_months
3. How many years experience with this company? \_\_\_\_\_years  
 \_\_\_\_\_months
4. Please describe your use of the XYZ since the "XYZ Training" IMM course?
5. Please describe your first reactions to "XYZ" IMM course.

6. Please describe your present opinions of “XYZ” IMM course.
7. Do you need additional training for the “XYZ?”
8. To what degree did you accomplish the performance objectives established for the “XYZ” IMM course?
9. What would you tell another person about to take the “XYZ” IMM course for the first time?
10. What kinds of successes have you experienced with the “XYZ” since the training?
11. What kinds of problems have you experienced with the “XYZ” since the training?
12. Please describe the areas in which you feel most competent concerning use of the “XYZ.”
13. Please describe the areas in which you feel least competent concerning use of the “XYZ.”
14. What improvements would you recommend for the “XYZ Training” IMM course overall?
15. What improvements would you recommend for the “XYZ” IMM course training manual?
16. What is your opinion of the interactive multimedia system

#### Questionnaire

- Questionnaires are undoubtedly the single most frequently used type of evaluation instrument. Poorly designed questionnaires are often administered at the close of a course or training session as a “smilometer” or “happiness indicator.” They are also often distributed to users of interactive multimedia programs. If the only thing you find out about your interactive multimedia program with a questionnaire is whether the trainees liked it, you are not making good use of this strategy. As shown in the “Questionnaire,” a wealth of information can be provided by a well-designed instrument.

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#### Instructions:

1. Questionnaires can take many forms, e.g., checklists, rating scales, multiple-choice questions, open-ended questions, and so forth. Most instruments include a combination of several different types of questions or items. You should design an evaluation questionnaire very carefully so that you get the information you need without requiring the persons completing the questionnaire to spend too much of their time.
2. A sample evaluation questionnaire appears on the next page.

#### Evaluation Questionnaire

Course Name: \_\_\_\_\_ Training Location: \_\_\_\_\_  
 Participant Name (optional): \_\_\_\_\_ Date: \_\_\_\_\_  
 Job Title: \_\_\_\_\_ Years in present position? <1 1-3 3-5 5+

#### Instructions

Please circle your response to the items. Rate aspects of the course on a 1 to 5 scale 1 equals “strongly disagree” and 5 equals “strongly agree.” 1 represents the lowest and most negative impression on the scale, 3 represents an adequate impression, and 5 represents the highest and most positive impression. Choose N/A if the item is not appropriate or not applicable to this course. Your feedback is sincerely appreciated. Thank you.

#### Course Content (Circle your response to each item.)

NA=Not applicable 1=Strongly disagree 2=Disagree 3=Neither agree/nor disagree 4=Agree 5=Strongly agree

1. I was aware of the prerequisites for this course.  
N/A 1 2 3 4 5
2. I had the prerequisite knowledge and skills  
N/A 1 2 3 4 5 for this course.
3. I was well informed about the objectives  
N/A 1 2 3 4 5 of this course.
4. This course lived up to my expectations.  
N/A 1 2 3 4 5
5. The content is relevant to my job.  
N/A 1 2 3 4 5

#### Course Design (Circle your response to each item.)

6. The course objectives are clear to me.  
N/A 1 2 3 4 5
7. The course activities stimulated my learning.  
N/A 1 2 3 4 5
8. Interactive multimedia was essential in the course.  
N/A 1 2 3 4 5
9. The activities in this course gave me sufficient  
N/A 1 2 3 4 5 practice and feedback.
10. The test(s) in this course were accurate and fair.  
N/A 1 2 3 4 5
11. The difficulty level of this course is appropriate.  
N/A 1 2 3 4 5
12. The pace of this course is appropriate.  
N/A 1 2 3 4 5

NA=Not applicable 1=Strongly disagree 2=Disagree 3=Neither agree/nor disagree 4=Agree 5=Strongly agree

#### Course Instructor (Facilitator) (Circle your response to each item.)

13. The instructor was well prepared.  
N/A 1 2 3 4 5
14. The instructor was helpful.  
N/A 1 2 3 4 5

### Course Environment (Circle your response to each item.)

15. The training facility at this site was comfortable.

N/A 1 2 3 4 5

16. The training facility at this site provided

N/A 1 2 3 4 5 everything I needed to learn.

### Course Results (Circle your response to each item.)

17. I accomplished the objectives of this course.

N/A 1 2 3 4 5

18. I will be able to use what I learned in this course.

N/A 1 2 3 4 5

### Self-paced Delivery (Circle your response to each item.)

19. IMM was a good way for me to learn this content.

N/A 1 2 3 4 5

20. Video is an important aspect of the course.

N/A 1 2 3 4 5

21. How would you improve this course?

(Check all that apply.)

\_\_\_ Provide better information before course. \_\_\_ Clarify the course objectives.

\_\_\_ Reduce content covered in course. \_\_\_ Increase content covered in course.

\_\_\_ Update content covered in course. \_\_\_ Improve the instructional methods.

\_\_\_ Make course activities more stimulating. \_\_\_ Improve course organization.

\_\_\_ Make the course less difficult. \_\_\_ Make the course more difficult.

\_\_\_ Slow down the pace of the course. \_\_\_ Speed up the pace of the course.

\_\_\_ Allot more time for the course. \_\_\_ Shorten the time for the course.

\_\_\_ Improve the tests used in the course. \_\_\_ Add more video to the course.

22. What other improvements would you recommend in this course?

23. What is least valuable about this course?

24. What is most valuable about this course?

### User Interface Rating Form

- The “User Interface” of an interactive instructional product, e.g, a multimedia program, is a critical element of the product that must be carefully evaluated. If the user interface is not well-designed, learners will have little opportunity to learn from the program. This rating form includes ten major criteria for assessing the user interface for an interactive program, such as “ease of use” and “screen design.” Not all of the criteria may be relevant to the particular program you are evaluating, but most of them will. You may need to add additional criteria to the list. Novice users of interactive instructional products are generally not good candidates for using this form. The people rating the user interface should

be experienced users of the type of program you are asking them to rate. Even better, they could be experienced designers of interactive programs.

### User Interface Rating Form

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### Instructions:

- The “User Interface Rating Form” should be used by experienced interactive multimedia designers or users to rate the interface of a new program or one under development.
- The ten criteria used in the “User Interface Rating Form” are explained in detail at the end of the instrument itself.
- Some criteria may not be relevant in every IMM program.

### User Interface Rating Tool for Interactive Multimedia

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Instructions: For each of ten user interface dimensions illustrated below, rate the program you have reviewed on a one to ten scale by circling the appropriate number under the dimension. (Accompanying this tool are definitions for each of the ten user interface dimensions.) Please add any comments that may help to clarify or explain your rating. If a specific dimension does not seem appropriate to the interactive program you are reviewing, do not circle any numbers on the scale for that dimension and add a brief comment to explain your response.

1. Ease of Use										
←	Difficult									Easy
	1	2	3	4	5	6	7	8	9	10
Comments:										

2. Navigation										
←	Difficult									Easy
	1	2	3	4	5	6	7	8	9	10
Comments:										

3. Cognitive Load										
←	Unmanageable									Manageable
	1	2	3	4	5	6	7	8	9	10
Comments:										

4. Mapping

None

Powerful

1 2 3 4 5 6 7 8 9 10

Comments:

5. Screen Design

Violates Principles

Follows Principles

1 2 3 4 5 6 7 8 9 10

Comments:

6. Knowledge Space Compatibility

Incompatible

Compatible

1 2 3 4 5 6 7 8 9 10

Comments:

7. Information Presentation

Obtuse

Clear

1 2 3 4 5 6 7 8 9 10

Comments:

8. Media Integration

Uncoordinated

Coordinated

1 2 3 4 5 6 7 8 9 10

Comments:

9. Aesthetics

Displeasing

Pleasing

Comments:

10. Overall Functionality

Dysfunctional

Functional

1 2 3 4 5 6 7 8 9 10

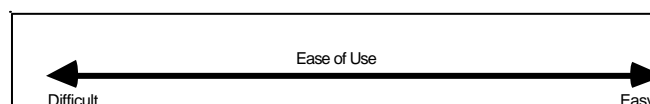
Comments:

Please add other comments related to the user interface of this program below:

## Definitions for User Interface Rating Tool

### User Interface Dimension 1 – Ease of Use

“Ease of Use” is concerned with the perceived facility with which a user interacts with an interactive multimedia program. Figure 1 illustrates a dimension of such a program ranging from the perception that the program is very difficult to use to one that is perceived as being very easy to use. Like many of the dimensions described in this tool, ease of use is both an aggregate and individual dimension. For example, in the aggregate sense, the Windows interface is generally perceived as easier to use than the command interface of the Microsoft disk operating system (MS DOS). However, in the individual sense, some people may perceive the MS-DOS interface to be easier to use because of their own unique experiences and attributes.

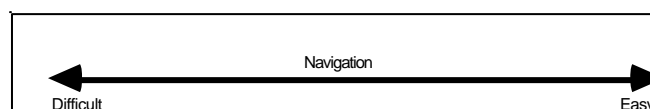


*Figure 1. “Ease of Use” dimension of user interface.*

User interface dimensions may be highly correlated with how well users enjoy using a specific program. Whether users like a program may be more or less important, depending on the intent of the program and the context for its use. Certainly, not liking an interactive program that is intended to be highly motivating is a major problem, whereas users’ affect for a program may be less important in a training context in which strong extrinsic motivational factors exist. Nonetheless, in the long run, improving the user interface dimensions of multimedia, such as “ease of use,” is a highly desirable goal, regardless of context.

### User Interface Dimension 2 – Navigation

“Navigation” is concerned with the perceived ability to move through the contents of an interactive program in an intentional manner. Figure 2 illustrates a dimension of interactive multimedia ranging from the perception that a program is difficult to navigate to one that is perceived as being easy to navigate. An important aspect of navigation is orientation, i.e., the degree to which a user feels that he/she knows where he/she is in a program and how to go to another part of it. This is a critical variable because users frequently complain of being lost in an interactive program (Utting & Yankelovitch, 1989). Designers use several ways of supporting navigation and maintaining orientation. A popular approach to navigation is the WIMP (window-icons-mouse-pointing) interface.

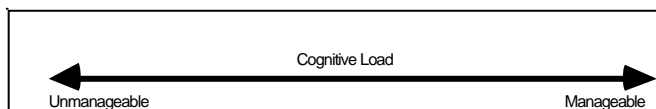


*Figure 2. “Navigation” dimension of user interface.*

### User Interface Dimension 3 – Cognitive Load

Using an interactive program requires different mental efforts than performing tasks via print or other media. In order to make any meaningful response to an interactive program, users must cope with and integrate at least three cognitive loads or demands, i.e., (a) the content of the program, (b) its structure, and (c) the response options available. To use interactive

programs, users must perceive options, conceptualize a choice, and make some physical action, all while mentally coordinating the demands of these three cognitive loads. The user interface is the vehicle that allows perceptual, conceptual, and physical contacts with the interactive program. In terms of “cognitive load,” the user interface can seem unmanageable (i.e., confusing) at one end of the continuum and easily manageable (i.e., intuitive) at the other end (see Figure 3).

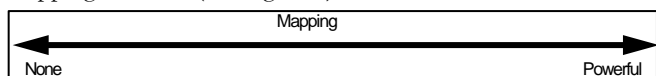


**Figure 3. “Cognitive Load” dimension of user interface.**

Learners acquire and structure information delivered via interfaces, conduct mental operations, and accomplish physical activities during their interactions with interactive multimedia. The limited capacity of working memory to hold only five to nine chunks of information simultaneously makes it difficult for users of complexity structured programs to reason when numerous cognitive load factors must be handled simultaneously. Users may feel overwhelmed by numerous options that increase the cognitive load. The risks of confusion are especially high when users confront programs which by their very nature include many interactive options. The possibility of user disorientation is a major concern in the increasingly popular multimedia programs that feature a complex, flexible structure.

#### User Interface Dimension 4 – Mapping

“Mapping” refers to the program’s ability to track and graphically represent to the user his or her path through the program. In complex, non-linear programs, user-disorientation can be alleviated if users can see what parts of the system they have already accessed. Utting and Yankelovitch (1989) discuss user disorientation as referring to, among other things, the user’s not knowing “the boundaries of the information space.” Having a detailed mapping system gives users an aid in understanding which parts and how much of the information space they have interacted with, and conversely which parts and how much of it they haven’t. Interactive programs fall in a continuum of containing no mapping function to an appropriately powerful mapping function (see Figure 4).



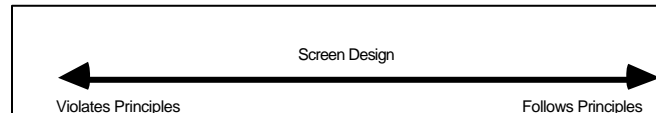
**Figure 4. “Mapping” dimension of user interface.**

The notion of an “appropriately powerful” mapping function requires some explanation. Just as it is important to possess a map of the most usable scale when taking a road trip, it is important for interactive programs to provide enough, but not too much, detail in showing user paths. A map that shows every piece of a program’s knowledge space might prove to be so tedious or unwieldy as to be of as little value as an interactive program with no map.

#### User Interface Dimension 5 – Screen Design

“Screen Design” is a particularly complex dimension of interactive programs that can easily be broken down into many sub-dimensions related to text, icons, graphics, color, and other visual aspects of interactive programs. Shneiderman (1987)

maintains that although certain design principles have been established, “screen design will always have elements of art and require invention” (p. 326). A separate dimension has been defined to deal with the artistic aspects of interactive programs (see Dimension 9 - Aesthetics below). We define “screen design” as a dimension ranging from substantial violations of principles of screen design to general adherence to principles of screen design (see Figure 5).



**Figure 5. “Screen Design” dimension of user interface.**

There are two problems with this dimension. First, screen design principles have not kept up with the rapidly changing nature of interactive technology. Second, creative designers may sometimes intentionally violate screen design principles for effect or to otherwise focus the user’s attention. Nonetheless, we think that there exists enough knowledge about the principles of screen design that people, particularly experienced designers, can make meaningful distinctions among poorly and well designed screens in interactive programs.

#### User Interface Dimension 6 – Knowledge Space Compatibility

“Knowledge space” refers to the network of concepts and relationships that compose the mental schema a user possesses about a given phenomena, topic or process. Subject matter experts and/or designers of interactive programs are generally perceived as possessing an expert knowledge space with respect to the content included in the programs they create. This expertise usually is the basis for the structure of the knowledge or information presented in a program. Novice users, on the other hand, often possess an inadequate knowledge space with respect to the content of a program. The knowledge space of novices may be inadequate because of ignorance, misconceptions, or some blending of ignorance and misconceptions. When a novice user initiates a search for information in an interactive program, the interface should be powerful enough so that the user perceives the resulting information as compatible with his or her current knowledge space (see Figure 6). If the information received is not perceived as relevant to the search strategies used by the user, the system will be perceived as incompatible.



**Figure 6. “Knowledge Space Compatibility” dimension of user interface.**

Admittedly, this is a very difficult dimension to judge. However, if a user initiates a search for information about a topic, e.g., the procedures for installing new software, the resulting information should seem compatible with that search once the information is thoroughly explored. If the information seems arbitrary or irrelevant to the search that was initiated, the knowledge space representation should be judged as incompatible.

## User Interface Dimension 7 – Information Presentation

The “Information Presentation” dimension is concerned with whether the information contained in the knowledge space of an interactive program is presented in an understandable form. The most elegantly designed user interface for an interactive program is useless if the information it is intended to present is incomprehensible to the user. Certainly the user might be able to find all of the information about a subject, but whether the user could then comprehend, understand, or learn that information is another matter. Imagine a complicated installation procedure presented in textual form, written in a stream of consciousness style reminiscent of James Joyce’s *Ulysses*. Or consider a video presentation on sales techniques for ATMs, directed and produced by Andy Warhol. In each case the information requisite for understanding may be present, but would probably be difficult if not impossible to comprehend. Information presentation is defined as a dimension ranging from obtuse to clear (see Figure 7).

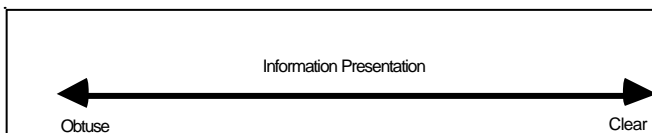


Figure 7. “Information Presentation” dimension of user interface.

## User Interface Dimension 8 – Media Integration

The most important aspect of the media integration dimension refers to how well an interactive program combines different media to produce an effective whole. Do the various media (text, graphics, audio, video, etc.) work together to form one cohesive program, or is the program a hodgepodge of gratuitous media segments? Are the various media components necessary to the function of the program or would the program function equally as well without them? The media integration dimension is defined as ranging from uncoordinated to coordinated (see Figure 8).



Figure 8. “Media Integration” dimension of user interface.

## User Interface Dimension 9 – Aesthetics

“Aesthetics” refers to the artistic aspects of interactive programs in the sense of possessing beauty or elegance. In the aggregate sense, many people may praise the aesthetics of an automobile design or the elegance of a bridal gown. However, in an individual sense, aesthetics are highly unique and one person’s sense of the beautiful may seem grotesque to another. Eisner (1985) described the need to develop “connoisseurs” in evaluation of education and training, just as we have connoisseurs in the arts. Connoisseurs have refined tastes and a deep sensitivity to aesthetics that enable them to criticize phenomena (e.g., plays, paintings, musical scores, or interactive programs) in a manner that can be communicated to others. In turn, other people, perhaps less refined and less sensitive, may become more informed by “consuming” the expert reviews provided by the connoisseurs. In the absence of such connoisseurs, the

aesthetics dimension of the user interface of an interactive multimedia program is defined as ranging from displeasing to pleasing (see Figure 9).



Figure 9. “Aesthetics” dimension of user interface.

## User Interface Dimension 10 – Overall Functionality

“Overall Functionality” is an aspect of interactive multimedia programs related to the perceived utility of the program. The perceived functionality of an interactive program is obviously highly related to the intended use of the program. A given program may have multiple uses. Its overall functionality must be judged in relation to the specific intended use that exists in the mind of the users. Figure 10 illustrates a dimension of the user interface of interactive programs that ranges from dysfunctional to highly functional.

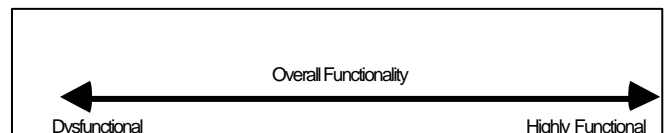


Figure 10. “Overall Functionality” dimension of user interface.

## Evaluation Report Sample

- The “Evaluation Report Sample” presents one way of structuring an evaluation report. Evaluation reports are notorious for being weighty volumes that few people read. Not surprisingly, lengthy reports have little effect on decision-makers. This tool illustrates a strategy for dividing an evaluation report into two-page sections that each include four parts:
  1. an attention-getting headline,
  2. a description of the major issues related to the headline,
  3. a presentation of data related to the issues, and
  4. a bottom-line recommendation or summary of the findings.
- People who receive a report in this format can take two or three sections at a time and make them agenda items for their team meetings. In this way, the evaluation findings are much more likely to have an impact on practical decisions

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## Instructions:

1. Evaluators often write long reports of evaluations that few people bother to read. Needless to say, these lengthy reports are unlikely to have much impact on decision-making if people don't even read them. One way of increasing the likelihood that your evaluation report will be read and acted upon is to report it in easy-to-consume "chunks" of information.
2. One strategy of "chunking" an evaluation report is to have no section of your evaluation report longer than two pages. An illustration of this format is presented below. The example is divided into four parts: 1) an attention-getting headline, 2) a description of the issues involved in that part of the evaluation, 3) evidence that relates to the issue(s), and 4) a bottom line recommendation based upon the evidence.

## Evaluation Report Sample

Although students value the self-paced nature of the L2 Algebra I multimedia program, it is not always implemented.

### • Issues

Self-paced learning is an academic ideal held forth by many, but few curricula have implemented this principle on a large scale. The L2 Algebra I course incorporates genuine self-paced learning, but it is not implemented in each school. Hence, student satisfaction with the self-paced nature of the L2 Algebra I course varies considerably. Overall, almost 50% of the 1,400 L2 students surveyed agreed with the statement that "The pace of this course is just right." However, in those schools where teacher-paced guidelines have been most strictly enforced, as many as 90% disagree with the statement! Overall student satisfaction with the L2 Algebra I course is much lower in those schools that have abandoned the principle of self-paced learning. Reasons for instituting teacher-pacing may stem from factors outside the teachers' control (e.g., the inability to issue incomplete grades or no provisions for summer school) to differences in individual teacher styles (an inability to tolerate ambiguity or a need for more control). Regardless of the source, teacher-pacing seems to be a major violation of the L2 program's design.

### • Evidence

Example comments of students in schools where self-pacing is implemented include:

Most of Gary's comments centered around how much he liked the self-paced nature of the instruction. He told me this: "If you don't understand something, the computer will take you back, if you had a teacher and you didn't understand, you would just have to go on."

Sheri likes L2 primarily because she enjoys the self-paced instruction. She also prefers working with a computer to listening to a teacher because she hates "teachers that sit there and talk to you for the whole period."

Aretha failed algebra last year in a traditional book-based, teacher-led class. She appreciates the opportunity that L2 has given her to be independent. "I'm on my own. Here you go, teach yourself. No excuses."

.....he [Don] likes it [L2] even more than he thought he would. Primarily, he likes the self-paced method of instruction. He

told me "with a teacher, if you don't understand and the rest of the class does, they're going to go on without you."

He [Jeffrey] would recommend the class to his friends because of the self-paced, individualized nature of L2. "You go at your own pace and the computer pertains to you better than a teacher," he said.

Charles really likes the self-paced learning in L2. "I can't think of a better way to learn," he said. He says that in a book class, the teacher goes too fast. He says that with L2, "you work your butt off" but that in the book class "everyone is failing."

Example comments of students in schools where teacher-pacing exists include:

Her initial reaction to L2 was that it was "a lot better than text-based classes! It's self paced!" Her favorite aspect of L2 is that it shows you what to do step by step. She especially disliked the fact that after a short period of self paced use, the rules were changed so that L2 time deadlines were placed on students by the teacher. "We must be to chapter 8 by the fourth six weeks!"

The worst thing about L2 is that now they have a teacher imposed pace that if not equaled will result in INCOMPLETES at the end of 6 week grading periods. He [Edward] has already missed one honor roll because of this policy and was peeved.

Farrah initially liked L2, "...it seemed easier than the teacher. It was self paced, and had individualized instructions. It was self paced!" She expressed definite resentment about the current policy of teacher set pacing. When asked for her opinion of L2 now Farrah says, "I don't like it. Really - there are only so many days to complete X number of topics. If you don't finish them - you get an incomplete. I have some incompletes. A lot of people do. What are they (the administration) going to do at the end of the year?"

She [Angela] also expressed her feeling that they had been misled regarding the self paced concept. "Now we have to be at certain points at the end of each grading period. I had to come after school to keep up."

Matt initially was very excited about the L2 program. The self paced approach really appealed to him. By the time the L2 program was discontinued seven weeks ago his attitude toward the program had drastically changed. Matt's comments reflect this; "When we stopped L2 I disliked the program-- a lot. I especially disagree with the time requirements and pass/fail grading policy. You should be given credit for increments in progress. If you haven't finished a chapter by the due date you get an 'F' even if you were about 80% finished. This is not right!"

He [Paul] likes the self-paced aspects of the program, and he said he strongly resents the pressure that the teacher puts on him to make more progress. He says that when he rushes through a section, he "really doesn't learn anything."

### • Recommendation

The National Science Center should work with school administrators, teachers, and parents to assure that the principle of self-paced learning can be implemented within the total educational environment of the local school system. In those schools where this is not possible, the L2 Algebra I course may be reduced to a supplementary role or eliminated entirely.

## LESSON 28

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### A Brief Introduction...

Note that the concept of program evaluation can include a wide variety of methods to evaluate many aspects of programs in nonprofit or for-profit organizations. There are numerous books and other materials that provide in-depth analysis of evaluations, their designs, methods, combination of methods and techniques of analysis. However, personnel do not have to be experts in these topics to carry out a useful program evaluation. The “20-80” rule applies here, that 20% of effort generates 80% of the needed results. It’s better to do what might turn out to be an average effort at evaluation than to do no evaluation at all. (Besides, if you resort to bringing in an evaluation consultant, you should be a smart consumer. Far too many program evaluations generate information that is either impractical or irrelevant — if the information is understood at all.) This document orients personnel to the nature of program evaluation and how it can be carried out in a realistic and practical fashion.

Note that much of the information in this section was gleaned from various works of Michael Quinn Patton.

### Program Evaluation

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

#### Some Myths About Program Evaluation

- 1.. Many people believe evaluation is a useless activity that generates lots of boring data with useless conclusions. This was a problem with evaluations in the past when program evaluation methods were chosen largely on the basis of achieving complete scientific accuracy, reliability and validity. This approach often generated extensive data from which very carefully chosen conclusions were drawn. Generalizations and recommendations were avoided. As a result, evaluation reports tended to reiterate the obvious and left program administrators disappointed and skeptical about the value of evaluation in general. More recently (especially as a result of Michael Patton’s development of utilization-focused evaluation), evaluation has focused on utility, relevance and practicality at least as much as scientific validity.
2. Many people believe that evaluation is about proving the success or failure of a program. This myth assumes that success is implementing the perfect program and never having to hear from employees, customers or clients again — the program will now run itself perfectly. This doesn’t happen in real life. Success is remaining open to continuing feedback and adjusting the program accordingly. Evaluation gives you this continuing feedback.
3. Many believe that evaluation is a highly unique and complex process that occurs at a certain time in a certain way, and almost always includes the use of outside experts. Many people believe they must completely understand terms such

as validity and reliability. They don’t have to. They do have to consider what information they need in order to make current decisions about program issues or needs. And they have to be willing to commit to understanding what is really going on. Note that many people regularly undertake some nature of program evaluation — they just don’t do it in a formal fashion so they don’t get the most out of their efforts or they make conclusions that are inaccurate (some evaluators would disagree that this is program evaluation if not done methodically). Consequently, they miss precious opportunities to make more of difference for their customer and clients, or to get a bigger bang for their buck.

#### So What is Program Evaluation?

First, we’ll consider “what is a program?” Typically, organizations work from their mission to identify several overall goals which must be reached to accomplish their mission. In nonprofits, each of these goals often becomes a program. Nonprofit programs are organized methods to provide certain related services to constituents, e.g., clients, customers, patients, etc. Programs must be evaluated to decide if the programs are indeed useful to constituents. In a for-profit, a program is often a one-time effort to produce a new product or line of products.

So, still, what is program evaluation? Program evaluation is carefully collecting information about a program or some aspect of a program in order to make necessary decisions about the program. Program evaluation can include any or a variety of at least 35 different types of evaluation, such as for needs assessments, accreditation, cost/benefit analysis, effectiveness, efficiency, formative, summative, goal-based, process, outcomes, etc. The type of evaluation you undertake to improve your programs depends on what you want to learn about the program. Don’t worry about what type of evaluation you need or are doing — worry about what you need to know to make the program decisions you need to make, and worry about how you can accurately collect and understand that information.

#### Where Program Evaluation is Helpful

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

#### Frequent Reasons

Program evaluation can:

1. Understand, verify or increase the impact of products or services on customers or clients - These “outcomes” evaluations are increasingly required by nonprofit funders as verification that the nonprofits are indeed helping their constituents. Too often, service providers (for-profit or nonprofit) rely on their own instincts and passions to conclude what their customers or clients really need and whether the products or services are providing what is needed. Over time, these organizations find themselves in a lot of guessing about what would be a good product or



service, and trial and error about how new products or services could be delivered.

2. Improve delivery mechanisms to be more efficient and less costly - Over time, product or service delivery ends up to be an inefficient collection of activities that are less efficient and more costly than need be. Evaluations can identify program strengths and weaknesses to improve the program.
3. Verify that you're doing what you think you're doing - Typically, plans about how to deliver services, end up changing substantially as those plans are put into place. Evaluations can verify if the program is really running as originally planned.

#### **Other Reasons:**

Program evaluation can:

4. Facilitate management's really thinking about what their program is all about, including its goals, how it meets its goals and how it will know if it has met its goals or not.
5. Produce data or verify results that can be used for public relations and promoting services in the community.
6. Produce valid comparisons between programs to decide which should be retained, e.g., in the face of pending budget cuts.
7. Fully examine and describe effective programs for duplication elsewhere.

### **Basic Ingredients: Organization and Program(s)**

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

#### **You Need an Organization**

This may seem too obvious to discuss, but before an organization embarks on evaluating a program, it should have well established means to conduct itself as an organization, e.g., (in the case of a nonprofit) the board should be in good working order, the organization should be staffed and organized to conduct activities to work toward the mission of the organization, and there should be no current crisis that is clearly more important to address than evaluating programs.

#### **You Need Program(s)**

To effectively conduct program evaluation, you should first have programs. That is, you need a strong impression of what your customers or clients actually need. (You may have used a needs assessment to determine these needs — itself a form of evaluation, but usually the first step in a good marketing plan). Next, you need some effective methods to meet each of those goals. These methods are usually in the form of programs.

It often helps to think of your programs in terms of inputs, process, outputs and outcomes. Inputs are the various resources needed to run the program, e.g., money, facilities, customers, clients, program staff, etc. The process is how the program is carried out, e.g., customers are served, clients are counseled, children are cared for, art is created, association members are supported, etc. The outputs are the units of service, e.g., number of customers serviced, number of clients counseled, children cared for, artistic pieces produced, or members in the association. Outcomes are the impacts on the

customers or on clients receiving services, e.g., increased mental health, safe and secure development, richer artistic appreciation and perspectives in life, increased effectiveness among members, etc.

### **Planning Your Program Evaluation**

(by Carter McNamara, PhD)

#### **Depends on What Information You Need to Make Your Decisions and on Your Resources**

Often, management wants to know everything about their products, services or programs. However, limited resources usually force managers to prioritize what they need to know to make current decisions.

Your program evaluation plans depend on what information you need to collect in order to make major decisions. Usually, management is faced with having to make major decisions due to decreased funding, ongoing complaints, unmet needs among customers and clients, the need to polish service delivery, etc. For example, do you want to know more about what is actually going on in your programs, whether your programs are meeting their goals, the impact of your programs on customers, etc? You may want other information or a combination of these. Ultimately, it's up to you.

But the more focused you are about what you want to examine by the evaluation, the more efficient you can be in your evaluation, the shorter the time it will take you and ultimately the less it will cost you (whether in your own time, the time of your employees and/or the time of a consultant).

There are trade offs, too, in the breadth and depth of information you get. The more breadth you want, usually the less depth you get (unless you have a great deal of resources to carry out the evaluation). On the other hand, if you want to examine a certain aspect of a program in great detail, you will likely not get as much information about other aspects of the program.

For those starting out in program evaluation or who have very limited resources, they can use various methods to get a good mix of breadth and depth of information. They can both understand more about certain areas of their programs and not go bankrupt doing so.

#### **Key Considerations**

Consider the following key questions when designing a program evaluation.

1. For what purposes is the evaluation being done, i.e., what do you want to be able to decide as a result of the evaluation?
2. Who are the audiences for the information from the evaluation, e.g., customers, bankers, funders, board, management, staff, customers, clients, etc.
3. What kinds of information are needed to make the decision you need to make and/or enlighten your intended audiences, e.g., information to really understand the process of the product or program (its inputs, activities and outputs), the customers or clients who experience the product or program, strengths and weaknesses of the product or program, benefits to customers or clients (outcomes), how the product or program failed and why, etc.

4. From what sources should the information be collected, e.g., employees, customers, clients, groups of customers or clients and employees together, program documentation, etc.
5. How can that information be collected in a reasonable fashion, e.g., questionnaires, interviews, examining documentation, observing customers or employees, conducting focus groups among customers or employees, etc.
6. When is the information needed (so, by when must it be collected)?
7. What resources are available to collect the information?

## Some Major Types of Program Evaluation

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

When designing your evaluation approach, it may be helpful to review the following three types of evaluations, which are rather common in organizations. Note that you should not design your evaluation approach simply by choosing which of the following three types you will use — you should design your evaluation approach by carefully addressing the above key considerations.

### Goals-Based Evaluation

(are your programs achieving their overall, predetermined objectives?)

Often programs are established to meet one or more specific goals. These goals are often described in the original program plans.

Goal-based evaluations are evaluating the extent to which programs are meeting predetermined goals or objectives. Questions to ask yourself when designing an evaluation to see if you reached your goals, are:

1. How were the program goals (and objectives, is applicable) established? Was the process effective?
2. What is the status of the program's progress toward achieving the goals?
3. Will the goals be achieved according to the timelines specified in the program implementation or operations plan? If not, then why?
4. Do personnel have adequate resources (money, equipment, facilities, training, etc.) to achieve the goals?
5. How should priorities be changed to put more focus on achieving the goals? (Depending on the context, this question might be viewed as a program management decision, more than an evaluation question.)
6. How should timelines be changed (be careful about making these changes - know why efforts are behind schedule before timelines are changed)?
7. How should goals be changed (be careful about making these changes - know why efforts are not achieving the goals before changing the goals)? Should any goals be added or removed? Why?
8. How should goals be established in the future?

### Process-Based Evaluations

(understanding how your program really works, and its strengths and weaknesses)

Process-based evaluations are geared to fully understanding how a program works — how does it produce that results that it does. These evaluations are useful if programs are long-standing and have changed over the years, employees or customers report a large number of complaints about the program, there appear to be large inefficiencies in delivering program services and they are also useful for accurately portraying to outside parties how a program truly operates (e.g., for replication elsewhere).

There are numerous questions that might be addressed in a process evaluation. These questions can be selected by carefully considering what is important to know about the program. Examples of questions to ask yourself when designing an evaluation to understand and/or closely examine the processes in your programs, are:

1. On what basis do employees and/or the customers decide that products or services are needed?
2. What is required of employees in order to deliver the product or services?
3. How are employees trained about how to deliver the product or services?
4. How do customers or clients come into the program?
5. What is required of customers or client?
6. How do employees select which products or services will be provided to the customer or client?
7. What is the general process that customers or clients go through with the product or program?
8. What do customers or clients consider to be strengths of the program?
9. What do staff consider to be strengths of the product or program?
10. What typical complaints are heard from employees and/or customers?
11. What do employees and/or customers recommend to improve the product or program?
12. On what basis do employees and/or the customer decide that the product or services are no longer needed?

### Outcomes-Based Evaluation

(identifying benefits to clients)

Program evaluation with an outcomes focus is increasingly important for nonprofits and asked for by funders. An outcomes-based evaluation facilitates your asking if your organization is really doing the right program activities to bring about the outcomes you believe (or better yet, you've verified) to be needed by your clients (rather than just engaging in busy activities which seem reasonable to do at the time). Outcomes are benefits to clients from participation in the program. Outcomes are usually in terms of enhanced learning (knowledge, perceptions/attitudes or skills) or conditions, e.g., increased literacy, self-reliance, etc. Outcomes are often confused with program outputs or units of services, e.g., the number of clients who went through a program.

The United Way of America (<http://www.unitedway.org/outcomes/>) provides an excellent overview of outcomes-based

evaluation, including introduction to outcomes measurement, a program outcome model, why to measure outcomes, use of program outcome findings by agencies, eight steps to success for measuring outcomes, examples of outcomes and outcome indicators for various programs and the resources needed for measuring outcomes. The following information is a top-level summary of information from this site.

To accomplish an outcomes-based evaluation, you should first pilot, or test, this evaluation approach on one or two programs at most (before doing all programs).

The general steps to accomplish an outcomes-based evaluation include to:

1. Identify the major outcomes that you want to examine or verify for the program under evaluation. You might reflect on your mission (the overall purpose of your organization) and ask yourself what impacts you will have on your clients as you work towards your mission. For example, if your overall mission is to provide shelter and resources to abused women, then ask yourself what benefits this will have on those women if you effectively provide them shelter and other services or resources. As a last resort, you might ask yourself, “What major activities are we doing now?” and then for each activity, ask “Why are we doing that?” The answer to this “Why?” question is usually an outcome. This “last resort” approach, though, may just end up justifying ineffective activities you are doing now, rather than examining what you should be doing in the first place.
2. Choose the outcomes that you want to examine, prioritize the outcomes and, if your time and resources are limited, pick the top two to four most important outcomes to examine for now.
3. For each outcome, specify what observable measures, or indicators, will suggest that you’re achieving that key outcome with your clients. This is often the most important and enlightening step in outcomes-based evaluation. However, it is often the most challenging and even confusing step, too, because you’re suddenly going from a rather intangible concept, e.g., increased self-reliance, to specific activities, e.g., supporting clients to get themselves to and from work, staying off drugs and alcohol, etc. It helps to have a “devil’s advocate” during this phase of identifying indicators, i.e., someone who can question why you can assume that an outcome was reached because certain associated indicators were present.
4. Specify a “target” goal of clients, i.e., what number or percent of clients you commit to achieving specific outcomes with, e.g., “increased self-reliance (an outcome) for 70% of adult, African American women living in the inner city of Minneapolis as evidenced by the following measures (indicators) ...”
5. Identify what information is needed to show these indicators, e.g., you’ll need to know how many clients in the target group went through the program, how many of them reliably undertook their own transportation to work and stayed off drugs, etc. If your program is new, you may need to evaluate the process in the program to verify that the

program is indeed carried out according to your original plans. (Michael Patton, prominent researcher, writer and consultant in evaluation, suggests that the most important type of evaluation to carry out may be this implementation evaluation to verify that your program ended up to be implemented as you originally planned.)

6. Decide how can that information be efficiently and realistically gathered (see Selecting Which Methods to Use below). Consider program documentation, observation of program personnel and clients in the program, questionnaires and interviews about clients perceived benefits from the program, case studies of program failures and successes, etc. You may not need all of the above. (see Overview of Methods to Collect Information below).
7. Analyze and report the findings (see Analyzing and Interpreting Information below).

## Overview of Methods to Collect Information

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

The following table provides an overview of the major methods used for collecting data during evaluations.

Method	Overall Purpose	Advantages	Challenges
questionnaires, surveys, checklists	when need to quickly and/or easily get lots of information from people in a non threatening way	<ul style="list-style-type: none"> <li>-can complete anonymously</li> <li>-inexpensive to administer</li> <li>-easy to compare and analyze</li> <li>-administer to many people</li> <li>-can get lots of data</li> <li>-many sample questionnaires already exist</li> </ul>	<ul style="list-style-type: none"> <li>-might not get careful feedback</li> <li>-wording can bias client's responses</li> <li>-are impersonal</li> <li>-in surveys, may need sampling expert</li> <li>-doesn't get full story</li> </ul>
interviews	when want to fully understand someone's impressions or experiences, or learn more about their answers to questionnaires	<ul style="list-style-type: none"> <li>-get full range and depth of information</li> <li>-develops relationship with client</li> <li>-can be flexible with client</li> </ul>	<ul style="list-style-type: none"> <li>-can take much time</li> <li>-can be hard to analyze and compare</li> <li>-can be costly</li> <li>-interviewer can bias client's responses</li> </ul>
documentation review	when want impression of how program operates without interrupting the program; is from review of applications, finances, memos, minutes, etc.	<ul style="list-style-type: none"> <li>-get comprehensive and historical information</li> <li>-doesn't interrupt program or client's routine in program</li> <li>-information already exists</li> <li>-few biases about information</li> </ul>	<ul style="list-style-type: none"> <li>-often takes much time</li> <li>-info may be incomplete</li> <li>-need to be quite clear about what looking for</li> <li>-not flexible means to get data; data restricted to what already exists</li> </ul>
observation	to gather accurate information about how a program actually operates, particularly about processes	<ul style="list-style-type: none"> <li>-view operations of a program as they are actually occurring</li> <li>-can adapt to events as they occur</li> </ul>	<ul style="list-style-type: none"> <li>-can be difficult to interpret seen behaviors</li> <li>-can be complex to categorize observations</li> <li>-can influence behaviors of program participants</li> <li>-can be expensive</li> </ul>
focus groups	explore a topic in depth through group discussion, e.g., about reactions to an experience or suggestion, understanding common complaints, etc.; useful in	<ul style="list-style-type: none"> <li>-quickly and reliably get common impressions</li> <li>-can be efficient way to get much range and depth of information in short time</li> <li>-can convey key information about programs</li> </ul>	<ul style="list-style-type: none"> <li>-can be hard to analyze responses</li> <li>-need good facilitator for safety and closure</li> <li>-difficult to schedule 6-8 people together</li> </ul>

#### Also see

Appreciative Inquiry  
Survey Design

### Ethics: Informed Consent from Program Participants

Note that if you plan to include in your evaluation, the focus and reporting on personal information about customers or clients participating in the evaluation, then you should first gain their consent to do so. They should understand what you're doing with them in the evaluation and how any information associated with them will be reported. You should clearly convey terms of confidentiality regarding access to evaluation results. They should have the right to participate or not. Have participants review and sign an informed consent form. See the sample informed-consent form.

### How to Apply Certain Methods

Purposes and Formats of Questions

Developing Questionnaires

Conducting Interviews

Conducting Focus Groups

Developing Case Studies

### Selecting Which Methods to Use

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

#### Overall Goal in Selecting Methods

The overall goal in selecting evaluation method(s) is to get the most useful information to key decision makers in the most cost-effective and realistic fashion. Consider the following questions:

1. What information is needed to make current decisions about a product or program?
2. Of this information, how much can be collected and analyzed in a low-cost and practical manner, e.g., using questionnaires, surveys and checklists?
3. How accurate will the information be (reference the above table for disadvantages of methods)?
4. Will the methods get all of the needed information?
5. What additional methods should and could be used if additional information is needed?
6. Will the information appear as credible to decision makers, e.g., to funders or top management?
7. Will the nature of the audience conform to the methods, e.g., will they fill out questionnaires carefully, engage in interviews or focus groups, let you examine their documentations, etc.?
8. Who can administer the methods now or is training required?
9. How can the information be analyzed?

Note that, ideally, the evaluator uses a combination of methods, for example, a questionnaire to quickly collect a great deal of information from a lot of people, and then interviews to get more in-depth information from certain respondents to the questionnaires. Perhaps case studies could then be used for more in-depth analysis of unique and notable cases, e.g., those who benefited or not from the program, those who quit the program, etc.

### Four Levels of Evaluation:

There are four levels of evaluation information that can be gathered from clients, including getting their:

1. reactions and feelings (feelings are often poor indicators that your service made lasting impact)
2. learning (enhanced attitudes, perceptions or knowledge)
3. changes in skills (applied the learning to enhance behaviors)
4. effectiveness (improved performance because of enhanced behaviors)

Usually, the farther your evaluation information gets down the list, the more useful is your evaluation. Unfortunately, it is quite difficult to reliably get information about effectiveness. Still, information about learning and skills is quite useful.

### Analyzing and Interpreting Information

(Carter McNamara, PhD; last revision: Feb 16, 1998)

Analyzing quantitative and qualitative data is often the topic of advanced research and evaluation methods. There are certain basics which can help to make sense of reams of data.

#### *Always start with your evaluation goals:*

When analyzing data (whether from questionnaires, interviews, focus groups, or whatever), always start from review of your evaluation goals, i.e., the reason you undertook the evaluation in the first place. This will help you organize your data and focus your analysis. For example, if you wanted to improve your program by identifying its strengths and weaknesses, you can organize data into program strengths, weaknesses and suggestions to improve the program. If you wanted to fully understand how your program works, you could organize data in the chronological order in which clients go through your program. If you are conducting an outcomes-based evaluation, you can categorize data according to the indicators for each outcome.

**Basic analysis of “quantitative” information** (for information other than commentary, e.g., ratings, rankings, yes's, no's, etc.):

1. Make copies of your data and store the master copy away. Use the copy for making edits, cutting and pasting, etc.
2. Tabulate the information, i.e., add up the number of ratings, rankings, yes's, no's for each question.
3. For ratings and rankings, consider computing a mean, or average, for each question. For example, “For question #1, the average ranking was 2.4”. This is more meaningful than indicating, e.g., how many respondents ranked 1, 2, or 3.
4. Consider conveying the range of answers, e.g., 20 people ranked “1”, 30 ranked “2”, and 20 people ranked “3”.

**Basic analysis of “qualitative” information** (respondents' verbal answers in interviews, focus groups, or written commentary on questionnaires):

1. Read through all the data.
2. Organize comments into similar categories, e.g., concerns, suggestions, strengths, weaknesses, similar experiences, program inputs, recommendations, outputs, outcome indicators, etc.
3. Label the categories or themes, e.g., concerns, suggestions, etc.

4. Attempt to identify patterns, or associations and causal relationships in the themes, e.g., all people who attended programs in the evening had similar concerns, most people came from the same geographic area, most people were in the same salary range, what processes or events respondents experience during the program, etc.
4. Keep all commentary for several years after completion in case needed for future reference.

### Interpreting Information

1. Attempt to put the information in perspective, e.g., compare results to what you expected, promised results; management or program staff; any common standards for your services; original program goals (especially if you're conducting a program evaluation); indications of accomplishing outcomes (especially if you're conducting an outcomes evaluation); description of the program's experiences, strengths, weaknesses, etc. (especially if you're conducting a process evaluation).
2. Consider recommendations to help program staff improve the program, conclusions about program operations or meeting goals, etc.
3. Record conclusions and recommendations in a report document, and associate interpretations to justify your conclusions or recommendations.

### Reporting Evaluation Results

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

1. The level and scope of content depends on to whom the report is intended, e.g., to bankers, funders, employees, customers, clients, the public, etc.
2. Be sure employees have a chance to carefully review and discuss the report. Translate recommendations to action plans, including who is going to do what about the program and by when.
3. Bankers or funders will likely require a report that includes an executive summary (this is a summary of conclusions and recommendations, not a listing of what sections of information are in the report — that's a table of contents); description of the organization and the program under evaluation; explanation of the evaluation goals, methods, and analysis procedures; listing of conclusions and recommendations; and any relevant attachments, e.g., inclusion of evaluation questionnaires, interview guides, etc. The banker or funder may want the report to be delivered as a presentation, accompanied by an overview of the report. Or, the banker or funder may want to review the report alone.
4. Be sure to record the evaluation plans and activities in an evaluation plan which can be referenced when a similar program evaluation is needed in the future.

### Contents of an Evaluation Report — Example

An example of evaluation report contents is included later on below in this document. Click Contents of an Evaluation Plan but, don't forget to look at the next section "Who Should Carry Out the Evaluation".

### Who Should Carry Out the Evaluation?

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

Ideally, management decides what the evaluation goals should be. Then an evaluation expert helps the organization to determine what the evaluation methods should be, and how the resulting data will be analyzed and reported back to the organization. Most organizations do not have the resources to carry out the ideal evaluation.

Still, they can do the 20% of effort needed to generate 80% of what they need to know to make a decision about a program. If they can afford any outside help at all, it should be for identifying the appropriate evaluation methods and how the data can be collected. The organization might find a less expensive resource to apply the methods, e.g., conduct interviews, send out and analyze results of questionnaires, etc.

If no outside help can be obtained, the organization can still learn a great deal by applying the methods and analyzing results themselves. However, there is a strong chance that data about the strengths and weaknesses of a program will not be interpreted fairly if the data are analyzed by the people responsible for ensuring the program is a good one. Program managers will be "policing" themselves. This caution is not to fault program managers, but to recognize the strong biases inherent in trying to objectively look at and publicly (at least within the organization) report about their programs. Therefore, if at all possible, have someone other than the program managers look at and determine evaluation results.

### Contents of an Evaluation Plan

(by Carter McNamara, PhD)

Develop an evaluation plan to ensure your program evaluations are carried out efficiently in the future. Note that bankers or funders may want or benefit from a copy of this plan.

Ensure your evaluation plan is documented so you can regularly and efficiently carry out your evaluation activities. Record enough information in the plan so that someone outside of the organization can understand what you're evaluating and how. Consider the following format for your report:

1. Title Page (name of the organization that is being, or has a product/service/program that is being, evaluated; date)
2. Table of Contents
3. Executive Summary (one-page, concise overview of findings and recommendations)
4. Purpose of the Report (what type of evaluation(s) was conducted, what decisions are being aided by the findings of the evaluation, who is making the decision, etc.)
5. Background About Organization and Product/Service/Program that is being evaluated
  - a. Organization Description/History
  - b. Product/Service/Program Description (that is being evaluated)
    - i. Problem Statement (in the case of nonprofits, description of the community need that is being met by the product/service/program)
    - ii. Overall Goal(s) of Product/Service/Program

- iii. Outcomes (or client/customer impacts) and Performance Measures (that can be measured as indicators toward the outcomes)
- iv. Activities/Technologies of the Product/Service/Program (general description of how the product/service/program is developed and delivered)
- v. Staffing (description of the number of personnel and roles in the organization that are relevant to developing and delivering the product/service/program)
- 6. Overall Evaluation Goals (eg, what questions are being answered by the evaluation)
- 7. Methodology
  - a. Types of data/information that were collected
  - b. How data/information were collected (what instruments were used, etc.)
  - c. How data/information were analyzed
  - d. Limitations of the evaluation (eg, cautions about findings/conclusions and how to use the findings/conclusions, etc.)
- 8. Interpretations and Conclusions (from analysis of the data/information)
- 9. Recommendations (regarding the decisions that must be made about the product/service/program)  
Appendices: content of the appendices depends on the goals of the evaluation report, eg.:
  - a. Instruments used to collect data/information
  - b. Data, eg, in tabular format, etc.
  - c. Testimonials, comments made by users of the product/service/program
  - d. Case studies of users of the product/service/program
  - e. Any related literature

### Pitfalls to Avoid

(by Carter McNamara, PhD; last revision: Feb 16, 1998)

- 1. Don't balk at evaluation because it seems far too "scientific." It's not. Usually the first 20% of effort will generate the first 80% of the plan, and this is far better than nothing.
- 2. There is no "perfect" evaluation design. Don't worry about the plan being perfect. It's far more important to do something, than to wait until every last detail has been tested.
- 3. Work hard to include some interviews in your evaluation methods. Questionnaires don't capture "the story," and the story is usually the most powerful depiction of the benefits of your services.
- 4. Don't interview just the successes. You'll learn a great deal about the program by understanding its failures, dropouts, etc.
- 5. Don't throw away evaluation results once a report has been generated. Results don't take up much room, and they can provide precious information later when trying to understand changes in the program.

## Warr's Framework of Evaluation

### Cipo Evaluation

Peter Warr had, for evaluating organization training, recommended the CIPO frame work of evaluation. According to him obtaining information about the trainee's performance after they have received training is to shut the door after the horse has bolted. It is preferable to treat evaluation as a process that is carried on before, during and after training. A training specialist would thus collect information for evaluating training, "right from the start"

#### 1. Context Evaluation (C )

Obtaining and using information about the current operational context that is about individual differences, organizational deficiencies and so on. In practice, this mainly implies the assessment of training need as a basis for decision.

#### 2. Input Evaluation (I)

Determining and using fact and opinion about the available human and material training resources in order to choose between alternative training methods. (for example in company or external training? Which external course had a good reputation?)

#### 3. Process Evaluation (P)

Monitoring the training as it is in progress. This involves continuous examination of administrative arrangements and feedback from trainees.

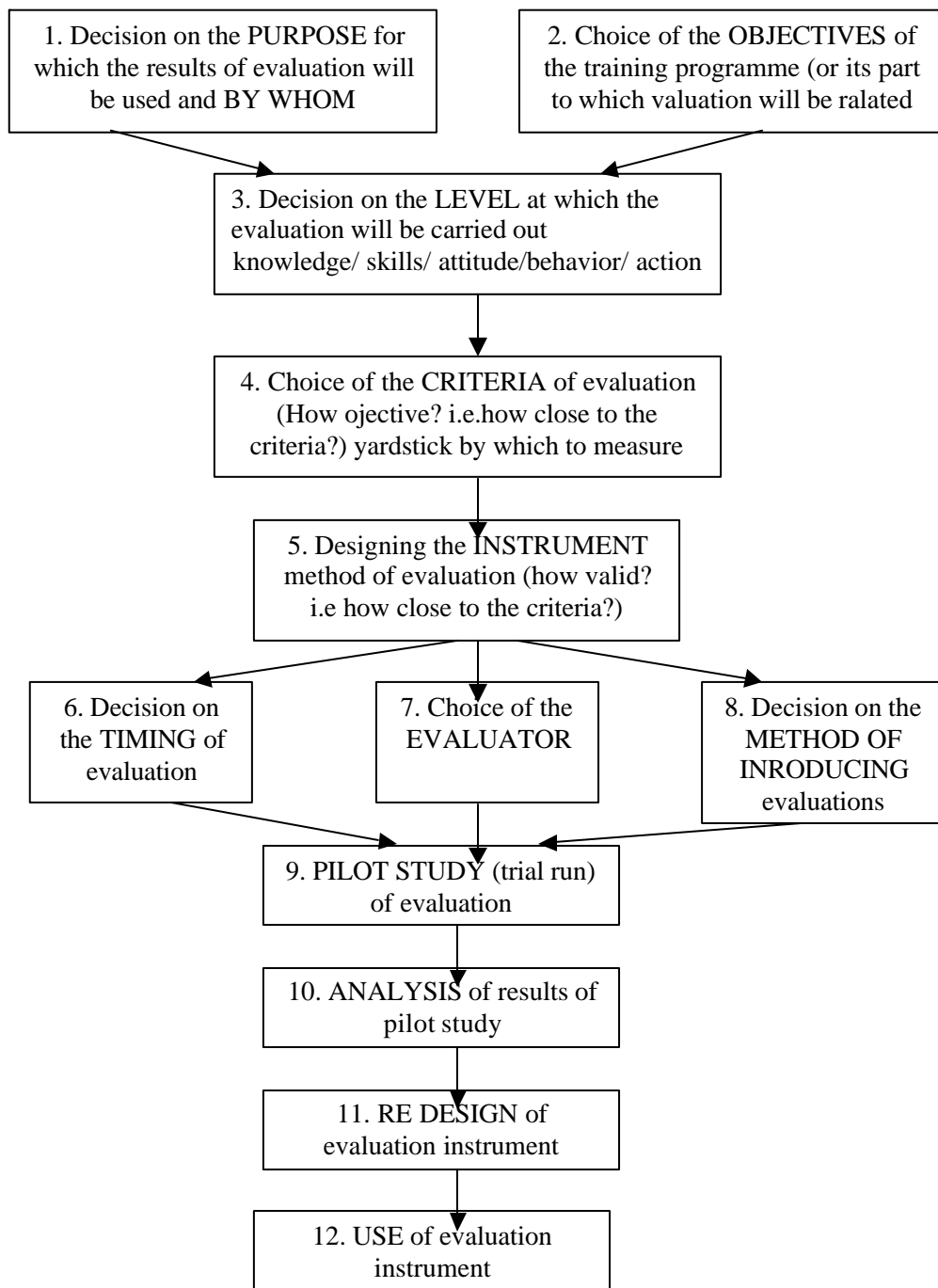
#### 4. Outcome Evaluation (O)

Measuring the consequences of training. Three levels of outcome evaluation may be distinguished:

- a. Immediate Outcome: changes in trainee's knowledge, skill and attitude which can be identified immediately after the completion of training. Assessment involves some measures of how people have changed during a training program.
- b. Intermediate Outcomes: The changes in trainees actual work behaviour which result from training assessment involves monitoring performance on the job.
- c. Long Term Outcomes: The changes in the functioning of part or all of the organization which have resulted from changes in work behavior originating in training. Assessment is usually in terms of output or financial measures.

In addition to the four levels of evaluation, Warr has described the stages in evolving an evaluation Instrument. The same is presented in below diagram.

#### Stages in Evolving an Evaluation Instrument



## Checklist for Program Evaluation Planning

The following checklist might prove useful when planning evaluations for programs. The reader would benefit from first reading Basic Guide to Program Evaluation.

### Name of Organization

Name of Program

### Purpose of Evaluation?

What do you want to be able to decide as a result of the evaluation? For example:

\_\_\_ Understand, verify or increase impact of products or services on customers/clients (eg, outcomes evaluation)

\_\_\_ Improve delivery mechanisms to be more efficient and less costly (eg, process evaluation)

\_\_\_ Verify that we're doing what we think we're doing (eg, process evaluation)

\_\_\_ Clarify program goals, processes and outcomes for management planning

\_\_\_ Public relations

\_\_\_ Program comparisons, eg., to decide which should be retained

\_\_\_ Fully examine and describe effective programs for duplication elsewhere

\_\_\_ Other reason(s)

### Audience(s) for the Evaluation?

Who are the audiences for the information from the evaluation, for example:

- ☐ Clients/customers
- ☐ Funders/Investors
- ☐ Board members
- ☐ Management
- ☐ Staff/employees
- ☐ Other(s)

### What Kinds of Information are Needed?

What kinds of information are needed to make the decision you need to make and/or enlighten your intended audiences, for example, information to understand:

- ☐ The process of the product or service delivery (its inputs, activities and outputs)
- ☐ The customers/clients who experience the product or service
- ☐ Strengths and weaknesses of the product or service
- ☐ Benefits to customers/clients (outcomes)
- ☐ How the product or service failed and why, etc.
- ☐ Other type(s) of information?

### Type of Evaluation?

Based on the purpose of the evaluation and the kinds of information needed, what types of evaluation is being planned?

- ☐ Goal-based?
- ☐ Process-based?
- ☐ Outcomes-based?
- ☐ Other(s)?

### Where Should Information Be Collected From?

- ☐ Staff/employees
- ☐ Clients/customers
- ☐ Program documentation
- ☐ Funders/Investors
- ☐ Other(s)

### How Can Information Be Collected in Reasonable and Realistic Fashion?

- ☐ questionnaires
- ☐ interviews
- ☐ documentation
- ☐ observing clients/customers
- ☐ observing staff/employees
- ☐ conducting focus groups among \_\_\_\_\_
- ☐ other(s)

### When is the Information Needed?

### What Resources Are Available to Collect the Information?

1. Decision on the PURPOSE for which the results of evaluation will be used and BY WHOM
2. Choice of the OBJECTIVES of the training programme (or its part to which valuation will be related)
3. Decision on the LEVEL at which the evaluation will be carried out knowledge/ skills/ attitude/behavior/ action
4. Choice of the CRITERIA of evaluation (How objective? i.e. how close to the criteria?) yardstick by which to measure
5. Designing the INSTRUMENT method of evaluation (how valid? i.e. how close to the criteria?)
6. Decision on the TIMING of evaluation
9. PILOT STUDY (trial run) of evaluation
7. Choice of the EVALUATOR
8. Decision on the METHOD OF INTRODUCING evaluations
10. ANALYSIS of results of pilot study
11. RE DESIGN of evaluation instrument

### Notes -



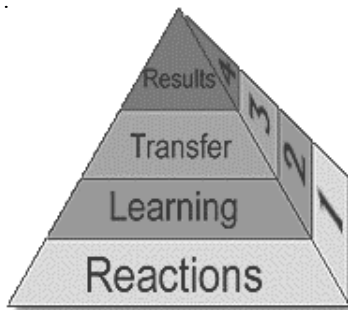
## LESSON 29

### METHODS OF EVALUATION

#### Kirkpatrick's Four Levels of Evaluation

##### Assessing Training Effectiveness

Often entails using the four-level model developed by Donald Kirkpatrick (1994). According to this model, evaluation should always begin with level one, and then, as time and budget allows, should move sequentially through levels two, three, and four. Information from each prior level serves as a base for the next level's evaluation. Thus, each successive level represents a more precise measure of the effectiveness of the training program, but at the same time requires a more rigorous and time-consuming analysis.



In Kirkpatrick's four-level model, each successive evaluation level is built on information provided by the lower level

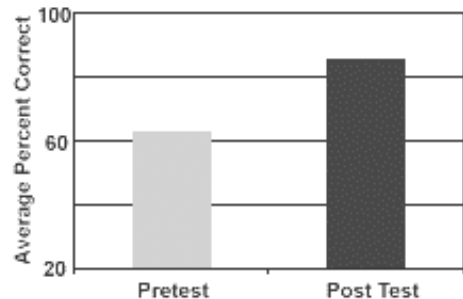
##### Level 1 Evaluation - Reactions

Just as the word implies, evaluation at this level measures how participants in a training program react to it. It attempts to answer questions regarding the participants' perceptions - Did they like it? Was the material relevant to their work? This type of evaluation is often called a "smilesheet." According to Kirkpatrick, every program should at least be evaluated at this level to provide for the improvement of a training program. In addition, the participants' reactions have important consequences for learning (level two). Although a positive reaction does not guarantee learning, a negative reaction almost certainly reduces its possibility.

##### Level 2 Evaluation - Learning

Assessing at this level moves the evaluation beyond learner satisfaction and attempts to assess the extent students have advanced in skills, knowledge, or attitude. Measurement at this level is more difficult and laborious than level one. Methods range from formal to informal testing to team assessment and self-assessment. If possible, participants take the test or assessment before the training (pretest) and after training (post test) to determine the amount of learning that has occurred.

Comparison of Test Performance



To assess the amount of learning that has occurred due to a training program, level two evaluations often use tests conducted before training (pretest) and after training (post test).

##### Level 3 Evaluation - Transfer

This level measures the transfer that has occurred in learners' behavior due to the training program. Evaluating at this level attempts to answer the question - Are the newly acquired skills, knowledge, or attitude being used in the everyday environment of the learner? For many trainers this level represents the truest assessment of a program's effectiveness. However, measuring at this level is difficult as it is often impossible to predict when the change in behavior will occur, and thus requires important decisions in terms of when to evaluate, how often to evaluate, and how to evaluate.

##### Level 4 Evaluation- Results

Frequently thought of as the bottom line, this level measures the success of the program in terms that managers and executives can understand -increased production, improved quality, decreased costs, reduced frequency of accidents, increased sales, and even higher profits or return on investment. From a business and organizational perspective, this is the overall reason for a training program, yet level four results are not typically addressed. Determining results in financial terms is difficult to measure, and is hard to link directly with training.

Level four evaluation attempts to assess training in terms of business results. In this case, sales transactions improved steadily after training for sales staff occurred in April 1997.

##### Methods for Long-Term Evaluation

- Send post-training surveys
- Offer ongoing, sequenced training and coaching over a period of time
- Conduct follow-up needs assessment
- Check metrics (e.g., scrap, re-work, errors, etc.) to measure if participants achieved training objectives
- Interview trainees and their managers, or their customer groups (e.g., patients, other departmental staff)

The Four Levels of Training Evaluation  
(The Kirkpatrick Model)

Level	Definition	Advantages	Disadvantages
Level 1 - "Reaction"	Measures trainees' opinions about the course. This is the most common way to evaluate student reaction to the course and provides a measure of immediate customer satisfaction with content, delivery, and environmental factors. Often referred to as "Smile Sheets."	Low cost and easy to administer. Provides insights to participant's personal feelings about the course. Provides quick feedback on successes and failures to the training provider.	Only reflects a quick reading of the participant while they are still in the class. Results should not be used as a solid basis for changing the educational content or strategy
Level 2 - "Learning"	Measures how well participants have mastered the course objectives. Can include tests of performance immediately before and after the course.	Compared to level 1, this provides more compelling evidence of whether the training program works.	Requires more time and money than level 1. Also requires greater insight to the evaluation process to develop valid measures of learning.
Level 3 - "Behavior"	Assesses practical value of training. Measures how well the knowledge, skills, and/or values from the course are used in the job. Typically measured 3-6 months after the course.	Provides stronger evidence that the investment in training yields the desired return. If designed properly, can also identify barriers and obstacles to improved performance.	Requires significantly more investment of time and money. Requires in-depth insight into performance interventions and root causes of performance deficiencies.
Level 4 - "Results"	Measures performance improvement, quality improvements, and cost savings to the organization. Measures the return on investment of the training course.	Provides strong evidence that training program has impact on organization. Addresses whether the performance is important to the organization's bottom line (e.g., production, safety, sales).	Substantial levels of investment and expertise are required to develop level 4. Often hard to decide whether or not this level is required. Linkage from training to org'l results is hard to establish.

## The Kirkpatrick Model of Training Evaluation

Donald Kirkpatrick has been used since the late 1950s by the training community. The focus is on measuring four kinds of outcomes that should result from a highly effective training program.

I will discuss each of these steps in some detail, including how to design these evaluations.

### Level 1—Reaction

Here your goal is to measure participants' reactions to the training program. You should measure their reactions immediately after the program. Level one evaluation should not just include reactions toward the overall program (e.g., Did you like the program?); it should also include measurement of participants' reactions or attitudes toward specific components of the program, such as the instructor, the topics, the presentation style, the schedule, audiovisuals, etc. Furthermore, each of these components can be further broken down into sub-components for evaluation (e.g., you can ask participants to evaluate specific characteristics of the instructor, the presentation, etc.). In short, level one evaluation is far more than just the measurement of overall customer satisfaction.

Learning (Level two outcomes) and transfer of learning (Level three outcomes) are unlikely to occur unless participants have positive attitudes toward the training program. Therefore, it is important to determine participants' reactions to the training program. Also, positive reactions are important because managers are more likely to eliminate unpopular training programs. Finally, the measurement of specific aspects of the training program can provide important information about what aspects of the training program can be improved in the future.

Level 1 evaluation relies on the measurement of attitudes, usually through the use of a questionnaire. It is important to include closed-ended items (including rating scales) as well as open-ended items on your questionnaire. Here are two open-ended items that I like:

- In your view, what were the three most important weaknesses of the program?
- In your view, what were the three most important strengths of the program?

It is important to learn the weaknesses, as well as the strengths, in order to improve a program. Do not be afraid to ask about program weaknesses!

When having participants fill out questionnaires, it is best not to have them put their names on the instruments because of the advantages of anonymity over confidentiality. If they do not put their names on the instruments, you can assure anonymity and they may be more likely to be more honest in their answers.

The level one questionnaires shown in Exhibit 4.3 and 4.4 are acceptable. The main changes I suggest are to put "neutral" rather than "agree" in the center of the 8-point rating scale used in the Exhibit 4.3 rating scale (actually, I'd probably recommend using a five-point rating scale) and include open-ended items about the program strengths and weaknesses. I don't recommend the questionnaires shown in Exhibits 4.1, 4.2, or 4.5.

The following point applies to all four levels of Kirkpatrick's outcome evaluation, but I will only state it here: Evaluators should establish performance standards on the outcomes, when possible, so that the four steps in the logic of evaluation can be utilized and evaluative judgments can be made. Also, don't forget Kirkpatrick's last piece of advice to communicate the results because utilization of evaluation results will not happen without dissemination and communication.

Here are a few advantages of level one evaluation:

- You will know how the participants felt about the training event.
- It may point out content areas that trainees felt were missing from the training event.
- It will tell you how engaged the participants felt by the training event.
- It can provide information about overall participant reaction as well as participant feedback and evaluation of specific aspects of the training event.
- Detailed level one evaluation can provide formative evaluation information that can be used to improve future versions of the training program (e.g., you can fix the things the participants disliked about the program and add the things they felt was missing).

## Level 2—Learning

Here your goal is to determine what the training program participants learned during the training event. Because the training instructor should have specific learning objectives, one hopes to find clear learning outcomes. Learning outcomes can include changes in knowledge (e.g., What are the key differences between Windows 95 and Windows ME?), skills (Can the participant upload a new operating system to a computer), or attitudes (Have participants' attitudes toward computers improved?). Some training events will emphasize knowledge, some will emphasize skills, some will emphasize attitudes, and some will emphasize multiple learning outcomes. The evaluation should focus on measuring what was covered in the training event (i.e., the learning objectives).

Level two evaluation should be done immediately after the training event to determine if participants gained the knowledge, skills, or attitudes. A couple of issues here are (a) how shall one measure knowledge, skills, and attitudes, and (b) what research design should be used to demonstrate improvement in level two outcomes?

First, let's talk about the measurement of level two outcomes. Knowledge is typically measured using already available or instructor constructed **achievement tests** (i.e., tests designed to measure the degree of learning that has taken place). In the training environment, these tests are usually criterion-referenced. Note that **norm-referenced tests** are traditional standardized tests that are constructed to maximize individual differences and to allow comparison of individuals to an external norming group. A normal curve often characterizes the performance distribution of the norming group. In contrast, **criterion-referenced tests** are constructed to determine whether learners have mastered one or more learning objectives and these tests include a cutoff point (pass/fail). The results of criterion-referenced tests often take the form of a negatively skewed curve, where the vast majority of the learners have reached or surpassed the criterion or cut-off point (i.e., the point at which one must reach in order to pass the test) and only a few learners have lower scores. In constructing a criterion-referenced test, you should develop a pool of items potentially measuring the content, have a panel of experts examine the items, pilot test the selected items, and analyze each item for item difficulty (i.e., the percentage of people who answer the item correctly), item discrimination (i.e., the high performers should be more likely to get the item correct than low performers if it is a good item), and distractor effectiveness (are the distractors working well?). Eliminate items with poor performance on difficulty (i.e., items that are too hard or too simple), discrimination (i.e., items that the low/less knowledgeable performers are more likely to get correct than the high/knowledgeable performers), and items whose distractors do not work well (e.g., an item where all incorrect responses are for only one distractor). Note Kirkpatrick's brief example of a knowledge test on page 44.

Skills typically require some kind of motor or manual response on the examinee's part, or some kind of manipulation; therefore, a **performance test** is used. A performance test is just a test that requires the test taker to create a product or demonstrate a process. Obviously the goal is to determine

whether each person can perform the skills they have been taught in the training event. For example, if the learning objective was to learn to make repairs to computers, a performance test would be required to determine whether a person can install a power supply or a computer chip in a computer. If the learning objective was to learn how to make effective public speeches, the participants would need to be evaluated on actual speeches that they give to the group. Some performance elements can be included on traditional paper-and-pencil tests (e.g., essay writing, drawing skills, etc.). In the training environment, performance tests are likely to be criterion-referenced (i.e., participants' scores are compared to a cutoff point).

Attitudes are measured with questionnaires similar to the questionnaires described for level one evaluation. You will typically have the participants give their ratings for various items (responding with Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree or with other rating scales), and you should include some open-ended items to allow participants to respond in their own words (e.g., How do you feel about diversity in the workplace?).

Second, Kirkpatrick also briefly discusses the issue of research design. He suggests that you include a control group in your design when possible, and he briefly mentions using a pretest measure when possible.

To give you a better idea of the design issues here, I will review several experimental research designs. For more information on these designs, go to Johnson/Christensen's Educational Research and/or read about them in the lectures on the homepage for our textbook (at <http://www.coe.usouthal.edu/bset/Faculty/BJohnson/Homepage/Supporting/textbook.htm>)

Visual Depiction of the Design			Design Name
	X	O <sub>2</sub> O <sub>4</sub>	Posttest-only nonequivalent control group design
O <sub>1</sub>	X	O <sub>2</sub>	One-group pretest-posttest design
O <sub>1</sub>	X	O <sub>2</sub>	Pretest-posttest nonequivalent control group design
O <sub>3</sub>		O <sub>4</sub>	
R O <sub>1</sub> X R O <sub>3</sub>		O <sub>2</sub> O <sub>4</sub>	Randomized pretest-posttest control group design (Note: this design has random assignment to groups)
O <sub>1</sub> O <sub>2</sub> O <sub>3</sub> O <sub>4</sub> X		O <sub>5</sub> O <sub>6</sub> O <sub>7</sub> O <sub>8</sub>	Interrupted time-series design

Here is the basic logic of analysis for each of the designs just listed. The counterfactual, discussed in an earlier lecture, is estimated slightly differently in some of these designs, which

means that the comparison may be different from design to design. Generally, you will check each of the following comparisons for practical significance.

- For the posttest-only nonequivalent control group design you compare the two posttest means (i.e.,  $O_2$  with  $O_4$ )
- For the one-group pretest-posttest design you compare the pretest mean with the posttest mean (i.e.,  $O_2$  with  $O_1$ )
- For the pretest-posttest nonequivalent control group design you compare the change in the experimental group ( $O_2$  minus  $O_1$ ) with the change in the control group ( $O_4$  minus  $O_3$ )
- For the randomized pretest-posttest control group design you compare the change in the experimental group ( $O_2$  minus  $O_1$ ) with the change in the control group ( $O_4$  minus  $O_3$ ). The word “randomized” in the title of this design means that the participants must be randomly assigned to the groups, which “equates” the groups on extraneous variables.
- For the interrupted time-series design, you compare the baseline series results ( $O_1$   $O_2$   $O_3$   $O_4$ ) with the experimental series results ( $O_5$   $O_6$   $O_7$   $O_8$ ), looking for differences in slope and differences in level of outcome.

Note that the posttest-only nonequivalent control group design is by far the weakest of the designs shown above (because you have no idea what group differences existed before the intervention), and the strongest design is the randomized pretest-posttest control group design because the groups are formed through random assignment (which makes the groups probabilistically equal on all known and unknown extraneous variables).

With the above review of the commonly used research designs, Kirkpartick’s discussion of designs should make a little more sense. Kirkpartick tends to take a very pragmatic stance toward design, claiming that one should use the best design possible, but, at the same time, one should also consider what is cost effective and practical to use in the organization undergoing evaluation. He believes that some data are virtually always better than no data at all.

#### Here are few advantages of level two evaluation:

- Demonstrating participant learning should help trainers in promoting their training program.
- Knowledge of level two evaluation can help in interpreting the results of level three evaluation (e.g., if level three results do not occur, it may be because of workplace factors and not because of any flaw in the training program).
- Detailed level two evaluation can provide formative evaluation information that can be used to improve future versions of the training program (e.g., you may find certain learning objectives that are not being met).

### Level 3—Behavior

Here your goal is to find out if training program participants change their on-the-job-behavior (OJB) as a result of their having attended and participated in the training program. If the behavior change does not occur, you also want to find out why the change did not occur. The level three question is, Did the

training have a positive effect on job performance? Level three evaluation specifically involves measuring the **transfer** of knowledge, skills, and attitudes from the training context to the workplace.

Remember that level one and level two outcomes are still important because participants generally need to react positively to the training program (level 1 outcome) and they need to learn the material (level 2 outcome) if they are going to be motivated and able to apply what they have learned when they return to their jobs.

Learning is likely to transfer only if the conditions in the work setting are favorable for transfer. In addition, there are obviously many things that trainers can do to increase the likelihood of transfer. In other words, transfer is affected by “training factors” before trainees go back to their workplace as well as “workplace factors” that operate in their workplace when they return. Here are two sets of factors that make transfer more likely to occur:

A. These are some factors in the training program or event that can help facilitate transfer of learning:

- The training or learning environment or context or culture is made to be similar to the actual work environment or context or culture of the organization (this is called **situated learning**). Learning that takes place in “authentic” contexts is more likely to be used later.
- Provide real world examples and actual experience performing and practicing the behaviors.
- Make sure trainees understand the general principles behind the behaviors (called “transfer through principles”).
- Explain the importance and applicability of the future on-the-job behaviors (i.e., motivate the trainees)

B. These are some factors in the receiving organization that can help facilitate transfer of learning:

- The organizational culture and climate support change.
- The participant’s direct supervisor and others with whom he or she works support and/or facilitate the participant’s new behaviors through direct extrinsic rewards such as help, encouragement, praise, increased freedom and responsibility, pay increases, and recognition.
- The participant gains intrinsic reinforcement from applying his or her new knowledge, skills, or attitudes (i.e., he or she likes what was learned and enjoys performing the new related behaviors).
- The participant has the opportunity to use his or her new knowledge or skills on the job.

So how does one design a level three evaluation? Here are Kirkpartick’s recommendations:

1. Use a control group if possible. That is, use the strongest design that is feasible.
2. Allow time for the behavior change to take place.
3. Evaluate both before and after the program if practical. Again, use the strongest design that is feasible.
4. Survey and/or interview one or more of the following: trainees, their immediate supervisor, their subordinates, and

others who often observe their behavior. The more the evidence, the better.

5. Get 100 percent response or a sampling.
6. Repeat the evaluation at appropriate times.
7. Consider cost versus benefits.

Level three is often harder than level one and level two evaluation because behavior changes at the workplace are often harder to measure than reaction and learning directly after the training event. You must give the behavior time to transfer and collect data at the workplace.

Probably the most common design used for level three evaluation is the one-group pretest-posttest design (i.e., get a baseline measure of the behavior you plan on training, train the participants, and then measure the participants' behavior again after the training). If you are able to include a control group, you will be able to use the pretest-posttest nonequivalent control group design (i.e., in addition to measuring the training participants before and after the training, you also find a set of similar people, who do not undergo training for the control group, and you measure these control group participants' behavior before and after the training program). Earlier (above) I showed the comparisons you make for the different designs during data analysis.

In the one-group pretest-posttest design the estimate of the counterfactual (i.e., what would have happened to the participants if they had not participated in the training) is the participants' pretest measure. In the pretest-posttest nonequivalent control group design, the estimate of the counterfactual is the change taking place in the control group. Remember: you want the change in the training group to be greater than the counterfactual change.

Note that it would be really nice to be able to use the randomized pretest-posttest control group design; however, usually, random assignment to the training and nontraining groups will not be feasible.

Kirkpatrick also discusses another popular design for measuring transfer of learning (i.e., for measuring level three outcomes). He never labels the approach, but it is formally called the **retrospective survey design**. He points out that you can survey (using questionnaires or interviews) the training participants, the participants' supervisors or managers, and the participants' subordinates. The design is called a "retrospective" design because you are asking the participants (or the others) to think back (i.e., in retrospect) to their behavior before the training program and then compare it to their current level of behavior, and, finally, to decide if the behavior has changed. You should ask for specific examples behavior changes. You can also use the retrospective survey design with the training participants' managers and subordinates, asking them if the participant's behavior has changed. The more corroboration you get across the different sources, the stronger the evidence of transfer.

The retrospective survey design is generally is a weaker design than the experimental designs discussed earlier because the actual pretest behavior is not measured directly. However, the retrospective survey can still provide useful and sometimes

convincing data. Kirkpatrick speaks highly of the retrospective design, probably because it is so simple to carry out and because it tends to be cost effective (i.e., it doesn't cost a lot of money to administer questionnaires). Kirkpatrick gives a couple of actual forms in Exhibit 6.1 (a retrospective interview) and Exhibit 6.2 (a retrospective questionnaire).

#### **Here are a few advantages of level three evaluation:**

- Provides measurement of actual behavior on the job, rather than only measuring or demonstrating positive reaction and/or learning. This is important because you want to have actual on-the-job results from the training program.
- Level three outcomes are required for level four outcomes (i.e., they are the intervening variables or factors that lead to level four outcomes); therefore, it is good news when level three outcomes are found.
- Most level three outcomes are intrinsically useful, even if level four outcomes (i.e., final organizational or business results) are never fully demonstrated (e.g., it is useful to have managers who are effective listeners and supportive, or employees who know how to do basic work on their computers, or employees who act respectfully toward employees from different ethnic or cultural groups).
- In many situations, evidence of level one outcomes, level two outcomes, and level three outcomes will be sufficient evidence of the merit and usefulness of a training program. This is especially true when all of these provide evidence of positive results of the training program.

#### **Level 4—Results**

Here your goal is to find out if the training program led to final results, especially business results that contribute to the "bottom line" (i.e., business profits). Level four outcomes are not limited return on training investment (ROI). Level four outcomes can include other major results that contribute to the well functioning of an organization. Level four includes any outcome that most people would agree is "good for the business." Level four outcomes are either changes in financial outcomes (such as positive ROI or increased profits) or changes in variables that should have a relatively direct effect on financial outcomes at some point in the future.

Here are some examples of different kinds of level four outcomes:

- Improved quality of work.
- Higher productivity.
- Reduction in turnover
- Reduction in scrap rate (i.e., less wasted resources).
- Improved quality of work life.
- Improved human relations (e.g., improved vertical and horizontal communication)
- Increased sales.
- Fewer grievances.
- Lower absenteeism.
- Higher worker morale.
- Fewer accidents.

- Greater job satisfaction.
- Increased profits.

#### Here are Kirkpatrick's recommendations for level four evaluation:

1. Use a control group if practical. In other words, use the strongest experimental design that is feasible.
2. Allow time for results to be achieved. In other words, many level four outcomes will take some time to occur.
3. Measure both before and after the program if practical. Again, use the strongest experimental design that is feasible.
4. Repeat the measurement at appropriate times. Repeated measurement (e.g., using the time-series design) can provide data on the long term pattern of results.
5. Consider costs versus benefits. You may not want to perform a level four evaluation if the costs of that evaluation are high in comparison to the potential benefits or impacts of the training program.

Level four evaluation is difficult in the sense that it is quite difficult to establish firm evidence that a training program was the key or only source that produced the level four outcomes. For example, time has to elapse after the training program in order for these outcomes to occur. Other factors may also occur during that time period. Second, it is hard to isolate the effect of the training program because there are usually many additional causal variables operating on the level four outcome variables (i.e., the training event is just one of many potential causes). Level four outcomes are often more distal outcomes, rather than proximal outcomes of a training program. For these reasons, the evidence obtained from level four evaluation is usually weaker than the evidence obtained from lower level evaluations, especially levels one and two which are relatively easy to document.

For an example of distal, level four outcomes (increased productivity and profits) here is a potential outcome line that ends with the level four results:

Program → Reactions → Learning → Behavior → Productivity → Increased profits.

Level four outcomes tend to fall far down outcome lines, which means that many intervening factors must take place in order for the level four outcomes to take place. This means that we should not be overly optimistic in expecting large level four outcomes from single training programs.

In general, we should try to develop an impact theory to help us to understand the operation of level four outcomes. If you really want a training program to have a positive level four outcome, it is probably wise to make the training program a component of a larger organizational performance program package that is designed to produce level four changes.

A common design for documenting level four outcomes is the interrupted time-series design, although the other experimental designs with control groups are also frequently called for, depending on the kinds of outcomes you want to measure. For example, some data are frequently recorded at regular intervals (sales, turnover, accidents) making these variables easy to measure over time forming time-series data (you just have to

get these secondary data). Other level four results will be more difficult to obtain because pre-training data may not be available (e.g., data on worker morale, quality of work life, improved communication). If pre-training data are not routinely recorded, you will have to make sure the data are recorded at least once before the training event is implemented. If the data are recorded multiple times before the training event, the interrupted time-series design may be used. If data are recorded only once before the training event, the one group pretest-posttest design is possible, or, even better, the pretest-posttest nonequivalent control group design may be feasible.

#### Summary of the Kirkpatrick Model

Donald Kirkpatrick first proposed this four-pronged approach to evaluating training programs in his 1959 doctoral dissertation.

Since then, it has become so widely used, that trainers can typically talk about it in shorthand and understand the reference. For example, when one trainer says to another, "What are you doing about level IV?" the other knows that the first trainer wants to understand how the second evaluates the impact of training.

Level	Name	Issues	Assessed at this Level
I.	Reaction	Assesses participants' initial reactions to a course. This, in turn, offers insights into participants' satisfaction with a course, a perception of value. Trainers usually assess this through a survey, often called a "smiley sheet." Occasionally, trainers use focus groups and similar methods to receive more specific comments (called qualitative feedback) on the courses. According to the TRAINING magazine annual industry survey, almost 100 percent of all trainers perform "Level I" evaluation.	
II.	Learning	Assesses the amount of information that participants learned. Trainers usually assess this with a criterion-referenced test. The criteria are objectives for the course: statements developed before a course is developed that explicitly state the skills that participants should be able to perform after taking a course. Because the objectives are the requirements for the course, a Level II evaluation assesses conformance to requirements, or quality.	
III.	Transfer	Assesses the amount of material that participants actually use in everyday work 6 weeks to 6 months (perhaps longer) after taking the course. This assessment is based on the objectives of the course and assessed through tests, observations, surveys, and interviews with co-workers and supervisors. Like the Level II evaluation, Level III assesses the requirements of the course and can be viewed as a follow-on assessment of quality.	
IV.	Impact	Assesses the financial impact of the training course on the bottom line of the organization 6 months to 2 years after the course (the actual time varies depending on the context of the course).	

#### I. Reaction

Assesses participants' initial reactions to a course. This, in turn, offers insights into participants' satisfaction with a course, a perception of value. Trainers usually assess this through a survey, often called a "smiley sheet." Occasionally, trainers use focus groups and similar methods to receive more specific comments (called qualitative feedback) on the courses. According to the TRAINING magazine annual industry survey, almost 100 percent of all trainers perform "Level I" evaluation.

#### II. Learning

Assesses the amount of information that participants learned. Trainers usually assess this with a criterion-referenced test. The criteria are objectives for the course: statements developed before a course is developed that explicitly state the skills that participants should be able to perform after taking a course. Because the objectives are the requirements for the course, a Level II evaluation assesses conformance to requirements, or quality.

#### III. Transfer

Assesses the amount of material that participants actually use in everyday work 6 weeks to 6 months (perhaps longer) after taking the course. This assessment is based on the objectives of the course and assessed through tests, observations, surveys, and interviews with co-workers and supervisors. Like the Level II evaluation, Level III assesses the requirements of the course and can be viewed as a follow-on assessment of quality.

#### IV. Impact

Assesses the financial impact of the training course on the bottom line of the organization 6 months to 2 years after the course (the actual time varies depending on the context of the course).

For many reasons, Level IV is the most difficult level to measure. First, most training courses do not have explicitly

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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## LESSON 30

### FEEDBACK AND ASSESSMENT

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#### How to Give Good Feedback

People won't get great at their jobs unless you do a great job of giving them feedback. So why are performance reviews the most hated ritual in business? Here's a five-point program to improve your performance with reviews.

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A few years ago, Chris Oster's unit at General Motors got so fed up with traditional reviews that it abolished them. "There were so many problems - for managers and for people being appraised," explains Oster, director of organizational development for the GM Powertrain Group. "We had 'rater error.' We had the 'contrast effect.' We had the 'halo effect.' But the biggest problem was that feedback wasn't leading to changes in behavior."

Darcy Hitchcock, president of AXIS Performance Advisors, helps companies create high-performance work systems, including feedback systems. She says that one of her most painful professional moments came from a performance review early in her career: Her boss rated her a four on a five-point scale. Though most people would consider that a decent score, Hitchcock agonized over why she didn't get a five. She confronted her boss: What steps could she take to get a perfect score? He had no answer. Angry and confused, she left the office and spent the day in a nearby park. "In the space of a one-hour meeting," she says, "my boss took a highly motivated employee and made her highly unmotivated."

Many years ago, top executives at Glenroy Inc., a privately held manufacturer of packaging materials outside of Milwaukee, held an off-site at which they reviewed key company policies. A week later, Glenroy held a rally in the company parking lot at which employees built a bonfire and burned its policy manuals. The company's well-established approach to reviews literally went up in smoke. But unlike other policies, which Glenroy refined or reinvented, reviews were never reinstated. "When people find out that we don't have formal reviews, it drives them crazy," says Michael Dean, Glenroy's executive vice president. "They don't understand how we can run the business. Leaders here provide people with feedback. But the way for it to be effective is on a day-by-day, minute-by-minute basis - not twice a year."

Feedback matters. The only way for people to get better at what they do is for the people they work for to provide candid, timely performance evaluations. "In today's environment, you have to evaluate what's changing and what's staying the same, what's working and what's no longer working," says Bruce Tulgan,

author of FAST Feedback (1998, HRD Press) and founder of Rainmaker Thinking, a consulting firm based in New Haven, Connecticut. "Feedback plays that role." Anne Saunier, a principal at Sibson & Co., a consulting firm based in Princeton, New Jersey, puts it this way: "If you have ideas and information that will help someone perform better, it's hostile not to share them."

So why are reviews still the most painful ritual in business? A 1997 survey by Aon Consulting and the Society for Human Resource Management reported that only 5% of HR professionals were "very satisfied" with their performance-management systems. In 1995, William M. Mercer Inc., based in New York City, polled executives about reviews. Only 7% said their systems were "excellent"; more than 70% had revamped them or were planning to.

Part of the problem with reviews is that human nature hasn't changed - few of us enjoy hearing about our shortcomings, and few of our bosses and colleagues look forward to describing them. Part of the problem is that work itself has changed - it's more team-oriented, less individualistic. The tougher it is to measure individual performance, the tougher it is to evaluate it.

But the biggest problem with reviews is how little they've changed. Too many leaders still treat feedback as a once-a-year event, rather than an ongoing discipline. "Doing annual appraisals is like dieting only on your birthday and wondering why you're not losing weight," cracks Saunier. Too many leaders confuse feedback with paperwork. "Filling out a form is inspection, not feedback," says Kelly Allan, senior associate of Kelly Allan Associates Ltd., a consulting firm based in Columbus, Ohio whose clients have included Boeing, Paramount Pictures, and IBM. "History has taught us that relying on inspections is costly, improves nothing for very long, and makes the organization less competitive."

We can't teach you the one right way to provide - or receive - feedback. But our program does offer five action-oriented principles to improve your performance with performance reviews. Be sure to let us know how you think we performed. . .

#### 1. Feedback is not About Forms

Mention the term "performance review," and the first image that comes to mind is paper: checklists, ratings, all-too-familiar reports that invite all-too-predictable answers. That's a problem. Anyone who equates delivering feedback with filling out forms has lost the battle for smart appraisal before it's begun. "If you use forms as the basis for meetings about performance," argues Allan, "you change only one thing - what might have been a natural, helpful conversation into an awkward, anxious inspection."

Yes, there are reasons to document the appraisal process. But most of them involve administrative neatness or legal nervousness, not sound thinking about feedback. That's why more and



more companies that are serious about reviews use forms only to confirm that a review has taken place - not as a tool for the review itself.

Consider the example of Parkview Medical Center in Pueblo, Colorado. For years, the hospital's leaders have been importing new ideas about quality and service into their 286-bed facility. Early on, administrators and executives looked at ways to improve how the hospital evaluated its employees. They began by exploring how best to modify the hospital's existing checklist-based reviews: Which ratings made the most sense? Which scoring systems worked best? But no amount of tinkering satisfied Parkview's leaders.

Dorothy Gill, vice president of human resources, and a team of her colleagues explained their dilemma to the CEO: "He said, 'If there isn't a better way to do reviews, let's just stop doing them.' So we did. We had no idea what we were going to do instead."

Gill and her colleagues eventually came up with an idea. It's called APOP, for Annual Piece of Paper. The most valuable kinds of feedback, they concluded, are the daily interactions between leaders and their people - interactions that can't be captured on paper. The hospital still requires that managers do annual reviews. But instead of being top-down appraisals, the reviews are bottom-up requests for assistance: What can the leader do to make the employee's job easier? What gets in the way of accomplishing the job?

And the medium for those reviews is conversation, not written evaluation. There is a form - the APOP. But its only role is to confirm that the conversations took place. There are no scores, no written goals for the next year. It's literally a piece of paper, signed by the employee and the director, that records the date, place, and agenda of the meeting. The APOP process "takes performance reviews and turns them upside down," Gill says. "Directors don't tell employees how they're doing. They ask open-ended questions to see what will help employees do a better job."

## 2. Feedback Delayed is Feedback Denied

You know the old joke about airline food. First passenger: "This food is terrible!" Second passenger: "And the portions are so small!" Most of us feel the same way about performance reviews. The only thing worse than how unsatisfying they are is how seldom they take place.

Bruce Tulgan interviewed hundreds of managers and employees for his book, *FAST Feedback* (the acronym stands for "frequent, accurate, specific, timely"). One of the most common complaints, he says, is that reviews take place too long after the performance being critiqued has occurred. "We don't work in a year-by-year, pay-your-dues, climb-the-ladder environment anymore," he says. "The once- or twice-a-year evaluation is a creature from the workplace of the past. Today's business leaders expect workers to be project-driven, results-oriented. That doesn't fit with the old model of reviewing performance every 6 or 12 months."

Why do smart companies and leaders stick with such an obsolete practice? Because, Tulgan argues, they have well-established systems for conducting annual or semiannual

reviews. "There are no systems for day-to-day engagement with workers," he says.

That's where "FAST feedback" comes in. Tulgan offers lots of techniques for accelerating how people deliver and process feedback. Managers, he says, can build feedback into routine meetings and memos. They can learn to deliver feedback through email and voice mail. They can use short notes. Ideally, they should set aside a designated chunk of time each day, just for giving their people feedback. "If we really want a just-in-time workforce," he argues, "we have to create just-in-time feedback."

One caution: There's a difference between timely feedback and rushed feedback. Rick Maurer, author of *Feedback Toolkit* (Productivity Press, 1994), argues that a few old-fashioned principles of human behavior still apply, even in fast-paced work environments. If you're providing feedback around an emotionally charged event, wait a day or two (but never more than a week). "Sometimes you're so emotional that it makes sense to wait," he says. "Let your gut be your guide." And if your feedback involves a big issue, something the person you're working with really needs to take seriously, then find an appropriate time and place - even if it delays the session. "Schedule an appointment and have a meeting," Maurer urges. "Don't give important feedback in the hallway."

## 3. Feedback is Where you Find It

It's a mistake to blame all the problems with performance reviews on the people who deliver them. Feedback is no different from any other business process - you get out of it only what you put into it. If you're not getting enough useful feedback, don't look at your boss; start by looking at yourself. "Ultimately," says Sibson & Co.'s Saunier, "managers aren't responsible for their people's performance. People are responsible for their own performance. There's feedback all around you - if you pay attention. If you're not getting enough feedback, ask for it."

Saunier offers an example from her own experience. She heard from a unit coach that a new employee, who'd been on the job three months and had been working with Saunier on a project, complained that he wasn't receiving enough feedback. "I couldn't believe it," Saunier says. "We walked back together from the client's office every day. And every day we discussed what we could do better. Just because I didn't sit him down in my office doesn't mean I wasn't providing feedback. The next time we walked back from the client's, I began our discussion by saying, 'Now, here's some feedback.'"

LeRoy Pingho, a vice president at Fannie Mae, the mortgage giant, never complains that he's not getting enough feedback. Since the mid-1980s, he's organized annual 360-degree reviews. This is not an official company program; it's his personal program. He selects a cross-section of colleagues - a boss, a subordinate, a customer - and asks them each to assess his performance. "Some things are 'flat spots' for me," he says. "I can struggle with them alone or get help."

Last year, Pingho took his review process a step further. He wrote an assessment based on the feedback he received, and then distributed copies to 50 people: bosses, peers, direct

reports, his wife. He sent everyone the same message: “You work with me, so you should know my strengths and weaknesses. Also, I’m going to ask four of you to help me work on the things I’m not good at.”

Pingho dubbed those four people his “spotters.” He chose two at his level, one above him, and one below him. He met with each of the spotters to review the “flat spots” he’d identified. Then he told them that he wanted to focus on getting better at two of those weaknesses. (He didn’t think he could tackle five at once.) One was active listening: “When I’m in meetings, I’m already through the presentation before the presenter has gotten to the first page.” The second was empowerment: “I want to use the input I get from people instead of disregarding it.”

He asked his spotters to alert him when they saw behavior that related to those improvement goals: “I said, ‘You don’t have to do this in a formal way. But if you see something, tell me.’ It’s like being on the high bar. Just knowing that there’s somebody to make sure you don’t fall helps you become more self-confident.”

At GM Powertrain Group, a new approach to feedback is helping salaried employees gain more self-confidence. The group, which designs and manufactures castings, engines, and transmissions, began redesigning its appraisal processes in July 1996. The new system, called Individual Growth Strategy, revolves around a few simple principles: People want to do their best. The people who improve are those who have the most control over their development. So it’s up to employees - not managers - to decide what kind of feedback is most useful and from whom it should come.

GM offers training in ideas, techniques, and tools for soliciting feedback. But it’s up to the people who want feedback to seek it out. “If I buy something, I’m more committed to using it than if someone gives it to me,” explains Chris Oster. “The same goes for feedback. If I solicit feedback, I’m more inclined to use it.”

#### **4. Giving people a Raise isn’t the Same as Giving them Feedback**

It’s hard to argue with the principle that the better you do, the more money you should get. But most performance gurus say that explicitly linking reviews and raises has unintended consequences.

“A raise is a transaction about how much money you or I can get,” explains Kelly Allan. “Feedback is a conversation about how much meaning you and I can create. Feedback is about success for your people and your customers. Pay is about marketplace economics and skills. Pay and feedback are not related.”

Allan practices what he preaches. At his company, discussions about money are tangible and statistical. People play a big role in setting their own pay. Associates research market rates for talent in their peer group, based on skills and experience. People who want a raise can present evidence that they’ve acquired a new skill or had an experience that the market would reward with a salary increase.

Conversations about performance, on the other hand, are informal and collegial. Associates meet weekly with a colleague

to discuss their current project. The firm schedules formal sessions monthly, quarterly, or every six months (depending on the associate’s tenure) to discuss the past, present, and future of each person’s work. “We have conversations, not appraisals,” Allan says. “And these conversations never include discussions of pay. Period.”

Glenroy Inc., the Wisconsin manufacturer that burned its employee manuals, has experimented with a more radical approach to pay. Several weeks after the bonfire, it was time for annual performance appraisals and salary reviews. Management was clear: Reviews were on the ash heap of history. But Glenroy did need to figure out what kinds of raises its employees would get. The improved approach? Employees decided their own raises.

Glenroy divided its workforce into peer groups based on job classifications. It was up to those peer groups to set their raises. In most cases, executive vice president Michael Dean reports, the peer groups were tougher than management would have been; the company later had to adjust many of the raises upward. “We treat people like adults,” says Dean. “That’s the essence of leadership.”

#### **5. Always Get Feedback on your Feedback**

One reason candid feedback is so important is that most people are great at self-delusion. It’s easy to think we’re better at writing software, creating marketing campaigns, or evaluating business plans than we really are. That same talent for self-delusion applies to the art of giving feedback. Bruce Tulgan puts it this way: “There’s such a disconnect between managers’ impressions of the feedback they give and their employees’ impressions of the feedback they get. Most managers need a reality check.”

Tulgan has devised a simple technique for creating such a check. He suggests that managers think about the three most recent times they offered feedback to one of their employees. Then, they should write down brief answers to questions about those sessions: What prompted you to give feedback on that matter at that time? Did you check your facts first? What was the substance of the feedback? Was there any concrete action as a result? Next the manager should ask the employee to write down brief answers to the same questions. The comparisons, Tulgan says, make for interesting reading.

“Think of the people who work for you as ‘customers’ for your feedback,” he argues. “Find out whether the feedback you’re providing is working for them. If it’s not, what’s the point?”

#### **Basic Guidelines for Giving Feedback**

1. Clarity — Be clear about what you want to say.
2. Emphasize the positive — This isn’t being collusive in the person’s dilemma.
3. Be specific — Avoid general comments and clarify pronouns such as “it,” “that,” etc.
4. Focus on behavior rather than the person.
5. Refer to behavior that can be changed.
6. Be descriptive rather than evaluative.
7. Own the feedback — Use ‘I’ statements.

8. Generalizations — Notice “all,” “never,” “always,” etc., and ask to get more specificity — often these words are arbitrary limits on behavior.
9. Be very careful with advice — People rarely struggle with an issue because of the lack of some specific piece of information; often, the best help is helping the person to come to a better understanding of their issue, how it developed, and how they can identify actions to address the issue more effectively.

## Handling Criticism with Honesty and Grace

Perhaps one of the most vulnerable of moments is when someone criticizes you, especially if that person knows you well. The scalpel of her comments can be surgically rapid and close for the bone, more damaging than the rubber hammer of a stranger’s passing slight. Yet, as the old say goes, “What doesn’t kill us can make us stronger.” People are most revealing when offering praise or criticism. Praise indicates what they most like about themselves and criticism often shows what they least like or feel least competent about in themselves. So criticism is actually a two-way mirror. How can you respond to another’s criticism with honesty and grace and actually gain new insights about yourself and the other person in the process?

### First Recognize that you are an Animal Under Attack

Whether you are with someone you love, hate, know little or just met, in the first moments when you realize that you are being criticized you will react the same. Your heart beats faster, skin temperature goes down and you even lose peripheral vision. Because you feel under attack, your first instincts are to focus on that feeling, making it more intense. You will then feel like withdrawing or retaliating. Just remember that both instinctual responses are akin to saying, “I don’t like your comments therefore I will give you more power.” Attempt to do neither as both fight or flight responses leave you with fewer options, not more.

When you focus on your feelings, you will be distracted from hearing the content of the comments. *You are more likely to react*, rather than choose how you want to act. Avoid a “faceoff” of escalation of comments between the two of you. Instead imagine a triangle of three entities: the other person, you and the topic of the criticism. Picture you both staring at the criticism, the third point in the triangle, to work through the comments, rather than staring each other down, where one person has to be wrong.

### Look to Their Positive Intent

#### Especially When they Appear to Have None

You are your most disarming when you compliment someone else for taking the time to give you

feedback. You take the wind out of their sails. The other person may even backtrack. Yet our first instincts are to look for the ways we are right and others are . . . less right. In responding to criticism, the momentum of defensive emotions builds fast. Why? Because we mentally focus on the smart, thoughtful, and “right” things we are doing, while obsessing about the dumb, thoughtless, and otherwise wrong things the other person is doing. This tendency leads us to take a superior or righteous

position, get more rigid, and listen less as the criticism continues. Difficult as you might find it, try staying mindful of your worst side and their best side as you engage in responding to the criticism. You will probably be *more* generous and patient with them, and increase the chances that they will see areas where you might be right after all. Act as if they mean well, especially if it appears they do not, not for them, but for yourself. The more you can look to their positive intent, the greater the likelihood that you can respond to their comments without their adding more or elaborating before you can respond to their first comments.

Here’s an easy to remember four step process to follow when responding to a criticism. Remember it is never comfortable to hear negative comments. I just find this approach makes it easier than any other alternative I’ve found.

### “AAA” Approach to Responding to Criticism

#### Step One: Acknowledged

Acknowledge that you heard the person, with a pause (buys time for both to cool off), nod, or verbal acknowledgment that demonstrates that you heard them. Whether the criticism is “justified” or not, if you attempt to avoid discussing it, it will loom larger in everyone’s minds that heard it and stick to you like fly paper, as you attempt to move on. Do not disagree or counter- attack. Prove that you have heard his comment. Perhaps say “I understand you have a concern” rather than “You shouldn’t have. . . .”). Avoid blaming or “bad labeling” language such as “That’s a lie” or “You don’t know what you are talking about. “ You will only pour hot coals on the heat of escalation and harden the person into their position so she will want to elaborate.

#### Step Two: Ask for More.

Ask for more information so you both can cool off more and stay focused on the issue, not the feelings or personalities. Go slow to go faster later in reaching agreement about how to resolve the criticism. Try to “warm up” to the part of the person you can respect — focus on it mentally and refer to it verbally: “You are so dedicated” or “knowledgeable” or whatever their self- image is that leads them toward making the criticism. The more fully the other person feels heard, the more likely that he will be receptive to your response, whether it is to agree or disagree.

#### Step Three: Add Your Own

Add your own, asking permission first. If you believe the comments are accurate, then say so. If an apology is in order, give it sooner rather than later. Then say what you plan to do differently to respond to the criticism. Ask for their response to your comments and again thank the person for being thoughtful in offering them. The sooner you verbally agree, if you find truth in the criticism, the more likely that you will engender respect from the other person and any others who witness the interaction. In fact, if you tell others who are important to that person that you were wrong and appreciate his pointing it out to you, you will feel and appear more comfortable with yourself.

If, on the other hand, you disagree with the comments, say “May I tell you my perspective?” This sets the other person up

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[illegible]

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[illegible]

Date:	Name (Optional)
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Training Site:
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Organization and Office:
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Job Title:
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Please provide your candid assessment of the course by completing this evaluation form. For questions 1 through 9, select one response only by placing "X" in the appropriate box. For questions 9 through 14, write your comments in the space provided. Use the back or additional sheets if necessary. Your feedback is an important part of the evaluation of this course and of distance learning as an instructional strategy. Thank you for your help in the assessment of the OMB Circular A-87 training session conducted on December 19 and 20, 2002.

1. Please evaluate the instructor.					
Stephen Garfinkel	Outstanding	Excellent	Good	Poor	Very

1. This course deserves an overall grade of:				
A ____	B ____	C ____	D ____	F ____

1. This course deserves an overall grade of:				
A ____	B ____	C ____	D ____	F ____

2. The video quality was:	Excellent	Good	Poor	Very Poor
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3. The audio quality was:	Excellent	Good	Poor	Very Poor
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4. Course content was relevant.	Strongly Agree	Agree	Disagree	Strongly Disagree
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5. The graphics were useful in illustrating the subject matter.	Strongly Agree	Agree	Disagree	Strongly Disagree
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6. I had adequate access to the instructor to ask questions.	Strongly Agree	Agree	Disagree	Strongly Disagree
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1. Course objectives were clearly stated.	Strongly Agree	Agree	Disagree	Strongly Disagree
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2. Would you participate in another grants training like this? Yes _____ No _____
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3. What information did you find most useful?
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4. What did you like most about the course?
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5. What did you like least about the course?
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6. What information that could be useful to you would you like to see in another course?
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7. Additional comments:
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## Evaluation of Training and Learning

These instruments for training and learning evaluation and follow-up were developed by W Leslie Rae MPhil, FITOL, Chartered FCIPD, who is an expert in this field, and author of over 30 books about training and learning. These materials are free for personal and organizational use subject to the terms stated (basically, retain the copyright notice, accept liability for any issues arising, and don't sell or publish the materials).

This document contains the essential end-of-programme validation, feedback and follow-up instruments: most ready for use, others for you to develop to suit your own situation.

Instruments such as the ones included here are the most effective way of:

- determining what the participants have learned
- giving the learners time to reflect on their learning during the programme prior to their completion of their post-training personal action plan
- getting useful feedback in an organized manner, to help with future training planning, and
- ensuring trainees and learners follow-up their training with relevant actions to apply, improve, develop and reinforce learning attained.

The document contains two alternative learning evaluation instruments; two suggested approaches to post-training personal action planning, and four types of 'reactionnaire' for post-training feedback.

### Tools included

- Evaluation of Learning Questionnaire (LQ) - ready to use
- Evaluation of Key Objectives Learning Questionnaire (KOLQ) - guide
- Action Plan template and instruction - ready to use
- Four separate and different 'Reactionnaires' - to suit different situations

### About 'reactionnaires'

It is often valuable to obtain the reactions of training participants to matters outside the evaluation of the learning itself, eg., domestic arrangements, style and pace of training delivery, training administration, etc.

By using a well constructed and effective 'reactionnaire' (not a tame 'happy sheet', skewed to prompt favourable comments) useful data can be obtained to help plan future training.

### Evaluation of learning questionnaire (LQ)

Please consider the learning programme that you have attended and complete the following. Be completely honest in your assessments and answer the questions as fully as possible, continuing on a separate sheet if necessary. You will find your reflections helpful in the completion of your Action Plan.

#### LQ Part I - Learning

To what extent do you feel you have learned from the programme? (Please ring the score number that you feel most closely represents your views)

If you have rated 6, 5 or 4 please describe a) what you have learned and b) what you intend to do with this learning on your return to work.

If you have rated 3, 2 or 1, please state as fully as possible the reasons why you gave this rating.

### LQ Part II - Confirmation of Learning

To what extent do you feel you have had previous learning (perhaps some you have forgotten) confirmed?

*Confirmed a lot*      6 5 4 3 2 1 *Confirmed*      *little*

If you have rated 6, 5 or 4, please describe a) what has been confirmed and b) what you

intend to do with this learning on your return to work.

If you have rated 3, 2 or 1, please state as fully as possible the reasons why you gave this rating.

### LQ Part III - Non-learning

What have you NOT learned that you needed to and /or expected to learn during the programme? Please describe fully any items.

### LQ Part IV - Any other comments

#### evaluation of key objectives learning questionnaire (KOLQ)

This instrument is a more specific alternative to the LQ where you want to determine the learning of the particular content and objectives of the programme. You should identify from the training programme planning activity what are the main objectives of the programme (which, of course, every programme should have). These can be converted into a format of questions seeking information on the extent to which the learners feel that they have learned in each key objective area. While being more specifically related to the learning, this method obviously takes greater effort in preparation since a different KOLQ will have to be produced for each different programme.

Part of a KOLQ for, for example, an interpersonal skills programme might be:

1. To what extent have you learned on the course about your behavioural skills?

A lot 6 5 4 3 2 1 Nothing

If you scored in the range 3 to 1, please comment why you have given this rating.

2. To what extent have you learned on the course about how much you contribute to group discussions?

A lot 6 5 4 3 2 1 Nothing

If you scored in the range 3 to 1, please comment why you have given this rating.

3. To what extent have you learned on the course about non-verbal communication?

A lot 6 5 4 3 2 1 Nothing

If you scored in the range 3 to 1, please comment why you have given this rating.

and so on.

## Action Plan - Template and Instruction

### The Action Plan Format

It is essential that at the end of every learning event, all learners should complete an action plan based on what has been learned or has been reminded. When learning is applied when the trainee returns to work, the new skills and knowledge develop, reinforce their new abilities, and the organization benefits from improved performance. Learning without meaningful follow-up and application is largely forgotten and wasted.

Learners should be guided to produce action plans that:

- are simple and straightforward
- are clear and unambiguous
- contain items that can be implemented by the learner at work, with or without support
- or any resources that might be available
- contain comments on the methods to be used; the resource required and the timings: start, finish times or dates, for all the action items (use 'SMART' - Specific, Measurable, Agreed, Realistic, Time-bound)

Finally, action plans should be achievable in the context of work demands. Action plans should not contain more items than the learner can handle without undue delay or creating problems at work. If the action list appears to be too complex or long, items should be scheduled for progressive introduction, when prior items have been completed.

### Personal Action Plan

#### Action plan item how to implement when

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

(Continue on a separate sheet if necessary)

### Action Plan Implementation Aid

Complete this sheet for each item included on the action plan:

1. What is the item of learning you intend to implement?
2. By which targets will you measure progress?
3. What barriers might impede your implementation?
4. How will you avoid or negate these barriers?
5. Time: when do you intend to start implementing the item?
6. Time: by when do you intend to complete the implementation of the item?
7. Resources: what resources (people, equipment, extra skills, etc.) will you need to complete the implementation of the item?
8. Benefits: what benefits do you hope will result from your actions (including financials if possible to assess)?
9. Commitment: when will you and your manager meet a) to discuss the implementation of your plan and b) to review the progress of this action?

10. Any other comments (continue on a separate sheet if necessary):

### Reactionnaire 1 (general)

Where scoring number ranges are given, circle the number that you feel most closely represents your views.

1. To what extent do you feel your personal learning objectives have been achieved?

<i>Fully</i>	<b>6 5 4 3 2 1</b>	<i>Not at all</i>
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2. Which of your personal objectives were not achieved, and why?

3. Which parts of the event do you feel will be most useful back at work?

4. Which parts of the event do you feel will be least useful, or not at all useful back at work?

5. Are there any subjects you would have liked to be included?

6. To make way for any additional material what would you omit?

7. How would you rate the programme overall

<i>Very useful</i>	<b>6 5 4 3 2 1</b>	<i>Little use</i>
<i>Very interesting</i>	<b>6 5 4 3 2 1</b>	<i>Of little interest</i>

Please state fully why you have given the above ratings.

### Reactionnaire 2 (specific)

#### Training location/hotel/accommodation/travel

This reactionnaire can be used as a model to customise your own, based on the specific areas on which you wish to obtain the learners' views - eg., administration, accommodation, training facilities, etc.

Circle the score nearest to your views.

bedroom comfort

<i>Good</i>	<b>6 5 4 3 2 1</b>	<i>Poor</i>
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Why have you given this score?

bedroom facilities

<i>Good</i>	<b>6 5 4 3 2 1</b>	<i>Poor</i>
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Why have you given this score?

food quality

<i>Good</i>	<b>6 5 4 3 2 1</b>	<i>Poor</i>
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Why have you given this score?

training accommodation - seating comfort

<i>Good</i>	<b>6 5 4 3 2 1</b>	<i>Poor</i>
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Why have you given this score?

training accommodation - facilities

<i>Good</i>	<b>6 5 4 3 2 1</b>	<i>Poor</i>
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Why have you given this score?

training location - ease of travel

<i>Good</i>	<b>6 5 4 3 2 1</b>	<i>Poor</i>
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Why have you given this score?

other: .....

<i>Good</i>	<b>6 5 4 3 2 1</b>	<i>Poor</i>
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Why have you given this score?

Any other comments:

### Reactionnaire 3 (general)

Comments are required as well as scores please.

For every item place an 'X' in the scoring box that most closely represents how you feel about the programme. Also, please comment briefly on each item about your reasons for giving this score, particularly if your ratings are 3, 2 or 1.

<i>Stimulating</i>	<b>6 5 4 3 2 1</b>	<i>Boring</i>
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Please comment briefly why you have given this rating

<i>Useful for my work</i>	<b>6 5 4 3 2 1</b>	<i>Useless</i>
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Please comment briefly why you have given this rating

<i>Relevant to my work</i>	<b>6 5 4 3 2 1</b>	<i>Irrelevant</i>
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Please comment briefly why you have given this rating

<i>Good discussions</i>	<b>6 5 4 3 2 1</b>	<i>Limited discussions</i>
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Please comment briefly why you have given this rating

<i>Flexible structure</i>	<b>6 5 4 3 2 1</b>	<i>Rigid structure</i>
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Please comment briefly why you have given this rating

<i>Well conducted</i>	<b>6 5 4 3 2 1</b>	<i>Poorly conducted</i>
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Please comment briefly why you have given this rating

<i>Demanding</i>	<b>6 5 4 3 2 1</b>	<i>Undemanding</i>
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Please comment briefly why you have given this rating

<i>Challenging</i>	<b>6 5 4 3 2 1</b>	<i>Patronizing</i>
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Please comment briefly why you have given this rating

<i>Well spaced out</i>	<b>6 5 4 3 2 1</b>	<i>Too condensed</i>
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Please comment briefly why you have given this rating

<i>Good use of time</i>	<b>6 5 4 3 2 1</b>	<i>Poor use of time</i>
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Please comment briefly why you have given this rating

<i>Good level of activity</i>	<b>6 5 4 3 2 1</b>	<i>Poor level of activity</i>
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Please comment briefly why you have given this rating

<i>My objectives achieved</i>	<b>6 5 4 3 2 1</b>	<i>My objectives not achieved</i>
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Please comment briefly why you have given this rating

I would recommend the programme to my colleagues Yes No

Any other comments:

### Reactionnaire 4 (general - detailed)

Please comment as fully as possible on all relevant items and where scoring ranges are given, circle the score that most closely represents your views.

general

1. To what extent have the objectives of the programme been achieved?



**Fully 6 5 4 3 2 1 Not at all**

If you have scored 3, 2 or 1, please comment why you have given this rating.

2. To what extent have your personal objectives for attending the programme been achieved?

**Fully 6 5 4 3 2 1 Not at all**

If you have scored 3, 2 or 1, please comment why you have given this rating.

3. To what extent has your understanding of the subject improved or increased as a result of the programme?

**A lot 6 5 4 3 2 1 Little**

If you have scored 3, 2 or 1, please comment why you have given this rating.

4. To what extent have your skills in the subject of the programme improved or increased as a result of the programme?

**A lot 6 5 4 3 2 1 Little**

If you have scored 3, 2 or 1, please comment why you have given this rating.

5. To what extent has the programme helped to enhance your appreciation and understanding of your job as a whole?

**A lot 6 5 4 3 2 1 Little**

If you have scored 3, 2 or 1, please comment why you have given this rating.

6. What is your overall rating of this programme?

**Excellent 6 5 4 3 2 1 Poor**

Make any comments on your ratings that you feel will be of help to the designers of this programme.

7. To what extent would you recommend others with similar needs to your own to attend this programme?

**Fully 6 5 4 3 2 1 Not at all**

### Programme Administration

8. To what extent was material necessary to the programme provided to you prior to the programme?
9. What was the level of the instructions given to you to, a) attend the programme, b) complete pre-programme material, c) bring relevant material with you to the programme, d) travel to the training location?

**a) Excellent 6 5 4 3 2 1 Poor**

**b) Excellent 6 5 4 3 2 1 Poor**

**c) Excellent 6 5 4 3 2 1 Poor**

**d) Excellent 6 5 4 3 2 1 Poor**

Please make any comments you feel would help the designers and administrators of this programme.

10. Did you think that the number of participants on the course was

**Too few Just right Too many**

### Trainer Evaluation

11. Please rate each trainer by placing his/her initials under the relevant score and for each aspect, from (a) to (f).

### Very Good Not very Not effective effective effective

- a. Knowledge of subject 4 3 2 1  
b. Organization of sessions 4 3 2 1  
c. Obvious preparation 4 3 2 1  
d. Style and delivery 4 3 2 1  
e. Responsiveness to group 4 3 2 1  
f. Producing a good learning climate 4 3 2 1

Any other comments:

### Balance of Programme

12. How do you rate the balance between input sessions, activities, discussions, and videos?

**Good balance 6 5 4 3 2 1 Poor balance**

Why do you give this rating?

13. How did you feel about the length of the programme?

**Too short Just right Too long**

14. To what extent was the programme logically sequenced?

**Well sequenced 6 5 4 3 2 1 Poorly sequenced**

In what way?

15. How did you feel about the pacing of the programme?

**Too short Just right Too long**

16. How effective were the practical activities?

**Very effective 6 5 4 3 2 1 Ineffective**

Why do you give this rating?

17. What was the level of time given for (a) the activities and (b) the follow-up discussion?

**a) Sufficient 6 5 4 3 2 1 Insufficient**

**b) Sufficient 6 5 4 3 2 1 Insufficient**

What level of time would you like to have seen?

18. How knowledgeable and/or experienced are you in the techniques and approaches of training?

**Very 6 5 4 3 2 1 Not at all**

In what way?

### Programme Content

19. What did you like best about the programme?
20. What did you like least about the programme?
21. What did you learn from the programme?
22. What did you not learn from the programme that you were expecting to learn?
23. What do you think should be added to the programme?
24. What do you think should be dropped from the programme?
25. To what extent did the programme duplicate what you had learned previously?
26. What are your views on the handouts issued?

Excellent quality 6 | 5 4 3 2 1 Poor quality |

Too many Just right Too few

Very relevant Satisfactory Not at all relevant

Any comments on the above ratings?

27. What are your views on the visual aids used?

OHP/Powerpoint slides:

Excellent quality 6 | 5 4 3 2 1 Poor quality |

Too many Just right Too few

Well used 6 | 5 4 3 2 1 Badly used |

Flipchart:

Excellent quality 6 | 5 4 3 2 1 Poor quality |

Too many Just right Too few

Well used 6 | 5 4 3 2 1 Badly used |

#### Training Location

27. How do you rate the training establishment?

Excellent 6 | 5 4 3 2 1 Poor |

If you have rated 3, 2 or 1, please state why.

28. How do you rate the training accommodation (training room, etc)?

Excellent 6 | 5 4 3 2 1 Poor |

29. How do you rate the service (breaks, refreshments, meals, etc)?

Excellent 6 | 5 4 3 2 1 Poor |

#### Post-Training

30. Has a post-training debriefing meeting been arranged with your line manager?

Yes No

31. If 'No', will you have a post-training debriefing with your line manager?

Yes Don't know No

32. To what extent will you be helped to implement your Action Plans: (a) by your line manager (b) by your colleagues?

A lot | 6 5 4 3 2 1 | Not at all

A lot | 6 5 4 3 2 1 | Not at all

33. If your line manager does not perform post-programme reviews and follow-up of your action plans, do you agree that the Training Department can contact you for this purpose?

Yes No Don't know

34. Are there any other comments about the training programme that have not been covered and that you would like to make?

#### Points to Ponder

### IS MEASURING SOFT SKILL TRAINING REALLY POSSIBLE

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#### Agenda

- What are "Soft-Skills"?
- Who Needs Soft-Skills Training?
- Why Measure Soft-Skills Training?
- Why do Organizations Implement Soft-Skills?
- Developing Objectives for Soft-Skills Programs
- Techniques for Measuring Soft-Skills Training
- Using Soft-Skills Metrics

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What are “Soft-Skills”?

Five categories...

- Behavioral Development
- Professional Development
- Company Specific
- Compliance
- Job/Task Specific

## What are “Soft-Skills”?

### Professional Development

Required for an individual to obtain or maintain a professional certification or accreditation

Examples Include...

- Project Management Professional®
- Certified Public Accountant
- Legal

## What are “Soft-Skills”?

### Behavioral Development

Designed to improve or enhance the underlying social behaviors and influencing capabilities of the participants

Examples Include...

- Leadership Development
- Teamwork
- Coaching Employees
- Change Management

## What are “Soft-Skills”?

### Company Specific

Feature company specific information, policies and/or procedures

Examples Include...

- HR Policies & Procedures
- Employee Orientation

## What are “Soft-Skills”?






















### Compliance

Designed to help employers become legally compliant with various legislated safety or work environment standards

Examples Include...

- Sexual Harassment
- Office Ergonomics
- Lockout/Tagout

## Who Needs Soft-Skills?

Job Role	Example	Behavioral Development	Professional Development	Company Specific	Compliance	Job/Task Specific
Executive	Vice President					
Middle Management	Department Manager					
Supervisory	Team Leader					
Individual Contributor	Programmer					
Professional	Accountant					

## What are “Soft-Skills”?

### Job/Task Specific

Relate to the actual performance of a specific task or job function that is a fundamental component of the employee’s responsibilities.

Examples Include...

- Entering purchase orders
- Responding to a customer call or inquiry
- Assembling product

## Why Measure Soft-Skills Training?

### Three Basic Questions-

1. Is the training effective in transferring the knowledge and competency as intended?
2. Are the outcomes of training, relevant to the needs of the organization?
3. Are the costs of the program worth the competencies obtained?

## Why do Organizations Implement Soft-Skills?

- Employee & Management Development
- Certification of Employees
- Legal/Regulatory
- Productivity & Competency
- Communicate Policies & Procedures

## Developing Program Objectives for Soft-Skills Training

- Achievable
- An outcome that is realistically attainable through training
- Cost Centric
- Address the training costs to some extent, both direct and indirect
- Time Bound
- Should also include timeline or schedule for achieving the outcome

## Developing Program Objectives for Soft-Skills Training

- Strategically Relevant
- Grounded in the ultimate values & mission of the organization it serves
- Outcome Focused
- Focused on the end-result of training, not the training itself
- Measurable
- Objectives should have some quantifiable attributes

## Measuring Soft-Skills

### Kirkpatrick Model, 1950s

- Level 1 – Reaction
- Level 2 – Learning
- Level 3 – Behavior
- Level 4 – Results
- Level 5 – Benefit
  - Level 5 added by Phillips, Pulliam-Phillips and Zuniga

## Measuring – Kirkpatrick Model

### Level 1: Reaction

A measure of how students react to aspects of a training program.

Examples Include...

- *Rating of instructor effectiveness*
- *Adequacy of training facilities*
- *Quality of audio & video signals*

## Measuring – Kirkpatrick Model

### Level 3: Behavior

A measure to the extent to which there has been a change in behavior due to participation in a program

Examples Include...

- *Surveys of supervisory or subordinate personnel or on-the-job observations*

## Measuring – Kirkpatrick Model

### Level 2: Learning

A measure of how much a student increased knowledge, improved a skill, or changed an attitude.

Examples Include...

- *Measures of performance on a written test or a hands-on assessment of skill, each compared to a before-training baseline*

## Measuring – Kirkpatrick Model

### Level 4: Results

A measure of the final results that occurred due to participation in a program

Examples Include...

- *New business (in terms of dollars) and/or clients secured in a consulting business as a result of employee certification from training*
- *Reduced fines and/or litigation as a result of compliance or safety training*

## Measuring – Kirkpatrick Model

### Level 5: Benefit

Compare the results of the training to the costs of the training  
(2000, Phillips, Pulliam-Phillips and Zuniga)

Examples Include...

- *New business (in terms of dollars) and/or clients secured in a consulting business as a result of employee certification from training, less direct and indirect costs of the program*
- *Reduced fines and/or litigation as a result of compliance or safety training, less direct and indirect costs of the program*

## Performance Against the Program's Objectives

Given this objective-

*The outcome of the XYZ program is to enable 90% of the participants to obtain their XYZ certification within six months of the completion of training at a cost of \$1,000 per participant.*

Guidelines	Related Metric
<b>Achievable</b>	<ul style="list-style-type: none"> <li>• Is obtaining the XYZ certification attainable within six months of training? Has this changed since the program's inception?</li> </ul>
<b>Cost Centric</b>	<ul style="list-style-type: none"> <li>• What is the cost per participant in terms of both direct and indirect costs? Is this inline with the program's objective?</li> </ul>
<b>Time Bound</b>	<ul style="list-style-type: none"> <li>• How long after training do participants obtain their certification? Is this inline with the program's objective?</li> </ul>

## Performance Against the Program's Objectives

Given this objective-

*The outcome of the XYZ program is to enable 90% of the participants to obtain their XYZ certification within six months of the completion of training at a cost of \$1,000 per participant.*

Guidelines	Related Metric
<b>Strategically Relevant</b>	<ul style="list-style-type: none"> <li>• Is the XYZ certification still relevant to the ultimate strategy of the organization?</li> </ul>
<b>Outcome Focused</b>	<ul style="list-style-type: none"> <li>• Are the participants leaving training with enough knowledge to sit for the XYZ certification exam? (Kirkpatrick Level 2)</li> </ul>
<b>Measurable</b>	<ul style="list-style-type: none"> <li>• What percentage of the participants has obtained their certification? Is this consistent with the objective of 90%?</li> </ul>

## Monitoring & Controlling the Program

<b>Periodic Reporting</b>	<ul style="list-style-type: none"> <li>• Maintain a periodic and systematic reporting process. These reports may include key metrics based on the program's objectives, the Kirkpatrick-Phillips framework or a combination of both.</li> </ul>
<b>Periodic Evaluation of Program Objectives</b>	<ul style="list-style-type: none"> <li>• Review the program's objectives periodically to ensure that they still consistent with the needs and expectations of the organization.</li> </ul>
<b>Rely on the Facts</b>	<ul style="list-style-type: none"> <li>• Use the metrics as the basis for change, rather than anecdote or perception.</li> </ul>

## •Is Measuring Soft-Skills Training Really Possible?

*Although the outcomes of soft-skills training can be intangible or subjective...*

*...Measurement is indeed possible through the careful development of focused objectives and metrics.*



## LESSON 31

### EVALUATING TRAINING STAFF

Friends,

In previous units you have been explained about the training and development procedures. In this unit you have got exposure towards evaluation of training and development, which is the last step for training procedure.

After reading this lesson you will be able to

1. explain criteria for training staff evaluation
2. Design evaluation for training staff
3. conduct evaluation for training staff
4. help in improving the key areas of training staff performance

#### **Evaluating Effectiveness of Training of Workers, Administrators, Trainers, Managers, Technicians**

Evaluation of training, as has been discussed in the earlier chapters is a process which can be made simple by clearly answering the 'what', 'when', 'who' and 'how' of evaluation. The whole thing looks complex when something is measured to evaluate something else. For example we tend to evaluate the trainer whenever we talk of classroom training. But if the training manager has failed to choose the right inputs, he is looking at the wrong things by evaluating the trainer. The best trainer available cannot train employees if the inputs do not deal with their deficiency on the job (input evaluation). By the same token, we cannot expect the best trainer to help improve the organisation if the wrong set of people are selected for training (context evaluation). So part of the evaluation has to do with the training organisation's skill in selecting the inputs, setting specific objectives and getting the right set of trainees to the training. Even then, we may evaluate the wrong thing. We may watch the trainer in action and decide that he is doing a good job because there is lot of action, movement and variety. The concerned faculty may be a good performer, he does not lean on the podium, does not talk while facing the board, and gets lot of eye contact (good lecture skills). We have to remember that we are looking for is not a good public speaker, but a good facilitator of learning. So the characteristics of a good learning situation are: accountability, feedback and involvement which helps us evaluate whether the trainer is doing his job properly. Whatever be the trainee group, it is important to identify the characteristics of its learning-training situation. Once this has been identified the evaluator is left to use the appropriate evaluation model. There are a few options:

1. Borrowing the model off-the-shelf from those presented in this book or other published/available literature;
2. Hire the services of consultant specialists to develop the evaluation model exclusively for your needs;
3. Train your own personnel in developing the model internally;

4. Combine the first two options by using specialists' services to develop the model while concurrently training some of your own personnel for gradual take over of the task.

Each of these has its advantages and disadvantages. While borrowing the ready model is easy it may be too general to meet the requirements of a particular situation. Unless the expertise is available within, the evaluators may not be able to adapt the available model.

But if the expertise is available it is advantageous to develop one's own model so that there is internal control on the strategy, techniques and cost of evaluation. Besides, the skills and expertise developed within become part of the resources for the organisation and can be generalized for use in other types of training and target groups.

The skeleton required for developing one's own model is provided in this chapter. The trainer has to fill in the gaps by information relevant and required for each category of trainees (Administrators or workers or managers or trainers or technicals). Depending on the availability of time, expertise and resources one can pick and choose the levels, techniques and strategies to suit one's requirements. The user should nevertheless be aware of what they are sacrificing in terms of quality of evaluation for want of resources of time, in order to optimize results. Wherever essential, examples have been used to elaborate the point. It is assumed that the reader would have carefully read and grasped the preceding chapters to enable indigenisation of the Evaluation Design with ease.

Action steps	TRAINEE GROUP (*) : (1)			
	Workers/ Administrators/Trainers/			
	(W)	(A)	(Tr)	
	Managers/T echnicians		(M)	(TE)

1. What is the Training Purpose in Focus. Is it :
  - i. Orientation Trg. for inducting new recruits \_\_\_\_\_
  - ii. Refreshor Trg = upgrading skills, operations, changes in products/services \_\_\_\_\_
  - iii. Developmental Trg = for projected requirements and higher responsibilities \_\_\_\_\_
  - iv. Diagnostic Trg = to correct deficiencies in Knowledge, skills and attitudes of trainee group \_\_\_\_\_
2. What are the training needs in focus
 

Eg : For W = Safety, Trade, Psychomotor skills  
 A = Policy~orientation/  
 Decision making skills  
 TR = Sensitivity, Communication skills

M = Human Relations, .  
Decision making  
TE= Technical,psychomot of  
skills

### 3. Job~context in Focus

- Functions and major duties
- Scope of authority

W = Very limite

TR =Limited ,!

- Relationship between the position and others at that level in that department!  
functional group

(\*) The initials used in the text are :

W = Workers

A = Administrators

TR = Trainers

M = Managers

TE = Technicians

TRG= Training

1. These are only a few examples and are not exhaustive

- What is/are the statement of the training goals. Are they:

- Practical and realistic
- Clear and Specific
- Stated in unequivocal behavioural terms
- Measurable
- Compatible with company  
Boss's objectives
- Compatible with  
trainees objectives

- Pre-requities for trainees'selection

- Organisational climate in which Premissive Constrained  
trainee has to work after training

- Amount and kind of supervision,  
tools. working aids and  
assistance for trainee  
in performing duties  
and task

- Construction, validation/adaptation of achievement,  
apitude, attitude, diagnostic tests to measure the existing  
level of Knowledge, skills, potential and attitude of the  
trainee group (Are they valid, reliable, objective)

EG		
W	=	trade tests/ manual tests
TE	=	Psychomotor tests
		performance test of
MA	=	work samples
IR	=	objective paper
TR	=	Pencil Test
	=	Socio-psycho test
A	=	Attitudinal test

- Administration of the above test,

When?

Who?

How?

- Criteria of acceptable Performance of the trainee group  
(quality, quantity, *standards*)
- Scoring, analysis and interpretation of test data. is it left in  
qualified hands  
Yes not sure
- Have the curriculum builders been provided with the  
inventory of the abilities of the trainees  
Yes No
- Preparation of training curriculum
- Are the training inputs/competence of training staff  
adequate  
Yes No
- Have the inputs been discussed (in the light of trg and  
trainee objectives) in a committee/group of trg staff  
Yes No  
Training
- What reaction feedback factors are most indicative of  
successful and efficient training
- Are comments being taken at face value  
Yes No
- Are unsupported and un~ validated observantions  
resulting in significant changes  
Yes No
- Are reaction evaluation reports appropriate in content and  
format for the level which will use them  
Yes No
- Are reaction feedback reports timely, self explanatory,  
accurate & fairly objective  
Yes No
- Administration and analysis of achievement performance.  
tests (posttrg data)

Eg. W = Amount of work  
completed

W = Faults recorded  
in work samples

W = Number of accidents

M&A = Problem solving and  
decision making skills

TR = Communication and  
interpersonal skills

TE = Psychomotor tests

W = Versatility of workers

- Analysis of test results (measure of central tendency,  
Variation, reH~ility)

- Me.1Sures of job-performance

- i. Are these measures reliable  
Yes                      No
  - ii. What complementary methods are available?  
Yes                      No
  - iii. Do these measures provide trainers with data needed to improve trg.  
Yes                      No
  - iv. It helps identify groups/ individuals who need close guidance and coaching  
Yes                      No
24. Follow-up methods to assess the outcome of training:
- |                       |   |
|-----------------------|---|
| Indicators of Results | <p><b>For All Categories</b></p> <p>on the Job Live follow-up</p> <p>Written reports of seniors and colleagues</p> <p>questionnaire survey</p> <p>interview observation</p> <p><b>For M</b></p> <p>Absenteeism</p> <p>Labour turnover</p> <p>Number of grievances</p> <p><b>For M &amp; A &amp; TR</b></p> <p>Human Relations</p> <p>financial Savings</p> <p><b>For TE</b></p> <p>Output,</p> <p>learning time</p> |
|-----------------------|---|
25. Special analysis made of cases of Trainee failure  
Yes                      No

Full written evaluation and reports of the total training system including choice of tests, statistics used, conclusions and recommendations for revision and further development for next training are prepared and distributed to all concerned.

The trainer is thus provided with a checklist to choose from, and fill up the gaps on the right side of the format depending on the category for which evaluation is meant. A good evaluator does not stop there but carry out an Evaluation Audit to check how scientific is the evaluation data.

### Evaluation Audit

1. Are procedures established for continual evaluation and quality control of training even if you are not present 01\ the training scene?
2. Is evaluation focussing on results rather than on the effort expended in conducting training?
3. Is evaluation comprehensive enough to cover methods, trainees progress and attitudes, degree of job behaviour change, knowledge gained and its impact on the group and the organisation as a whole?
4. Is collection of data and interpretation of results done by personnel qualified for the job?

5. Are evaluators trained in the techniques of observation and interview?
6. Is evaluation an orderly and flexible process?
7. Is evaluation specific and not vague?
8. Is evaluation an aid to future planning, is it directive and constructive and not conclusive?
9. Do trainees participate in the evaluation of their own progress?
10. Are evaluation procedures reviewed and revised periodically?
11. Are tests/examinations used derived from training objectives and are consistent with the coverage of inputs?
12. Are other methods like observation, ratings, opinion survey, interviews used to supplement tests? .
13. Are scoring, grading and reporting practices standardized, economical, practical, acceptable (SEPA).
14. Are the results used to interpret:
  - quality of instructional system;
  - to estimate effectiveness of the tests in measuring trainee achievement;
  - to provide to trainers with data needed to improve the training;
  - to identify group/individual who need close guidance and coaching.
15. Is the whole evaluation exercise worth the time, money and effort.

The chapter concludes with an elaborate summary of Evaluation of the training department.

## Evaluating Training-staff Performance

It is necessary to make a distinction between evaluating the performance of an individual trainer and evaluating the total performance of the staff and the training department. The reputation of the department will be established in part by the contributions of individual members, but the means of evaluation employed will be different.

### 1.Evaluating the Individual

There are several ways to measure a trainer's performance and contributions. These are based on Various factors: the trainer's performance, economic impact on the organization, and internal and external reputation.

- a. Job descriptions of the trainer should contain accountabilities as standards of effective performance :The total of all accountabilities should be the umbrella under which specific responsibilities of the role fall. When responsibilities are grouped under a common accountability and standards are identified for satisfactory performance, the measurement of performance against accountabilities becomes the first means of evaluation.
- b. Ideally, the training function could be managed under some version of management by objectives. All staff members and supervisors set Key Result Areas against which performance is measured. objectives should include the standards of acceptable accomplishment. By reviewing performance throughout the time frame of the objectives

- c. A third basis of measurement is the economic impact the trainer makes on the organization. Is the value of the training solutions designed and implemented greater than the cost? This evaluation is possible only if the trainer is making decisions about expending time and other resources on the basis of economic payoff for the organization. One would hope that this will be true the majority of the time.
- d. The impact of the trainer's activities on solving human performance problems also provides a means of evaluation. Here again change brought about through the trainer's interventions would be the measurement of his or her contribution. Even though a change may not be measurable in economic terms, there should be few trainer activities performed that cannot be measured in terms of some quantifiable change they have brought about: for example new skills learned, a problem solved, a new system set up and running efficiently, fewer grievances, less scrap, or fewer errors or orders entering the system.
- e. A fifth basis of measurement is the reputation the trainer has earned within the organization. Elements of this reputation include comments by line managers about the trainer or the results of training. The frequency and volume of requests for the trainer's services are a measure of worth, particularly if requests for solutions to different problems come repeatedly from the same part of the organization.
- f. Last, external reputation is a measure of trainer performance. Has the trainer been asked to hold office, chair committees, or appear on programs for professional organizations? Is he or she asked to speak, conduct seminars, or write articles? Does he continuously engage in research to improve his performance? Do people volunteer comments about the individual's innovations or worth? Admittedly, these are more a measure of the trainer's visibility and marketability than of performance on the job, but there is usually a definite, positive correlation.

There are four distinct elements that can be measured when evaluating the performance of a department. The first is the accomplishment of departmental objectives. Were they achieved? Within the budget? Using appropriate response time? If specific projects and objectives have been planned, departmental performance in relation to them is a very objective means of evaluation. The source of such information could be the upper management that training reports to, the line organization it serves, or both. This evaluation is activity-based only.

results of each project, program, or activity and making comparisons with the department's total training budget will yield the department's evaluation; Training should not cost an organization anything. The results of its activities should be worth more than the cost of staffing and running it.

Fourth, the department's reputation and the budget request trend can be evaluated. Does top management think the department is performing a valuable role? Is the training department asked for opinions about solutions to specific problems? Is it brought in at the discussion stage, or is it told what solution it should implement? Are the training department's staffing requests approved? Is the requested budget approved? Are facilities and location adequate? These are all indicators of the organization's evaluation of the worth of the department's performance.

[illegible]

## LESSON 32

### ASSESSING THE ROI OF TRAINING

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Friends,

**As rightly said If people really are your greatest asset, isn't it time to look at your training programmes as investments in your organisation's human capital and not just as an expense?**

In this Lesson we are going to scan through the cost effectiveness of training or the returns offered from training.

We will quickly review the argument the case for return on investment (ROI) as a primary tool for forecasting and evaluating the benefits of training and understand the steps involved in conducting an ROI analysis.

#### **A Note About ROI (Return on Investment) in Training**

Attempting financial ROI assessment of training is a controversial issue. It's a difficult task to do in absolute terms due to the many aspects to be taken into account, some of which are very difficult to quantify at all, let alone to define in precise financial terms. Investment - the cost - in training may be easier to identify, but the benefits - the return - are notoriously tricky to pin down. What value do you place on improved morale? Reduced stress levels? Longer careers? Better qualified staff? Improved time management? All of these can be benefits - returns - on training investment. Attaching a value and relating this to a single cause, ie, training, is often impossible. At best therefore, many training ROI assessments are necessarily 'best estimates'.

If ROI-type measures are required in areas where reliable financial assessment is not possible, it's advisable to agree a 'best possible' approach, or a 'notional indicator' **and then ensure this is used consistently from occasion to occasion**, year on year, course to course, allowing at least a comparison of like with like to be made, and trends to be spotted, even if financial data is not absolutely accurate.

In the absence of absolutely quantifiable data, find something that will provide a useful if notional indication. For example, after training sales people, the **increased number and value of new sales made** is an indicator of sorts. After motivational or team-building training, **reduced absentee rates** would be an expected output. After an extensive management development programme, the **increase in internal management promotions** would be a measurable return. Find something to measure, rather than say it can't be done at all, but be pragmatic and limit the time and resource spent according to the accuracy and reliability of the input and output data. Also, refer to the very original Training Needs Analysis that prompted the training itself - what were the business performance factors that the training sought to improve? Use these original drivers to measure and relate to organizational return achieved.

The problems in assessing ROI are more challenging in public and non-profit-making organizations - government depart-

ments, charities, voluntary bodies, etc. ROI assessment in these environments can be so difficult as to be insurmountable, so that the organization remains satisfied with general approximations or vague comparisons, or accepts wider forms of justification for the training without invoking detailed costing.

None of this is to say that cost- and value-effectiveness assessment should not be attempted. At the very least, direct costs must be controlled within agreed budgets, and if it is possible, attempts at more detailed returns should be made.

It may be of some consolation to know that Jack Philips, an American ROI 'guru', recently commented about training ROI: "Organisations should be considering implementing ROI impact studies very selectively on only 5 to 10 per cent of their training programme, otherwise it becomes incredibly expensive and resource intensive."

#### **To understand ROI the Lesson will covers following Contents in detail**

- Measuring the success of training
- Forecasting and measuring costs
- Forecasting and measuring benefits
- Calculating return on investment
- Making ROI work for you

#### **Measuring the Success of Training**

The evaluation of training, like motherhood and apple pie, is inherently a good thing. But, because short term priorities always crowd out their longer term competitors, it's typically something we plan to do better next year - after all, we've got away with it so far, so another year won't hurt!

And even if training evaluation is undertaken, it is usually at the easiest and lowest level - the measurement of student reactions through happy sheets. Reactions are important and the happy sheets serve a purpose, but will they be enough to back up your arguments when there is a need for a greater investment in training, when major changes need to be made in direction, when there is stiffer competition for resources, when times get tough?

#### **Why Evaluate Training?**

Let's summarise the main arguments for better evaluation of training:

##### **To validate training as a business tool**

Training is one of many actions that an organisation can take to improve its performance and profitability. Only if training is properly evaluated can it be compared against these other methods and expect, therefore, to be selected either in preference to or in combination with other methods.

##### **To justify the costs incurred in training**

We all know that when money is tight, training budgets are amongst the first to be sacrificed. Only by thorough, quantitative analysis can training departments make the case necessary to resist these cuts.

### **To help improve the design of training**

Training programmes should be continuously improved to provide better value and increased benefits for an organisation. Without formal evaluation, the basis for changes can only be subjective.

### **To help in selecting training methods**

These days there are many alternative approaches available to training departments, including a variety of classroom, on-job and self-study methods. Using comparative evaluation techniques, organisations can make rational decisions about the methods to employ.

### **Criteria for Measuring Training Success**

The form of evaluation that we undertake is determined by the criteria that we choose, or are told to use, to measure success:

#### **Numbers**

One way of measuring the success of training is the good old 'bums on seats'. Although by no means a true measure of the effectiveness of training, student numbers do reflect the fact that the training is addressing a need and that the design and methodology is meeting expectations.

#### **Direct cost**

Direct costs are those costs that are incurred directly as a result of a training programme – external design and development, consultancy fees, travel expenses and so on. If the programme did not take place, these costs would not be incurred. Many organisations only ever take direct costs into consideration when measuring training costs.

#### **Indirect cost**

Indirect costs are costs that may or may not be directly associated with a training event, but which would have been incurred anyway, whether or not the training took place. Examples are salaries of in-house trainers and students and the costs of rooms and equipment. Any analysis of the true costs of training will include both direct and indirect costs.

#### **Efficiency**

Efficiency is a measure of the amount of learning achieved relative to the amount of effort put in. In practical terms this means the amount of time it takes to complete a piece of training. Efficiency has a direct relation to cost – the more efficient a training method is, the less it will cost.

#### **Performance to schedule**

Sometimes with a training programme, 'time is of the essence' – the training needs to be completed by a given date if a particular business objective is to be achieved. In these situations, the extent to which a training programme performs to schedule is a critical measure of success.

#### **Income received**

If you are a training provider operating externally to a client organisation, then income received is a vital measure of your success. It's the financial equivalent of 'bums on seats' – the more courses you run or places you fill, the greater the benefit. Some internal training providers may also cross-charge their clients, although, because this correspondingly increases the cost to the organisation, this is not regarded as a benefit when assessing return on investment.

### **The extent to which trainees mix**

A justification often made for training, particularly group events, is that it provides an opportunity for students who work in different departments or regions to meet with each other, share experiences and make contacts. Because this is a valued outcome of training, it needs to be considered when comparing training methods. Similarly, some training may be regarded as a perk, a benefit of some value, even if this is not directly related to learning.

#### **Reactions**

Reactions are what you measure with the 'happy sheet'.

Reactions are important because, if students react negatively to your courses, they are less likely to transfer what they learned to their work and more likely to give bad reports to their peers, leading in turn to lower student numbers.

#### **Learning**

Learning, in terms of new or improved skills, knowledge and attitudes, is the primary aim of a training event. Learning can be measured objectively using a test or exam or some form of assessed exercise. If a student has to achieve a certain level of learning to obtain a 'pass mark', then the number of passes may be used as an evaluation measure. Another important aspect of learning is the degree of retention – how much of the learning has stuck after the course is over.

#### **Behaviour change**

If a student has learned something from a course, you hope that this will be reflected in their behaviour on the job. If a student employs what they have learned appropriately, then their work behaviour will meet desired criteria. Behaviour can be measured through observation or, in some cases, through some automated means. To assess behaviour change requires that the measurements are taken before and after the training.

#### **Performance change**

If, as a result of training, students are using appropriate behaviours on the job, then you would expect that to have a positive impact on performance. A wide variety of indicators can be employed to measure the impact of training on performance – numbers of complaints, sales made, output per hour and so on. It is hard to be sure that it is training that has made the difference without making comparisons to a control group – a group of employees who have not been through the training.

#### **Return on Investment as a Measure**

Return on investment (ROI) is a measure of the monetary benefits obtained by an organisation over a specified time period in return for a given investment in a training programme. Looking at it another way, ROI is the extent to which the benefits (outputs) of training exceed the costs (inputs).

ROI can be used both to justify a planned investment and to evaluate the extent to which the desired return was achieved. However, it can not measure all aspects of training success:

- whether students liked the training or not
- the numbers of students participating in the training
- the extent to which students' personal objectives were achieved

## The Process of Calculating ROI

To calculate ROI you must first make estimates or obtain measurements of the costs and benefits associated with a training programme. As you will see, the calculation of ROI is then a relatively simple process. Let's start with the costs ...

Forecasting and measuring costs

### Design and Development Costs

The first category of cost to be considered is the design and development of the training programme, whether this comprises classroom events, self-study materials, simple coaching sessions or some combination. You will need to consider:

- internal days of design and development
- costs of external designers and developers
- other direct design and development costs (purchase of copyrights, travel, expenses, etc.)
- outright purchase of off-the-shelf materials

### Promotional Costs

Most organisations devote effort to promoting their training programmes. This second category takes promotional costs into account:

- internal days of promotional activity
- costs of external agencies
- other direct costs of promotion (posters, brochures, etc.)

### Administration Costs

An allowance must be made for the time taken by the training department in administering the training programme. This will typically be a factor of the number of students:

- hours of administration required per student
- direct administration costs per student (joining materials, registration fees, etc.)

### Faculty Costs

The next category of costs relates to the delivery of the training, whether this is mediated by faculty (tutors, instructors, coaches, etc.) or is self-administered (workbooks, CBT, online training, etc.). Let's start with the information needed to calculate faculty costs:

- the number of students who will be going through the programme
- hours of group training (whether classroom-based or delivered in real time, online)
- hours of one-to-one training (typically face-to-face, but could conceivably be conducted by telephone, video conferencing link or in real-time, online)
- hours of self-study training
- additional faculty hours (preparation time, the time needed to review or mark submitted work or the time needed to correspond by email or bulletin boards with online students)
- faculty expenses (travel, accommodation, subsistence, etc.).

### Material

Then there's the cost of materials:

- cost per student of training materials (books, manuals, consumables, etc.)
- license cost per student for use off-the-shelf materials

### Facilities

You will also need to allow for the cost of your training facilities, whether these are internal or external. Make sure to include the rental or notional internal cost of the following:

- training rooms
- open learning / self-study rooms
- equipment used

### Student Costs

Probably the most significant delivery cost relates to the students themselves. It is only necessary to charge a student's cost against the programme if training is undertaken in time that would otherwise be productive and paid for, so you only need to estimate the amount of travel and training that is undertaken in productive work time, i.e. not in slack time, breaks or outside work hours.

When an employee goes through a training programme in work time, the organisation is not only having to pay that person's payroll costs, they are also losing the opportunity for that person to add value to the organisation. When a salesperson is on a course, they are not bringing in new business. Similarly, a production line worker is not creating products, a researcher is not developing new ideas and an accountant is not finding ways to save money.

If an employee can be easily replaced while they are undergoing training, then there is no lost opportunity – the cost is simply the employee's payroll costs. In many cases, however, it is simply not practical to obtain a suitable replacement, so the output that the employee would have generated in the time that they are receiving training will be lost. In this case, the true cost of the employee being trained is the lost opportunity – the 'opportunity cost'. The calculation of opportunity costs goes beyond the scope of this article, but, suffice to say, they are greater than an employee's payroll costs and need to be considered in any serious evaluation of costs.

Finally, don't forget to include any direct student expenses - travel, accommodation and subsistence.

### Evaluation costs

You also need to make an allowance for the time spent evaluating the training, whether this is an ROI analysis or some other method.

### Forecasting and measuring benefits

The financial benefits of training can not be measured in terms of student reactions, nor the amount of learning that has been achieved; not even the extent to which behaviour may have changed. The real benefits come from improved performance – traditionally the hardest training outcome to forecast or measure.

So, what do we do when faced with this difficulty – back away and focus our evaluation efforts on easier measures? No, we do the very best we can, because all other measures fail to reflect the financial reality that training must pay off – in hard cash.

If it is any comfort, trainers are not alone in finding it difficult to calculate the benefits of what they do. Is it any easier to predict the benefits to be obtained from launching a new product, running an advertising campaign, initiating a research programme or changing the pay and benefits policy?

Let's look at the major categories of benefits. Note that these categories are not necessarily mutually exclusive - in some respects they provide alternative ways of looking at the same underlying benefit. Because of this, you should be extremely careful not to include the same basic benefit under more than one of these headings.

### Labour savings

Labour savings occur where, as a result of the training, less effort is needed to achieve current levels of output. We have to assume that savings are realised by a reduction in the amount of labour applied to a particular job, not by utilising the newly available time to achieve further output on the same job.

Labour savings will only be realised if the labour applied to a job can really be reduced, whether this comes as a result of redundancies, transfers of staff to new positions or re-allocations of work. If the time savings simply result in more slack, then there is no saving.

Examples of labour savings include:

- reduced duplication of effort
- less time spent correcting mistakes
- faster access to information

### Productivity Increases

Productivity increases occur where, as a result of training, additional output can be achieved with the same level of effort. This implies that the organisation requires or desires more output in this particular area. If it does not, then it might be better to express the benefit as a cost saving.

Examples of productivity increases include:

- improved methodologies reducing the effort required
- higher levels of skill leading to faster work
- higher levels of motivation leading to increased effort

### Other Cost Savings

Cost savings can be achieved in a variety of ways, not just through savings in labour, and this category allows you to take account of these. Examples include:

- fewer machine breakdowns, resulting in lower maintenance costs
- lower staff turnover, reflected in lower recruitment and training costs
- a reduction in bad debts

### Other Income Generation

In some job positions, it may be possible for new income to be generated as a direct result of training. Sometimes this can be satisfactorily recorded as a productivity increase, but there will be times when a more direct and specific analysis is required.

Make sure that you offset from the income any variable costs that are incurred as a result - it is the net contribution that you are looking for.

Examples of other income include:

- a higher success rate in winning competitive pitches, leading to increased sales
- sales referrals made by non-sales staff
- new product ideas leading to successful product launches

### Calculating Return on Investment

Return on investment tells you the percentage return you have made over a specified period as a result of investing in a training programme. On the assumption that benefits will continue to accrue some time after the training, then the period that you specify is critical to the ROI figure you will obtain. You may like to specify a period that fits in well with your organisation's planning cycle - perhaps a year or two years. On the other hand, you may wish to calculate the period to correspond to the lifetime of the benefit, in which case you will need to know how long the average student stays in a position in which they can continue to apply the knowledge and skills being taught.

It is relatively simple to calculate return on investment:

$$\% \text{ ROI} = (\text{benefits} / \text{costs}) \times 100$$

### Payback Period

Another way at looking at ROI, is to calculate how many months it will take before the benefits of the training match the costs and the training pays for itself. This is called the payback period:

$$\text{payback period} = \text{costs} / \text{monthly benefits}$$

Payback period is a powerful measure. If the figure is relatively low - perhaps only a few months - then management will be that much more encouraged to make the training investment. As a measure, it also has the advantage of not requiring an arbitrary benefit period to be specified.

Here's an example of the final results for a ROI analysis:

Duration of training	33 hrs
Estimated student numbers	750
Period over which benefits are calculated	12 months
<b>Costs</b>	<b>Rs.</b>
Design and development	40,930
Promotion	4,744
Administration	12,713
Faculty	86,250
Materials	15,000
Facilities	40,500
Students	553,156
Evaluation	872
<b>Total cost</b>	<b>754,165</b>
<b>Benefits</b>	
Labour savings	241,071
Productivity increases	675,000
Other cost savings	161,250
Other income generation	0
<b>Total benefits</b>	<b>1,077,321</b>
<b>Return on investment</b>	<b>143%</b>
<b>Payback period</b>	<b>8 months</b>



### Simplifying the Process

If you've been following through all of these steps, then you'll have realised just how many calculations are involved in conducting a thorough analysis. What's more, when you start to look at areas such as opportunity costs and productivity benefits, then there are some quite tricky concepts involved as 'Training ROI Calculator'.

### Making ROI Work for you

It has become something of a cliché for senior management to claim that 'people are our greatest asset'. Yet, much to the dismay of trainers, the effort they put in to developing this 'human capital' continues to be seen as an expense and not as an investment. It's time to turn this around. Start to analyse your training programmes as if they were capital investments - using techniques like ROI - and senior management may start to change their attitude to training. And at a time when there are so many exciting new developments in training - not least online learning - and a possible recession ahead, you're going to need their co-operation.

### Cost Effectiveness

Some assessment of the cost effectiveness of training should also be attempted, for its economic justification. This should be done in collaboration with the agencies to help to work out means of comparing the cost of training and its effectiveness. Assessing the cost of training off the job, whether it is carried out within an agency or externally, is not difficult; on the job training costs are not so easily identified but if the true costs of training are to be assessed, an attempt can be made by identifying the elements which make up the cost of training.

Assessing the cost effectiveness of training is practicable in cases where specific skills or techniques have been taught and are immediately put to use. These measures of efficiency will also apply to skill training.

Valuations thus made may then be set against the cost of training, assessed by cost analysis techniques. There are some forms of training which are required on both human and economic grounds, but they should still be subject to analysis to establish the cost.

Methods of measuring participant's progress are:

- i. Observations.
- ii. Simple tools for cross-checks.
- iii. Check list to ensure observance of different aspects of training.
- iv. Rating scales which allow measurement of opinion and feeling.
- v. Content analysis of written and spoken words serves to measure understanding.
- vi. Analysis of simulation sessions indicates the degree of skills with which the participants handle situations.

### Constraints of Evaluation

Despite the fact that an emphasis is now being laid on the importance of evaluation of training, there are built-in constraints in this process. Some of these are:

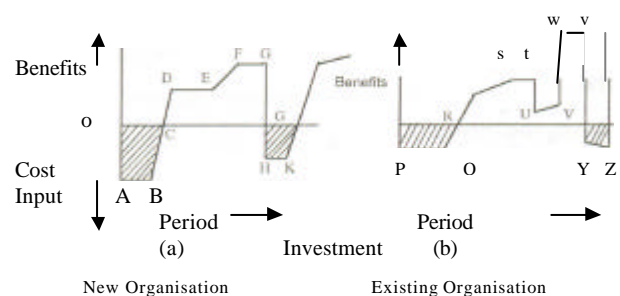
- i. Trainee is in a psychological mood to leave.

- ii. He may be mindful of the problems he is going to face when he goes back home to the same background from which he had come.
- iii. Sometimes reactions of the participants may be influenced by other non-academic considerations such as facilities provided.
- iv. Since it is time for the group to part, they may become emotional.
- v. There are various complex factors the interaction of which complicates the process further.
- vi. There is no foolproof and objective system or tools of evaluation.

The trainers and evaluators have, therefore, to construct their evaluation procedure and tools very carefully and objectively.

### Justification on Investment

The investment on T & D activities is a long term investment which cannot be easily justified. However the contribution of the activities in terms of change achieved and impact on the organisation can be projected in the following graph.



In graph (a) OA represents cost on T & D for new employees for a period of AS, SCD shows the gains to organisation in terms of job performance. By gaining this experience now the employees learn work and therefore the gain and the investment equalises upto DE and so the straight line. EF represents the benefits of the learning by doing experience and FH again learning by doing. After learning has achieved the saturation at G the retraining may perhaps be required which may call for taking away the employees from work place and have only lost & no gain, the GH will show again visible investment & so the gain likewise the cycle goes on repeating. The positive difference between benefits and investment is the only healthy sign for the organization.

In the case of existing/running unit the HRD activities may cost a little as compared to the new establishment i.e. every year budget may be less than the first investment at the start of activities. If we look at the graph (b) we find that OP is the investment which could be for improving skills, knowledge and attitude of managers, supervisors or every other employees QRS shows continuous improvement due to HRD activities and organisational culture improvement and ST shows improvement in experience through learning by doing for a short period of initiated challenges. TU represents the investments on further improving the performance but this may not necessitate the training to be away from his routine duties for longer period and hence the curve is above the datum line. At point X again there may be necessity for retraining or change of job which may cost more to the organisation.

Activity and Assignment

Case

Case. Cost-benefit Analysis of Training Programme

The Chief Personnel Manager, of XYZ Passenger Road Transport Corporation had problems in convincing top management on the desirability of a formal training programme for drivers. The XYZ Passenger Road Transport Corporation is a state owned undertaking. It has depots, workshops in all central places of the State. It runs the buses throughout the state all the 24 hours and 365 days. In case of breakdown of the bus on the road, the driver should not attempt to repair the bus. He should inform the Depot Manager of the nearest depot. The Depot Manager arranges the repairers immediately. Meanwhile, the conductor has to arrange to send the passengers by another bus. It takes at least on full day to bring the bus to the normal condition even I} in case of minor repairs which can normally be done by a driver. Both the driver and the conductor concerned should attend the work during breakdown period. The bus ““ has to go to the destiny without any passengers after repair.

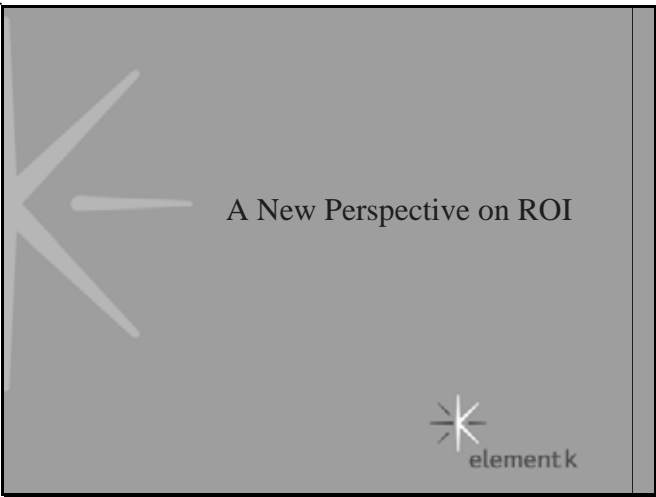
The Chief Personnel Manager has an idea that if the drivers are trained in minor repair activities many of the problems cited above could be avoided; (the cause of . inconvenience to the passengers, the cost of repairs, the cost of breakdown including II the opportunity revenue of the bus, cost of conductors and drivers can be minimised). But the top management has been arguing that if the drivers are asked to do the repair work, they may ask for the wage increase by Rs. 50 per month. The Chief Personnel Manager supplied the following data to the top management to decide upon providing training to drivers:

1. Average number of breakdowns per bus per month:	Major 0.35
	Minor 3.50
2. Average number of days lost per bus per month:	Major 1.25
	Minor 5.75
3. Average number of drivers per bus per month:	2
4. Average cost of driver per month	Rs 1,150
5. Proposed wage increase per driver per month (if the drivers are asked to do minor repair work)	Rs 50
6. Average cost of training per driver during entire service (including cost of absence of driver on duty during training period)	Rs 100
7. Average service of each driver	years 25
8. Average net profit per bus per day	Rs 200
9. Average cost of outstation allowance to driver per day (this should be paid during breakdown period also)	Rs 15
10. Average cost of outstation allowance to conductor per day (this should be paid during breakdown period also)	Rs 15
11. Average number of conductors per bus per month	2
12. Average cost of conductor per month	Rs 1050

Questions

1. Do. the factors seem to justify the training for drivers?
2. Are there any other matters to be considered in making the decision about training? 3. Calculate the cost-benefit analysis of training based on the data supplied by the Chief Personnel Manager.
4. How do you react to the proposal of the Chief Personnel Manager if your were the Managing Director of the Corporation.

Points to Ponder



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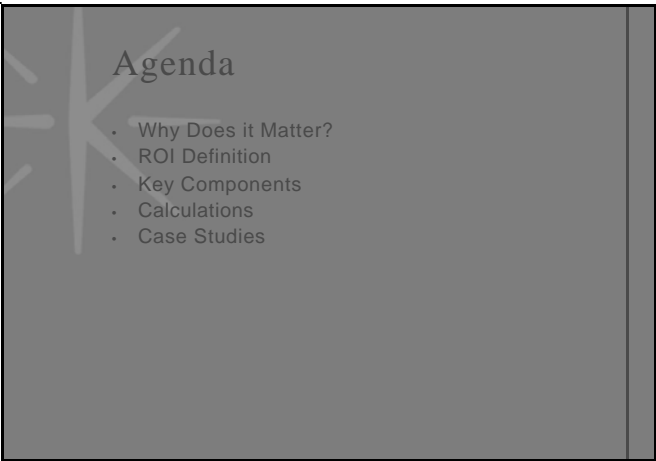
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## Knowledge is Critical

*R*etain

*R*etrain

*R*ecruit

35-45% Turnover Rate

• Client/service IT Shortage

• Data management

• Distribution

• Software

1.3M ('05)

Line 1000

ited lack of

ned workers

rier to

company

Waterhouse Coopers,

Mar. 2000)

40% decrease in  
college  
enrollments for  
technical degrees

## What is ROI?

Return on Investment

"Given an investment of time, money and resources, what is the payoff?"

- $ROI = \text{Revenue} / \text{Financed Capital}$

## Organizational Value of Training

"Extensive and ongoing training and development is second only to stock options as a primary means of attracting and keeping talented workers"

Fortune Magazine 1/11/99  
"100 Best Companies to Work for in America"

"In addition to productivity and cost issues involved, attracting and keeping good workers improves companies' financial standing. Institutional investors are more likely to buy stock in companies with stable, skilled work forces."

Corporate University Review, Mar/Apr '99

## E-learning cost justification

### Hard Dollar Costs

Course Development  
Travel, Hotels, Meals  
Facilities  
Instructor Fees  
Printing, Distribution,  
Storage  
Attrition re-training  
Help desk reduction

### Soft Dollar Costs

Value of Immediacy  
Consistency  
Certification  
Expert job performance  
Increased morale  
Continuous improvement

## Adult Learners

- solve a problem
- develop a skill
- everyone approaches a job with a different level of skills



How quickly we can get them from Point A to Point B  
Directly impacts our bottom line!

## The Investment

Do you believe that ....

- training increases confidence and job satisfaction?
- training decreases undesirable attrition?
- training increases productivity?
- you can train more people for less money faster with e-learning?
- these things will lead to increased profit?

The trick.....  
is defining the tactics to achieve success

## Calculating ROI

Monthly Training Expense Savings		Monthly Time Savings		Monthly Training Miscellaneous Savings	
Cost per Student	\$100.00	Training Coordinator	\$100.00	Savings - Printed Materials	\$150.00
Cost per Student per Year	\$1200.00	Savings - Coordinator	\$ 450.00	Savings - Equipment Rental	\$100.00
Estimated per Student	\$1200.00	Administrative - Marketing	\$ 40.00	Savings - Lunch	\$50.00
Enter Number of Students	15	Savings - Marketing	\$ 60.00	Number of Students	15
Enter Number of Days	3	Equipment - Materials	\$ 20.00	Total Lunch Units	\$75.00
Savings - per Student	\$28,800.00	Savings - Executive	\$ 20.00	Other (Binders, etc)	\$75.00
Total	\$12,000.00	Total Time Savings	\$ 650.00	Total Media Savings	\$400.00
Estimated per day	\$400.00	Total Savings	\$ 650.00		
Enter Number of Days	3	Total Training Expense Savings	\$ 10,350.00		
Savings - per Trainer	\$4,350.00	Total Time Savings	\$ 650.00		
Enter number of Trainers	3	Total Miscellaneous Savings	\$ 400.00		
Total Training Savings	\$30,225.00	Total Savings per Month	\$40,975.00		
		Total Savings per Year	\$ 490,512.00		
		Expenses	\$ 250,000.00		
		ROI in Months	12.40		
		ROI in Years	0.79		
		ROI in Dollars First Year (%)	\$ 490,512.00		

## Project steps

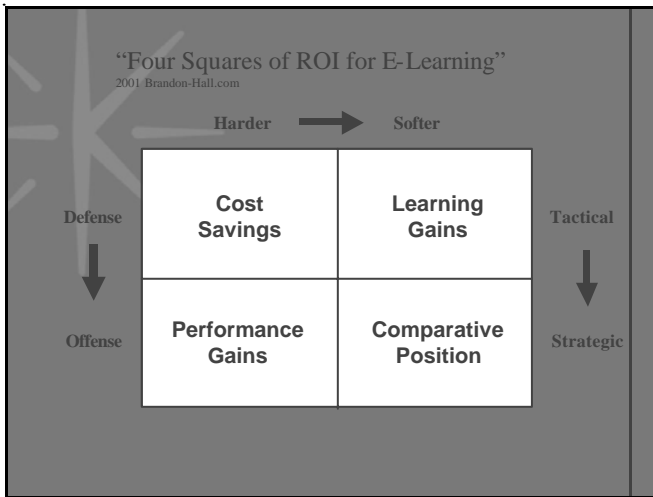
Quantify/Qualify current state

Identify desired outcomes

Define the investment  
Strategic, tactical, or just a task

Develop a path

Seek consultation




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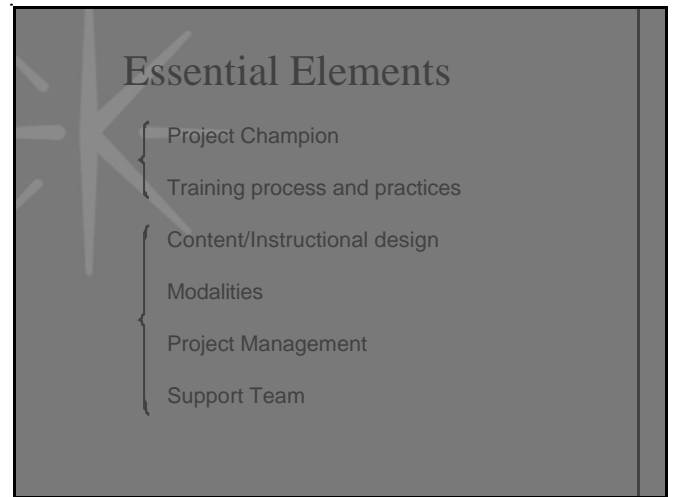
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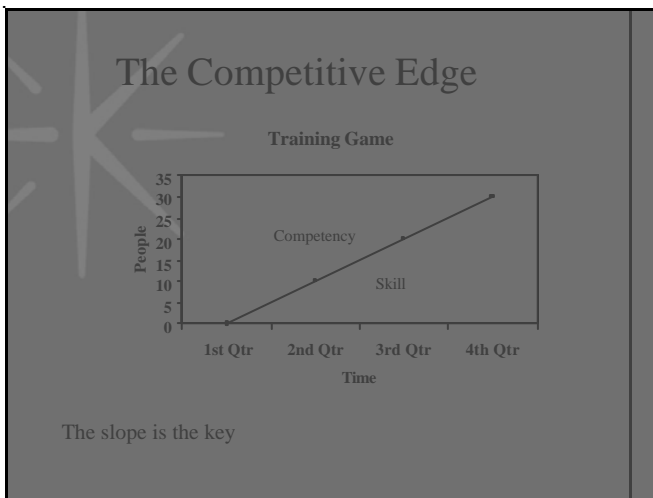
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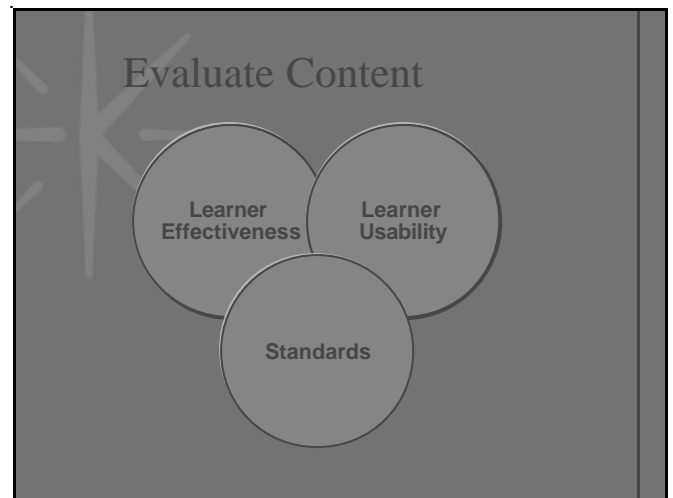
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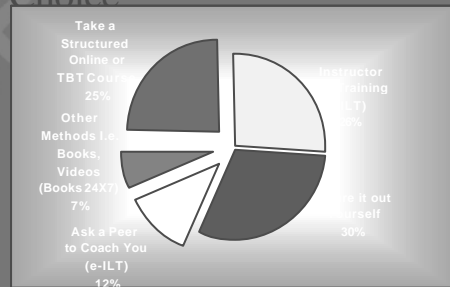
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## Learner Effectiveness

- Activate
- Demonstrate
- Apply
- Integrate

## Multiple Modalities = Student Choice



*A mismatch between learning style and delivery style will reduce the effectiveness of a training program by as much as 80%.*  
-- Gartner Group 12/98

\* 1,200 training professionals, when asked how they would choose to learn to use a new piece of software.  
-- Gartner Group 12/98

## “Not all adults learn the same”

### Multiple modalities

- Self-paced
- Instructor lead online
  - Synchronous
  - Asynchronous
- Reference Material
- V-Labs
- Blended ILT/e-learning
- Custom content

## Project Management (LMS)

“the longer organizations have been using e-learning, the more likely they are to measure results beyond course completion.”

Online Learning 10/01

- Career tracking
- Competency Mapping
- Registration
- Assessment
- Utilization
- Knowledge Database

## Consultative Team

Sales Consultation

System Engineering

Implementation Consultation

Participation Reporting and Coaching

Performance Guarantee

## Ensuring Return on Investment

### Turnover Reduction & Decreased Recruiting Costs

Average turnover rate between 35-45%. -- Deloitte & Touche study

"Mellon designed a training program aimed specifically at reducing the turnover and, through constant analysis and improvement, dropped its attrition rate from 20 percent in 1997 to 12 percent in 1999 and 10 percent in 2000."

Allan Woods, CIO, Mellon Financial

#### Potential Measurements '02 vs. '01:

- Compare turnover rates
- Assess reason for departure
- Assess costs to hire consultants to fill gaps
- Assess costs of "time to competency" for new hires
- Compare recruiting costs

## Culture

Case examples:



## Ensuring Return on Investment

### 1. Turnover Reduction & Decreased Recruiting Costs

#### Potential Measurements '02 vs. '01:

- Compare turnover rates
- Assess reason for departure
- Assess costs to hire consultants to fill gaps
- Assess costs of "time to competency" for new hires
- Compare recruiting costs

Ex:

420 IT people, turnover at 35% = 147 people  
Reduce turnover to 20% = Retain 63 jobs  
Average hourly rate for IT = \$35/hour (\$72,800/yr)  
Average time to recruit new hire = 3 months (\$18,200/employee)  
Average recruiting fees = 25% of annual salary (\$18,200/employee)  
Average "time to competency" = 3 months at 50% competency (\$9,100/employee)

**\$2,866,500 in savings**

## Ensuring Return on Investment

Decreased classroom expenses (instructors, travel costs & physical space)

Training Magazine reports corporations save between 50-70% when replacing ILT with technology-delivered training (approx. 40% T&E + 7% facility costs)

Learning in 3 hrs online vs. 3 day course. GE was able to reduce amount of time employees spent away from the job, as well as save money on travel costs. Savings were so substantial that CEO announced a corporate-wide plan to move 50% of all training online by end of '01.

CIO Magazine, "Measuring the ROI of Training", 2/15/01

## Ensuring Return on Investment

Reduction of Technical Support for End Users

"Research shows than an undertrained end user consumes two to six (2-6) times the amount of technical and peer support than does an adequately trained end user"

Gartner Group, Research Note 2/28/99

"Motorola calculates that every \$1 it spends on training translates to \$30 in productivity gains within 3 years."

Merrill Lynch, "The Book of Knowledge", 4/9/99

Potential Measurements '02 vs '01:

- # Help desk staff
- Reduction in # of calls to help desk

## Ensuring Return on Investment

Decreased classroom expenses (instructors, travel costs & physical space)

Potential Measurements '02 vs. '01:

- # Classroom days
- # Students trained
- Assess lost productivity per hour of training
- Assess reduction in travel costs
- # Students taking TBT training for ongoing support after ILT

Ex:

2249 classes taught last year, average rate \$140/day  
Reduce classes by 40% = 900 fewer people in training classes (\$126,000)  
Average hourly rate for end user = \$20/hour or \$41,600/yr (\$160/day in training)  
7% Facility costs = \$52,416

**\$322,416 in savings**

## Tips

Define strategic importance

Develop high level champion

What gets measured, gets done

Apply some common sense

Pick your partner wisely

- Partner not a just a vendor
- Wide product breadth
- Instructional design expertise
- Integrates content, services, and management



## LESSON 33

### TUTORIAL

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**TUTORIAL**

## LESSON 34

### MANAGEMENT DEVELOPMENT

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Hi Friends,

In previous few units you have studied the entire training and development process.

As you know that Management development is different than training. In this unit you are given

- A. Introduction
- B. Essential Ingredients Of The Management Development Programmes
- C. Techniques Of Management Development
- D. Selection Of Techniques
- E. Training And Development For International Assignment

#### Lets us First Understand

##### What is Management Development?

Management development is a systematic process of growth and development by which the managers develop their abilities to manage. So it is the result of not only participation in formal courses of instruction but also of actual job experience. It is concerned with improving the performance of the managers by giving them opportunities for growth and development.

##### Role of the Organisation

“The role of the company in management development is to establish the programme and the development opportunities for its present and potential managers. Just exposing the employees to lectures, case studies, readings, job rotation, assignments and the like does not guarantee that they will learn. What is more important is the effort of the individuals. Each individual has to make his own contribution to the development of himself, as others can only create the opportunity. The saying “We can take the horse to the water but we cannot make it drink” cannot be forgotten here.

“Executive development is eventually something that the executive has to attain himself. But he will do this much better if he is given encouragement, guidance and opportunity by his company. The role of the company is to provide conditions that accelerate the growth. And these conditions should be part of the organizational climate itself, in order to be away from the unrealistic expectation that we can create and develop managers only in class room.

##### Who is a Manager and What Does He Do?

The word manager has been used to mean people at different levels of hierarchy. To some, the term means only the top man at the top rung of the ladder. To others a manager is any person who supervises others. But in fact to be called a manager one neither has to be at the top of the organisation, nor should one necessarily supervise others. All those who perform all or some of the basic functions of management to some degree regularly or occasionally can be called managers. Needless to say that their actions have significant impact on the performance of

the part or whole of the organisation. So a scientist who keeps himself to the laboratory is as much a manager as a foreman who supervises a group of workers. Even a worker may be considered a (potential) manager for the purpose of management development, one of the objectives of which is to create management succession.

##### Characteristics of Managers

1. He moves rapidly from job to job. It now takes 20 years on the average to rise from the first level manager to president, during which time there are seven geographical moves, 11 positional ones, and countless numbers of special and project assignments. More than before, the successful manager's career may include moving from one company to another.
2. He is flexible, realistic and sensitive to the complexities of his work environment. Compared with less successful managers, he is both challenged by, and comfortable in, situations filled with high risk and ambiguity..
3. He earns his spurs by handling critical assignments, which are more important than routine work done well.
4. Very often, he has a “sponsor”, someone from the higher management who is impressed by his abilities, finds him useful to have around, and who looks after his interests. It helps if the sponsor is himself moving up rapidly.
5. He engages in “anticipatory socialization”; at each stage he copies the values of those who are a step above him.
6. He is not necessarily an “organisation conformist”. High level managers tend to be more “inner directed” and less “outer directed” and less concerned with pleasing others than are those at lower levels.

##### Knowledge and Skills of the Manager

Though the composition of the skills is the same for all managers at all levels, their (contents) proportion differs depending on the level at which a manager is and also the nature of the work he does. A foreman requires more of technical skills and human skills. He must be able to teach his men the technical aspects of the products and processes. He must also be good at human relations in order to motivate, coordinate and direct his subordinates.

Technical skills are less important whereas the conceptual skills are especially important at the top level. Human skills are important at all levels. It should also be remembered that, at the same level the skills required of a production executive differ from that of a marketing executive.

##### Whose Responsibility?

Though the success of the Management Development depends on the commitment of executives at all levels, its launching should be done by the chief of the organisation, since it is a fundamental policy decision that involves time, various

resources and organisational efficiency. Planning and administration of the programme maybe handed over to a committee composed of senior executives, while the day-to-day administration of the same can be performed by the personnel department.

### **Evolution of Management Development**

Efficient and loyal workers were promoted to the supervisory or management positions and it was soon realised that “Superior workers do not necessarily make superior managers. This realisation necessitated the need for planned programmes for the selection, training and development of managerial personnel.”

Formal management development programmes started emerging in the late 1940s and 1950s. Several forces have operated to cause the expansion of management development activities. To name only a few -

1. Shift from owner managed to professionally managed enterprises.
2. Management has been recognised as a distinct kind of occupation consisting of acquired skills and a unified body of knowledge.

### **Objectives of Management Development**

The management development programmes are organised with a view to achieving specific objectives. They are:

#### **Management Development**

1. To overhaul the management machinery.
2. To improve the performance of the managers.
3. To give the specialises on overall view of the functions of an organisation and equip them to co-ordinate each other's efforts effectively.
4. To identify the persons with the required potential and prepare them for senior positions.
5. To increase the morale of the members of the management group.
6. To increase the versatility of the management group.
7. To keep the executives abreast with the changes and developments in their respective fields.
8. To create the management succession which can take over in case of contingencies.
9. To improve thought process and analytical ability.
10. To broaden the outlook of the executive regarding his role position and responsibilities.
11. To understand the conceptual issues relating to economic, social, and technical areas.
12. To understand the problems of human relations and improve human relations skills.
13. To stimulate creative thinking.

Achievement of the above stated objectives is very difficult as some factors inhibits the management development process. Exhibit 9.2 depicts the factors inhibiting management development.

### **Factors Inhibiting Management Development**

1. Job security of the employees, its stability, and pension; these slow down the mobility of employees and check the recruitment of younger people.
2. Supervisors at different levels, especially in the middle management, often feel trapped. They are “frozen”, i.e., there is little prospect of their promotion because of the limited opportunities for advancement available in an establishment. This is especially the case if a man is not ego-involved and does not take pride in his job.
3. Home ownership, home-sickness, close ties with one's family, community and social activities inhibit development to a large extent; and when these are accompanied by the absence of job security and chances of promotion, the employees tend to stress the non-job aspects of their lives.
4. Relations between superiors and subordinates are often not conducive to management development. When a subordinate is afraid of the wrath of his superiors, or when no challenging situations are often to him. the chances of his development are greatly reduced. The superior also finds little incentive for developing subordinates despite lip services, partly because he does not have much time for it, and partly because of his reluctance to promote subordinate lest he lose a good worker and may have to train fresh personnel of unknown quality.

### **Essential Ingredients of the Management Development Programmes**

The essential ingredients of the management development programme can be explained through the steps of management development process.

The important steps or ingredients of a management development programmes are:

1. Analysis of Organisational Present and Development Needs.
2. Appraisal of Present Management Talent.
3. Inventory of Management Manpower.
4. Planning of Individual Development Programme.
5. Establishment of Development Programme.
6. Evaluation of the Programme.

### **Basic Requisites for the Success of Management Development Programmes**

1. The top management should accept responsibility for getting the policy of development executed. For this purpose, a senior officer may be placed in charge to initiate and implement the MDP (Management Development Programme).
2. Management development is essentially a “line job”. It takes place on the job and involves both the man and his boss.
3. Every manager must accept direct responsibility for developing managers under his control on the job, and a high priority should be given to his task.
4. Management development must be geared to the needs of the company and the individual.

5. A policy of promotion from within is a necessary incentive for managers to develop in an organisation.
6. Management development starts with the selection of the right material for managerial ranks. It is essential to ensure that really good material is fed into the programme at the entry levels.
7. There should be a realistic time table in accordance with the needs of a company. this time table should take into account the needs for managerial personnel over a sufficiently long period and the resources which are available and which will be required.

In our view, the management development programme should be based on a definite strategy, which should spell out the type, coverage and objectives of the programme. The multi-tier supervisory and management development programme should start from the first line supervisor and go all the way up to the top management.

1. Analysis of Organisational Present and Developmental Needs: The decision to launch a management development programme having been made, the next thing to do is the close and critical examination of organisational present and future developmental needs. We should know how many and what type of managers are required to meet the present and future needs. An examination of the organizational Management Development structure in the light of the future plans of the organisation should help one know what the organisation requires in terms of functions, departments and executive positions.

Having got the above, the information it is easy to prepare the descriptions and specifications for all management positions which in turn, gives us the information as to the kind of education, experience, training, special knowledge, skills and personal traits required for each job.

A comparison of the existing talents plus those that can be developed from within those required to meet the projected needs will help the top management make a policy decision as to whether it wishes to fill those positions from within the organisation or from outside sources.

2. Appraisal of Present Management Talent: In order to make the above suggested comparison, a qualitative assessment of the existing management talent should be made and an estimate of their potential for development should be added to that. Only then can it be compared with the projected required talent.
3. Inventory of Management Manpower: This is prepared to have a complete information about each executive in each position. For each member of the management team, a card is prepared listing such data as name, age, length of service, education, work experience, training courses completed, health record, psychological test results and performance appraisal data etc. The selection of the individuals for the management development programme is made on the basis of the kind of background they possess. The management may set certain standards in terms of each of the above factors mentioned on the cards to qualify for the management development programme.

Such information when analysed discloses the strengths as well as the deficiencies of managers in certain functions relative to the future needs of the organisation.

4. Planning of Individual Development Programmes: Guided by the results of the performance appraisal which indicate the strengths and weaknesses of each of his subordinates the executive performs this activity of planning of individual development programmes. "Each of us has a unique set of physical, intellectual, emotional characteristics. Therefore, a development plan should be tailor made for each individual. It would be possible to impart knowledge, skills and mould behaviour of human beings, but it would be difficult to change the basic personality and temperament of a person once he reaches adulthood stages

5. Establishment of Development Programmes: It is the duty of the HR department to establish the well-conceived development opportunities.

The HR department has to identify the existing level of skills, knowledge etc., of various executives and compares them with their respective job requirements. Thus, it identifies developmental needs and will establish specific development programmes like leadership courses, Management games, Sensitivity training. The department may not be in a position to organise development programmes for executives at the top level as could be organised by reputed institutes of management. In such situations, top management deputed certain individuals to the executive development programmes organised by the reputed institutes.

Branching networks

Resource allocation

Using a computer with these techniques Simulation including Monte Carlo method Queuing Theory.

How to improve product quality and reliability?

Statistical quality control

Process control by computer, including Evolutionary operation, and

Adaptive control.

How to cope with complex mixes?-such problems as: several factories, delivery to many customers, or several products from many raw materials available from many different sources, or several products profitability made by several process, etc. Mathematical programming by computer, including

Linear programming

Quadratic programming

Separable programming

Integer programming

Dynamic programming

How to cut labour costs?

Method study

Incentive schemes

Ergonomics

Productivity bargaining.  
 How to improve labour relations?  
 Job relations programme  
 Human Resource  
 How to improve training methods?  
 Teaching machines  
 Business games.  
 How to bring order and equity into wages and salary schemes?  
 Job description  
 Job evaluation  
 Merit rating  
 Salary progressing curves  
 Time-span discretion.  
 How to recruit the right number of the right type of people? Manpower planning  
 Intelligence, personality and aptitude tests.

## Purchasing

How to check quality and reliability of raw materials?  
 Statistical quality control including quality protection  
 Statistical sampling methods including sequential stocks?  
 How to cut down the cost of purchasing an holding stocks?  
 Statistical stock control  
 Methods of forecasting demand (see under marketing)  
 Economic batch re-ordering quantities  
 Simulation by computer.

## Research

How to reduce the time taken to complete research?  
 Method study  
 Critical path methods including

## Management Development

PERT/COST  
 Branching networks  
 Research allocation  
 Using a computer with these techniques Statistical design of experiments Scientific calculations by computer Simulation by computers  
 Learning is haphazard without background and, learning can never be called true learning if it is just theory without practice. When on-the-job training is properly balanced with the class-room training, the real learning takes place.

The following are some of the important on-the-job and off-the-job techniques of management development.

## Important Techniques of Management Development

### On-the-job Techniques

Coaching Job Under Multiple  
 Rotation Study Management

### Off-the-job Techniques

The Case Method  
 Incident Method  
 Grid Training

## On-the-Job Techniques

These are the most widely used techniques. No other technique may interest the trainee so much as these do, since the location of the learner is not an artificial one as the class-room. The success of these techniques depends on the immediate supervisor and how good a teacher he is. On-the-job techniques are especially useful for certain groups like scientific and technical personnel

Though the costs of training initially appear to be low they may turn out to be high when wastages of all kinds are considered under this type of training.

This method of learning in isolation may prove to be inadequate but in

Business security	Role Playing
Game training	in Basket Method.
	Simulation
	Conferences

combination with the other techniques will be excellent. The important on-the-job training techniques are: coaching, job rotation, I under study, multiple management

**Coaching :** In coaching the trainee is placed under a particular supervisor who acts as an instructor and teaches job knowledge and skills to the trainee. He tells him what he want him to do, how it can be don\! and follows up while it is being done and correct errors.

“Coaching should be distinguished from counselling . Counselling... involves a discussion between the boss and his subordinates of areas concerned with the man’s hopes, fears, emotions, and aspirations. It reaches into very personal and delicate matters. To be done correctly, counselling demands considerable background and ability on the part of the counselor. If carried out poorly, it may do considerable damage. “7

The act of coaching can be done in several ways. The executive apart from asking them to do the routine work, may ask them to tackle some complex problem by giving them chance to participate in decision-making.

One of the important limitations of this technique is that the individual cannot develop much beyond the limits of his own boss’s abilities

**Job Rotation :** The transferring of executives from job to job and from department to department in a systematic manner is called Job Rotation. When a manager is posted to a new job as part of such a programme, it is not merely an orientation assignment. He has to assume the full responsibility and perform all kinds of duties.

The idea behind this is to give him the required diversified skills and a broader outlook, which are very important at the senior management levels. It is upto the management to provide a variety of job experiences for those who have the potential for higher ranks before they are promoted.

Job rotation increases the interdepartmental co-operation and reduces the monotony of work. It makes the executives in

general management and does not allow them to confine themselves to their specialised field only.

**Under Study:** “An under study is a person who is in training to assume at a future time, the full responsibility of the position currently held by his superior. “8 This method supplies the organisation a person with as much competence as the superior to fill his post which may fall vacant because of promotion, retirement or transfer.

As under study may be chosen by the department or its head. He will then teach what all his job involves and gives him a feel of what his job is. This under study also learns the decision-making as his superior involves him in the discussion of daily operating problems as well as long-term problems. The leadership skills can also be taught by assigning him the task of supervising two or three people of the department.

**Multiple Management:** Multiple Management is a system in which permanent advisory committees of managers study problems of the company and make recommendations to higher management. It is also called Junior-board of executives system. These committees discuss the actual problems and different alternative solutions after which the decisions are taken.

The technique of multiple management has certain advantages over the other techniques. They are:

1. Members have the opportunity to acquire the knowledge of various aspects of business.
2. It helps to identify the members who have the skills and capabilities of an effective manager.

### **Off-the-Job Techniques**

Because of the fact that on-the-job techniques have their own limitations, these off-the-job techniques are considered important to fill those gaps. The following are some of the important off-the-job techniques:

1. The case study.
2. Incident method.
3. Role playing.
4. In basket method.
5. Business game.
6. Sensitivity training.
7. Simulation.
8. Grid training.
9. Conferences.
10. Lectures

1. **The Case Study:** Cases are prepared on the basis of actual business situations that happened in various organisations. The trainees are given cases for discussing and deciding upon the case. Then they are asked to identify the apparent and hidden problems for which they have to suggest solutions.

The situation is generally described in a comprehensive manner and the trainee has to distinguish the significant facts from the insignificant, analyse the facts, identify the different alternative solutions, select and suggest the best. This whole

exercise improves the participant's decision-making skills by sharpening their analytical and judging abilities.

2. **Incident Method:** This method was developed by Paul Pigors. It aims to develop the trainee in the areas of intellectual ability, practical judgement and social awareness.<sup>10</sup> Under this method each employee developed in a group process. Incidents are prepared on the basis of actual situations which happened in different organisations. Each employee in the training group is asked to study the incident and to make short-term decisions in the role of a person who has to cope with the incident in the actual situation. Later, the group studies and discusses the incident and takes decisions relating to incident, based on the group interaction and decisions taken by each member. Thus, this method is similar to a combination of case method and in basket method.

3. **Role Playing:** A problem situation is simulated by asking the participants to assume the role of particular person in the situation. The participant interacts with other participants assuming different roles. Mental set of the role is described but no dialogue is provided.

The whole play may be tape-recorded and the trainee may thus be given the opportunity to examine his or her own performance.

Role playing gives the participants vicarious experiences which are of much use to understand people better. This method teaches human relations skills through actual practice. The exemplary role playing situations are: a grievance discussion, employment interview, a sales presentation etc.

4. **In Basket Method:** The trainees are first given background information about a simulated company, its products, key personnel, various memoranda, requests and all data pertaining to the firm. The trainee has to understand all this, make notes, delegate tasks and prepare memos within a specified amount of time. Abilities that this kind of exercise develops are: “(i) situational judgement in being able to recall details, establish priorities, interrelate items and determine need for more information, (ii) social sensitivity in exhibiting courtesy in written notes, scheduling meetings with personnel involved and explaining reasons for actions taken, and (iii) willingness to make decision and take action.”

5. **Business Games:** Under this method, the trainees are divided into groups or different teams. Each team has to discuss and arrive at decisions concerning such subjects as production, pricing, research expenditure, advertising etc., assuming itself to be the management of a simulated firm. The other teams assume themselves as competitors and react to the decision. This immediate feedback helps to know the relative performance of each team. The team's cooperative decision promotes greater interaction among participants and gives them the experience in cooperative group processes.

All this develops organisational ability, quickness of thinking, leadership qualities and the ability to adopt under stress.

6. **Sensitivity Training:** The main objective of sensitivity training is the “Development of awareness of and sensitivity of behavioural patterns of oneself and others.” This

development .results in the (i) increased openness with others, (j) greater concern for others, (ij) increased tolerance for individual differences, (iv) less ethnic prejudice, (v) understanding of group processes, (vi) enhanced listening skills, (vii) increased trust and support.

The role played by the trainee here is not a structured one as in role play. It is a laboratory situation where one gets a chance to know more about himself and the impact of his behaviour on other;. It develops the managerial sensitivity, trust, and respect for others. One of the limitations of sensitivity training is that it exacts a huge emotional cost from the manager.

7. Simulation: Under this technique the situation is duplicated in such a way that it carries a closer resemblance to the actual job situation. The trainee experiences a feeling that he is actually encountering all those conditions. Then he is asked to assume a particular role in the circumstances and solve the problems by making a decision. He is immediately given a feedback of his performance.

One of the limitations of this method is that it is very difficult to duplicate the situation to the extent of making the trainee feel the pressures and realities of actual decision-making on the job. The very fact that the trainee knows that it is an artificial situation prevents him from experiencing all that he experiences in real job situation.

8. Managerial Grid' It is a six phase programme lasting from three to five years. It starts with upgrading managerial skills, continues to group improvement; improves inter group relations, goes into corporate planning, develops implementation method and ends with an evaluation phase. The grid represents several possible leadership styles. Each style represents a different combination of two basic orientations -concern for people and concern for production.

9. Conferences: A conference is a meeting of several people to discuss the subject of common interest. But contribution from members can be expected as each one builds upon ideas of other participants. This method is best suited when a problem has to be analysed and examined from different viewpoints.

It helps the members develop their ability to modify their attitudes. Participants enjoy their method of learning as they get an opportunity to express their views.

The success of the conference depends on the conference leader. In order to make the conference a success, the conference leader must be able to see that the discussion is thorough and concentrate on the central problem by encouraging all the participants to develop alternatives and present their viewpoints and by preventing domination by a few participants.

10. Lectures: It is the simplest of all techniques. This is the best technique to present and explains series of facts, concepts, and principles. The lecturer organises the material and gives it to a group of trainees in the form of talk. The main uses of lectures in executive development are:

1. It is direct and can be used for a larger group of trainees.
2. It presents the overview and scope of the subject clearly.
3. It presents the principles, concepts, policies and experiences in the shortest time. Thus, it is a time saving technique.

The lectures do not give scope for student participation and may sometimes be boring which in turn hinders learning. Skills can be learnt only by doing and therefore lectures are of no use for technical skills

Now think, discuss, observe and write your conclusion on following here

1. What is the need for Management Development.

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2. Mention Methods of Management Development.

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3. What are necessary ingredients of Management Development.

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## Activities and Assignments

### Cases

#### Cases 1. Sultability of the Technique

The Punjab Bank Ltd., has been facing problems relating to deposit mobilisation<sup>1</sup> and loan recovery. The bank appointed a number of Commissions to go into the problems and find out the root cause for these problems. All the commissions pointed out that the delay in decision-making and faulty decisions made by the executives at different levels are responsible for the state of affairs in the bank. Mr. Khanna Pande, the Chairman of the bank, on 3rd March, 1984, asked the Chief Personnel Manager of the bank to develop various techniques and organise the executive development programmes in order to improve the decision-making skills of the bank executives from the level of branch manager to the general manager.

The Chairman of the bank attended an executive development programme during July, 1984 conducted by the Administrative

Staff College of India for Chairmen of all the Banks. He was very much impressed by two techniques in the entire programme. They are role playing and sensitivity training. He thought that he should educate his personnel manager about these techniques and these techniques should be used in the proposed executive development programme of the bank. He called on the Chief Personnel Manager of the bank and told him about his experiences and ideas. But the Chief Personnel Manager responded negatively. Mr. Khanna tried his level best to convince the Chief Personnel Manager and similarly the Chief Personnel Manager also tried to persuade him about the nature of those techniques and the nature of the proposed development programme. At last Mr. Khanna vexed with the behaviour of the Chief Personnel Manager ordered him to use role playing and sensitivity training techniques.

## Questions

1. Do you find any justification in the argument of Mr. Khanna?
2. Why did Mr. Khanna form such an opinion?
3. What do you feel about the suitability of technique for the executive development programme, in this case?

## Case 2. Evaluation of Executive Development Programme

The Indian Cooking Gas Ltd., was established as a public sector company in 1963. It had its plants in six areas in the country. The company provided both in-company and out-company executive development programmes. In company programmes included orientation programmes for Apprentice Assistant Executive Engineers. It had a staff college at Bangalore. Programmes were conducted at staff college for all types personnel. In company programmes included quality management, participative management, time management etc. The best faculty was drawn from Indian Institute of Management, Universities, Professional Bodies etc., apart from the four permanent and internal faculty. At present all the four permanent faculty positions are vacant.

Evaluation of management development programmes is done as a ritual rather than to make it a part of development process. Evaluation of in-company programme is done at staff college with the objective of knowing the participants learning and to know how far the participants have found the programme useful. The staff college sends no formal feedback to the functional heads of the departments and to the corporate personnel and administrative department. There appears to be no formal system that provides for the feedback from the participants and out-company programmes to their respective functional heads. There exists no evaluation model with pre-training and post-training evaluation and no efforts are made to develop evaluation techniques.

## Questions

1. Find out the reasons for the unsatisfactory conditions of evaluation of management development programmes?
2. How do you improve the conditions of evaluation programmes?

## Game

### Preparing Action Plan for Training and Development

The Managing Director of Indian Trucks Industries Ltd., Bangalore received a number of complaints from workers, Supervisors, staff of the training colleges about the haphazard organisation and functioning of training activity in the company. One day he called on the Chief Personnel Manager in his turn asked the Deputy Personnel Managers in charge of training and development functions to prepare an approach paper on training and development. They submitted the approach paper to the Chief Personnel Manager. The Chief Personnel Manager has to submit the action plan tomorrow to the Managing Director. He arranged a meeting of the Deputy Personnel Managers with him in his chamber to finalise the action plan. The Deputy Managers are asked to attend the meeting with all supportive material and with their subordinates (two each).

It is the Chief Personnel Manager's chamber. The Deputy Manager (Training) attended with his Assistant Manager immerge of Training and Instruction and Deputy Manager (Development) attended with his Assistant Manager who is the Director of the Executive Development Institute of ITI. Now, all these five managers are required to prepare action plan and submit it to the Managing Director immediately after its finalisation.

Play the six roles including the Managing Director with your course mates.

## A Successful Manager is .....

1. Who leads by example more than by directive
2. Who surrounds himself with experts but often confounds them by his shortcuts to essentials. —
3. Who has curved vision of the prophet that sees the goal ahead without disturbing too many standing in the light.
4. Who can reduce the communication to specific points and in language which others can understand easily. “-
5. Who is logical up to the point of time when he may upset the obvious with inspired judgment.
6. Who can describe parameters of time and space leaving the inner dimensions to the man at drafting board.
7. Who can dare to take risk rather than being over cautious to take any challenge.
8. Who has more respect for men who make obviously wrong decision under emergency than for men who wrings their hands and take refuge in the rule book.
9. Who picks up “Yes” men who see potentials beyond question asked and “No” men who are specialists in methods, techniques and cost accounting.



## Planning Management Development

Simply put, management development is an effort (hopefully, planned in nature) that enhances the learner's capacity to manage organizations (or oneself). Very simply put, managing includes activities of planning, organizing, leading and coordinating resources. A critical skill for anyone is the ability to manage their own learning. The highly motivated, self-directed reader can gain a great deal of learning and other results from using the guidelines and materials in this library topic

### Introduction

Lets us first briefly scan about management. Perhaps one of the best ways to get a sense about the practices of management is to examine key terms in management. These key terms are defined below. Definitions in this document are quite basic and general in nature.

### Board of Directors

A board is a group of people who are legally charged to govern an organization (usually a corporation). The board is responsible for setting strategic direction, establishing broad policies and objectives, and hiring and evaluating the chief executive officer. The chief executive officer reports to the board and is responsible for carrying out the board's strategic policies. The nature of a board can vary widely in nature. Some boards act like "governing boards", that is, they take a strong policy-making role, and expect the chief executive to operate the organization according to those policies. Some boards, despite their being legally responsible for the activities of the corporation, follow all of the directions and guidance of the chief executive (in this case, board members arguably are not meeting their responsibilities as a board). Still, other boards take a strong "working board", or hands-on role, including micro-managing the chief executive and organization.

## Management

### Traditional Interpretation

There are a variety of views about this term. Traditionally, the term "management" refers to the activities (and often the group of people) involved in the four general functions listed below. (Note that the four functions recur throughout the organization and are highly integrated):

1. Planning,  
including identifying goals, objectives, methods, resources needed to carry out methods, responsibilities and dates for completion of tasks. Examples of planning are strategic planning, business planning, project planning, staffing planning, advertising and promotions planning, etc
2. Organizing resources  
to achieve the goals in an optimum fashion. Examples are organizing new departments, human resources, office and file systems, re-organizing businesses, etc
3. Leading,  
including to set direction for the organization, groups and individuals and also influence people to follow that direction. Examples are establishing strategic direction (vision, values, mission and / or goals) and championing methods of organizational performance management to pursue that direction.

4. Controlling, or coordinating,  
the organization's systems, processes and structures to reach effectively and efficiently reach goals and objectives. This includes ongoing collection of feedback, and monitoring and adjustment of systems, processes and structures accordingly. Examples include use of financial controls, policies and procedures, performance management processes, measures to avoid risks etc.

Another common view is that "management" is getting things done through others. Yet another view, quite apart from the traditional view, asserts that the job of management is to support employee's efforts to be fully productive members of the organizations and citizens of the community.

To most employees, the term "management" probably means the group of people (executives and other managers) who are primarily responsible for making decisions in the organization. In a nonprofit, the term "management" might refer to all or any of the activities of the board, executive director and/or program directors.

### Another Interpretation

Some writers, teachers and practitioners assert that the above view is rather outmoded and that management needs to focus more on leadership skills, e.g., establishing vision and goals, communicating the vision and goals, and guiding others to accomplish them. They also assert that leadership must be more facilitative, participative and empowering in how visions and goals are established and carried out. Some people assert that this really isn't a change in the management functions, rather it's re-emphasizing certain aspects of management.

### Executives

Usually, this term generally applies to those people or specific positions in top levels of management, e.g., chief executive officers, chief operating officers, chief financial officers, vice presidents, general managers of large organizations, etc. In large organizations, executives often have different forms of compensation or pay, e.g., they receive portions of the company's stock, receive executive-level "perks, etc. Chief executives usually pay strong attention to strategic plans and organizational performance, whether measured financially or from impact of services to a community. Many people think of the Chief Executive Officer as heading up large, for-profit corporations. This is not entirely true. The majority of businesses in the United States are small businesses, whether for-profit or nonprofit. Their top executives could be called Chief Executive Officers.

### "Leading versus Managing"?

(Whatever the title, the person in the top-level position in the organization is (or at least should be) responsible for setting (or, in the case of corporations, pursuing) the overall direction for the organization. Consequently (and unfortunately?), this "executive" level of management is often referred to as the "leadership" of the organization.)

With recent focus on the need for transformational leadership to guide organizations through successful change, the term "leadership" has also been used to refer to those who embrace

change and lead the change of organizations for the betterment of all stakeholders. Some people believe that leadership occurs only at the top levels of organizations and managing occurs in the levels farther down the organization. Some people believe that leadership occurs (or should occur) throughout the organization, but still use the term “leadership” mostly to refer to the top positions in the organization. Others believe that managing and leading occur at many levels of the organization.

## Managers

A classic definition is that “Leaders do the right thing and managers do things right.” A more standard definition is usually something like “managers work toward the organization’s goals using its resources in an effective and efficient manner.” In a traditional sense, large organizations may have different levels of managers, including top managers, middle managers and first-line managers. **Top (or executive) managers** are responsible for overseeing the whole organization and typically engage in more strategic and conceptual matters, with less attention to day-to-day detail. Top managers have middle managers working for them and who are in charge of a major function or department. **Middle managers** may have **first-line managers** working for them and who are responsible to manage the day-to-day activities of a group of workers.

Note that you can also have different types of managers across the same levels in the organization. A **project manager** is in charge of developing a certain project, e.g., development of a new building. A **functional manager** is in charge of a major function, such as a department in the organization, e.g., marketing, sales, engineering, finance, etc. A **product manager** is in charge of a product or service. Similarly, a **product line manager** is in charge of a group of closely related products. **General managers** are in charge of numerous functions within an organization or department.

## Supervisors

(This is a widely misunderstood term. Many people believe it applies only to people who oversee the productivity and development of entry-level workers. That’s not true.) The term “supervisor” typically refers to one’s immediate superior in the workplace, that is, the person whom you report directly to in the organization. For example, a middle manager’s supervisor typically would be a top manager. A first-line manager’s supervisor would be a middle manager. A worker’s supervisor typically would be a first-line manager.

Supervisors typically are responsible for their direct reports’ progress and productivity in the organization. Supervision often includes conducting basic management skills (decision making, problem solving, planning, delegation and meeting management), organizing teams, noticing the need for and designing new job roles in the group, hiring new employees, training new employees, employee performance management (setting goals, observing and giving feedback, addressing performance issues, firing employees, etc.) and ensuring conformance to personnel policies and other internal regulations.

Supervisors typically have strong working knowledge of the activities in their group, e.g., how to develop their product, carry out their service, etc. Many also use the term “supervisor” to designate the managerial position that is responsible for a major function in the organization, for example, Supervisor of Customer Service.

## Work Directors

Work directors directly oversee the work of their subordinates. They carry out their oversight role by specifically assigning work and then closely monitoring to ensure the work is carried out according to their wishes. Often, people work their way up through management levels by starting out as work directors. Over time, they develop skills in delegation, which frees them up from having to closely monitor the work of their subordinates and, instead, to attend to more high-level managerial activities. Work directors are not always at lower levels of the organization. For example, a middle- or upper-level manager who has poorly developed delegation skills might still be interpreted as work directing her or his subordinates.

## Individual Contributors

This term is often used to refer to entry-level and/or first-line employees who do not have employees reporting to them.

## Leaders

Very simply put, a leader is interpreted as someone who sets direction in an effort and influences people to follow that direction. They set direction by developing a clear vision and mission, and conducting planning that determines the goals needed to achieve the vision and mission. They motivate by using a variety of methods, including facilitation, coaching, mentoring, directing, delegating, etc. As noted above, one of the four key functions of management is leading (along with planning, organizing and controlling). Leaders carry out their roles in a wide variety of styles, e.g., autocratic, democratic, participatory, laissez-faire (hands off), etc. Often, the leadership style depends on the situation, including the life cycle of the organization. There are many views about what characteristics and traits that leaders should have. There are also numerous theories about leadership, or about carrying out the role of leader, e.g., servant leader, democratic leader, principle-centered leader, group-man theory, great-man theory, traits theory, visionary leader, total leader, situational leader, etc. This term is commonly misapplied when people use the term mostly to refer to the top levels in an organization. The term has — and should have — much broader usage. Anyone at any level in an organization can show leadership; thus, almost anyone can be a leader in the organization)

## Boards of Directors / Governance Development

Board / Governance development refers to the activities involved in enhancing skills of the corporation’s board members to effectively fill their role in governing the corporation. Board development typically includes helping board members to understand their role of boards, build skills in recruiting and training board members, carry out effective board meetings, make policy decisions about strategic goals and finances, evaluate the board and chief executive officer, etc.

## Management Development

Usually, this term refers to the activities involved in enhancing leaders', managers' and supervisor's abilities to plan, organize, lead and control the organization and its members. Consequently, many view the term "management development" to include executive development (developing executives), leadership development (developing leaders), managerial development (developing managers) and supervisorial development (developing supervisors).

As mentioned above, there are people who assert a strong difference between "leading" and "managing". These people often refer to leadership development (developing skills in leadership) as apart from management (and managerial) development (developing skills in planning, organizing and controlling).

## Executive Development

(Today's organizations are changing dramatically. Successful change requires strong leadership from top positions in the organizations. Therefore, writers often interchange use of the phrases "leadership development" with "executive development". They are not the same. As noted above, this is handy, but it can cause substantial confusion.)

Executive development refers to the activities involved in enhancing one's ability to carry out top-level roles in the organization. Some key skills for executives to have include understanding the external environment of the organization, leadership, strategic planning, financial forecasting and analysis, organizing, program planning and human resource management, etc.

## Managerial Development

This term is not frequently used. When it is, it is usually used meant in the same regard as management development.

## Supervisorial Development

Supervisorial development refers to the activities involved in enhancing one's ability to oversee, guide and evaluate activities of immediate subordinates in the organization. Supervisor development often includes learning basic skills in employee performance management, managing meetings, project management, etc. Good supervisory development should also include developing skills in time and stress management — the role of supervisor is often quite stressful to those who are first getting used to the hectic activities of management.

## Leadership Development

Leadership development refers to the activities involved in enhancing one's ability to establish vision and goals, and motivate and guide others to achieve the vision and goals. Leadership development is critical at almost *any* level in the organization — not just the executive level.

## What Does Management Development Look Like?

### Let's Look at Some Programs

Now you have learned about training programs that are informal and formal, and other-directed or self-directed. Management development programs come in all of these combinations, as well. You can learn about management in

informal "programs", for example, by reading some articles, discussing management with a friend, etc. You can attend formal training, for example, a course, seminar or workshop. At this point, it might help you to get some perspective on the nature of management development programs by looking at some.

## History of Management Development

It might be interesting for you to get a brief overview of the history of management development, in order to give you broader perspective and understanding of current management development methods. In your previous semesters you have been exposed towards it.

## What the Future Holds for Management Development Programs

As organizations have faced a new paradigm management development organizations must embrace a new paradigm as well.

## Strong Value of Self-Directed Learning

The ability to manage one's own learning is an increasingly critical skill. Bouchard explains, "Over the years, it has become increasingly clear that traditional approaches to [training] program design and delivery in the workplace and in associative organizations present some important weaknesses. Problem areas include: coping with the short life span of useful knowledge; passing down acquired competencies to succeeding cohorts; accommodating the demands of productivity while providing for a continuity of learning; [and] enabling learners to pursue activities that correspond to their learning styles and needs"

## Informal Activities to Learn About Management

### Informal Activities to Learn About Management

Attempt to Go Beyond Reading Books ...

There are a wide range of everyday and on-the-job activities from which you can learn about management and even enhance your management skills. Informal methods can include, for example, reading books, having discussions with friends, on-the-job training, keeping a diary with thoughts about management, etc. One of the more insidious ways to avoid learning to manage is by reading lots of books about management, rather than actually implementing any of the advice offered in any of them. You're not likely to develop much for management skills merely by reading, talking or attending a course unless you actually apply new materials and methods, and continue to reflect on what you're learning along the way.

## Ideas for Activities to Learn About Management

One of the most effective and reliable ways to learn is to do so consciously, in a planned fashion. Therefore, be sure to consider customizing your own management training plan. The following table includes numerous ideas for activities from which to learn about management, including planning, organizing, leading and coordinating resources.

(Some workplace activities for learning:)

- Start (and stick to) a new project at work or in your life
- Ask your supervisor, peers and subordinates for ideas to develop your management skills
- Ask to be assigned to a management position
- Regularly solicit feedback from others about your management skills

(Other sources for learning:)

- Identify traits and behaviors of your favorite managers
- Design a personal development plan
- Take strong participation in a course, apprenticeship or internship that involves planning, organizing, leading and/or coordination activities
- Take a leadership or management role in a management association
- Volunteer to lead a work or community project, or join a board of directors

**(Capturing your learning:)**

- Schedule (and stick to) ongoing periods for private reflection;
- Consider designing a formal training plan

## **Customizing Your Own Management Development Plan**

You are much more likely to learn useful skills in management if you develop and implement a training plan. The following sections will guide you to develop your own complete, highly integrated (and performance-oriented) management development plan. You should be able to identify your overall training goals and the learning objectives and activities to achieve the goals. Also be able to carry out the learning activities and evaluating your entire learning experience.

## **Preparation for Designing Your Management Training Plan**

Read the following two initial sections of the Guidelines (up to “Determining Your Overall Goals in Training”) and then return to the next section below.

Directions to Use “Complete Guideline ...”

Preparation for Designing Your Training Plan

## **Identifying Your Overall Goals in Management Training**

### **Purpose of this Section**

This section helps you identify what you want to be able to do as a result of implementing your training plan, for example, qualify for a certain job, overcome a performance problem, meet a goal in your career development plan, etc. Learners are often better off to work towards at most two to four goals at a time. There are a variety of ways to identify your training goals, depending on what you want to be able to accomplish as a result of implementing your training plan.

## **Begin Identifying Your Training Goals**

### **Consider Performance Gaps, Growth Gaps or Opportunities Gaps**

Performance gaps are areas of knowledge and skills need to improve performance and are usually indicated during performance reviews with your supervisor. Growth gaps are areas of

knowledge and skills need to reach a career goal. Opportunity gaps are areas of knowledge and skills needed to take advantage of an upcoming opportunity.

## **Conduct Self-Assessments**

The following on-line, self-assessments may help, as well, by helping you assess certain areas of your own management abilities.

### **Needs Assessments for Management Training and Development**

## **Collect Input From Others**

Ask others for ideas to improve your management skills. Try get their input in terms of behaviors you can show. Consider input from performance reviews.

### **Reference Lists of Areas of Knowledge and Skills Needed in Variety of Roles and Function**

Competencies are lists of the general abilities needed to perform a role. Consider the following lists for managing yourself and carrying out major functions in management.

## **Reference Books and Other Materials About Management**

There is a vast amount of information available regarding management and management skills. However, much of it is in regard to character traits that managers should have. When determining your training goals, translate these character traits to behaviors that you and others can recognize.

## **Look at Goals and Objectives of Management Development Programs**

These programs can offer good ideas about traits and characteristics needed by managers, and methods to achieve those traits and characteristics. Be careful not to simply adopt suggestions and methods without first considering if they’d really be useful to you.

## **Don’t Forget to Manage Yourself!**

Developing skills in management involves changing yourself, stretching yourself.

## **On to Refining and Writing Your Training Goals in Your Plan ...**

The Guidelines provides additional advice for identifying your training goals. Follow the steps in the following section of the Guidelines until you come to its section titled “Determining Your Learning Objectives and Activities “ and then return to the next section below.

### **Determining Your Overall Goals in Training**

### **Determining Your Learning Objectives and Activities**

### **Purpose of this Section**

The purpose of this section is to identify the various learning objectives you should achieve and learning activities you should undertake in order to achieve the overall training goals in your plan.

## **Identifying Your Learning Objectives**

Carefully consider each of your training goals. What specifically must be accomplished (that is, what objectives must be reached) in order for you to reach those goals? Which of these objectives require learning new areas of knowledge or skills? These

objectives are likely to become learning objectives in your training plan. To get a stronger sense for learning objectives,

## **Identifying Your Learning Activities**

Learning activities are the activities you will conduct in order to reach the learning objectives. The activities should help you work toward your training goal, accommodate your particular learning styles, be accessible to you and be enjoyable as well.

## **On to Refining and Writing Your Learning Objectives and Activities in Your Plan ...**

The Guidelines provide additional advice for identifying your learning objectives and activities. Follow the steps in the following section of the Guidelines until you come to its section titled “Developing Any Materials You May Need”

## **Developing Any Materials You May Need**

Developing materials might include, for example, getting books, signing up for courses, reserving rooms, getting coaches, etc. The Guidelines provides additional guidance to develop any materials you may need. Follow the steps in the following section of the Guidelines until you come to its section titled “Planning Implementation of Your Training Plan”

## **Planning Implementation of Your Management Training Plan**

During implementation, you should think about whether you’re really understanding the materials or not, need additional support, etc. The Guidelines provides additional guidance to you during implementation of your plan. Follow the steps in the following section of the Guidelines until you come to its section titled “Planning Quality Control and Evaluation of Your Training Plan and Experiences”

## **Evaluating Your Management Training Plan and Experiences**

Evaluation includes assessing and making value judgments on whether you achieved your training goals or not, and on the quality of the process to reach those goals. Follow the steps in the following section of the Guidelines until you come to its section titled “Follow-Up After Completion of Your Plan”

## **Follow-Up After Completion of Your Plan**

Follow the steps in the following section of the Guidelines until you come to its section titled

## **Recommended Topics For Management Development Training**

Account & Client Management  
Building an Effective Team  
Carrying Out Appraisals  
Change Management  
Coaching Skills for Managers  
Consulting Skills  
Designing Training Needs Analysis  
Effective Delegation & Time Management  
Coaching & Mentoring  
Facilitation Skills  
Key Management Skills  
Leadership Skills  
Managing Diversity  
Negotiating Skills for Managers

Performance Management  
Management Skills for New Managers  
People Management  
Performance Management  
Project Management  
Project Management & MS Project  
IT Project Management  
Positive Communication and Interpersonal Skills for Managers  
Recruitment & Selection  
Self & Career Development  
Staff Motivation Skills  
Stress Management  
Time Management  
Train the Trainer

## **Personal Development Training**

Active Listening Skills  
Assertiveness Skills  
Communication Skills  
Confidence Building  
Decision Making  
Designing Training Needs Analysis  
Customer Service Excellence  
Developing Personal Effectiveness  
Introduction to Human Resources  
Negotiation Skills  
Personal Organisation Skills  
Presentation Skills  
Advanced Presentation Skills  
Project Management  
Recruitment & Selection  
Self & Career Development  
Stress Management  
The Professional Receptionist  
Time Management  
Train the Trainer  
Writing Professional Reports

## **Sales Training**

Customer Relationship Management  
Effective Sales Techniques  
Effective Telephone Skills  
Telephone Sales  
Negotiating Skills  
Telesales  
Sales Management  
Developing Successful Client Relationships  
Writing Business Plans

## **Project Management Training**

Project Management  
IT Project Management  
Project Management & MS Project  
Introduction to Prince2  
Overview of Prince2

## Human Resources Training

Carrying Out Appraisals  
 Assertiveness Skills  
 Coaching Skills  
 Coaching & Mentoring  
 Communication Skills  
 Introduction to Human Resources  
 Presentation Skills  
 Time Management  
 Train the Trainer  
 Recruitment

<i>Technique</i>	<i>Description</i>	<i>Suitability</i>	<i>Check Points</i>
TV live teaching	Instructor lectures to groups of students at remote class-rooms. Usually, two-way voice communication is provided.	For a highly skilled lecturer working with groups of students located at widely separated company plants, this is an economical method. For courses that require relatively few questions to clarify points.	Instructors may outpace students if students do not take the initiative to slow them down. Associated written assignments have to be corrected and returned in the period between lectures to be effective.
Laboratory training	A change agent (consultant) devises means for groups of people in an organization to clarify their values, attitudes, and problems to improve understanding, motivation, and the working climate in general.	For groups of almost any size. For changing an organization's attitudes. For increasing organizational problem-solving capabilities.	Top management must understand its role and give strong backing to the change agent. Considerable time will be required before the impact of laboratory training becomes evident. High-level executives may have to devote a good deal of time to such programs.
Managerial grid sessions	Six-phase program lasting from three to five years. Starts with upgrading manager's skills, continues to group improvement, improves intergroup relations, goes into corporate planning, develops implementation methods, and ends with an evaluation phase.	For rapidly growing and large companies where the considerable investment has time to payoff.	Check on progress in achieving objectives. Check on turnover of the managers involved.
<i>Technique</i>	<i>Description</i>	<i>Suitability</i>	<i>Check Points</i>
T-group sessions, sensitivity training, group dynamics sessions	Participants are put in situations in which the views, behaviour, and personality of each are subjected to examination and critique by the others.	For developing better understanding and better perceptions of co-workers.	Participants may not be able to stand the stress involved in learning about themselves. They may withdraw from the group or suffer psychological damage. Problems arising within the group must be resolved before the group breaks up.
Correspondence courses	Correspondence courses require students to read material on their own or to actually work on equipment that is supplied. Students mail their answers to the company or university that offers the course. In some cases exams must be proctored by local professional teachers.	For development of technical manual skills. For training in specialized business subjects, such as accounting. For managerial development and broadening (for example, the Alexander Hamilton program).	Students must be highly motivated to study on their own. In some cases, students may have friends do the homework. Proctored exams will help reduce this problem.

## Teaching Techniques

<i>Technique</i>	<i>Description</i>	<i>Check Point</i>
Lecture	A talk to explain material, with little or no participation by the class in the form of discussion or questions.	For large groups. For orientation or easy-to-understand material.  Unless the preparation is very good, the audience may get lost at some point and miss all of the following ideas. Short lectures and brief applications or quizzes help.
Case study	A business problem situation is described in detail, with both relevant and irrelevant information given. The student is required to identify problems, develop alternative solutions, evaluate.	For small groups. Requires discussion and participation by all participants. The case-study method is used to develop skills at analyzing and solving complex unstructured problems and to provide broad simulated experience. It may also be used to develop group decision-making skills.  Students may get frustrated because the data are pretty much limited to the case material. Even in real life, however, similar limits are set by time and cost. Some students fail to participate unless called upon, and others may dominate the discussion unless controlled. Arguments may evolve around opinions rather than analysis of the "facts" of the case.
In-basket technique	Trainees are given a description of a company in some detail. Memos are then given to the trainees posing problems or asking for decisions.	For small groups. For developing analytical and decision-making skills. Outside data may be introduced by the trainees.  A good case and good questions are required. Considerable time may be required for discussion of students' replies.
Conferences and seminars	A speaker may lecture, or there may be no speaker, only a conference leader. Knowledge, ideas, and opinions are freely interchanged among all participants.	For broadening knowledge, stimulating new ideas, and changing attitudes. "Workshop seminars" may be used to develop skills.  Seminars away from the company tend to keep politics out of the viewpoints expressed.
Programmed instruction and computer assisted learning (learner, controlled instruction)	Programmed instruction and, usually, computer-assisted learning are rigid self-learning devices. The student is given material and tested on it immediately before proceeding to new material.	For either large or small groups where cost is critical. Permits people to study at their own convenience.  Appropriate programs must be available. Students may drop out by stretching out their work.
Simulation and gaming	A business situation or an entire industry is modeled so that the student may take actions and have the results reported back. Usually the model is stored in a computer.	For group projects. For developing decision-making skills requiring the integration of many factors.  The model should not be too simple, and the required learning of input formats should not be too complex. The students may just guess at their input decisions instead of making a good preanalysis. Computer reports of results should be returned to students well in advance of subsequent decisions.
Video and audio self-development programs	Lectures and rote learning material may be given on video equipment or tape cassettes.	For individual study at student's own pace. For learning facts. For developing skills when responses to the equipment are clear. For inspirational purposes, such as in sales training.  If the material is not clear, the student will become frustrated and drop out. The student's motivation must be strong to carry out a self-development program where reinforcement of motivation may be absent.

## LESSON 35

### EMPLOYEE TRAINING AND COACHING

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#### Overview

This Lesson covers topics in employee development from both the employee and employer perspective. There are three main areas of focus in this section: 1. Research and Resources, 2. Tools and Services, and 3. Organizations and Associations. Each of these topics are presented below in abstract form to present a clear idea of their contents in order to quickly assess the usefulness of the information.

After reading this lesson you will be able to

1. Explain Employee Development
2. Know why employee development is significant
3. What should employee development program include
4. Counsel employee

#### Employee Development

Employees and organizations will experience inevitable change. Human resource development (HRD) enhances employee competence in their jobs by increasing knowledge, abilities, and skills. Pro-active career management and self-reliance will be the key to success in the 21<sup>st</sup> century. In this environment, the employee will be primarily responsible for career development but the company will also have responsibilities that include clearly stating the company's corporate strategy and providing information about its business.

#### Strategy

The business strategy must be linked with the human resource strategy. It is essential to consider the differing characteristics of people when setting a plan for an organization to follow. The stage of development - embryonic, high-growth, mature, or aging - that the company is in will determine the HRD goals.

Companies that are just starting out are interested in strong managers. The next stage is characterized by high growth. While vying for a place for their product in the market, they are also spending a lot of time developing their intellectual capital, i.e., their people. When at the mature stage, companies begin to put more limits on employee actions. Good managers at this stage can assemble employees to be able to perform tasks in the best way possible. Companies that are aging will be very concerned with economic survival and will need a staff that can revitalize it.

Organizational culture will be strongest when the company is at the mature stage. "Culture is the pattern of basic assumptions a given group has... developed in learning to adapt to both its external environment and its internal environment" [Cascio, 1998]. Corporate commitment must exist for establishing and clearly communicating organizational culture. Managers who have well-developed human resource skills will recognize the value in a strong culture. They will be better suited and committed to aiding their staff in personal career development. There can be varying cultures across organizations. People who choose jobs that are in line with their own values and culture are likely

to be more productive and well suited to work together [Blake]. Successful human resource managers must tie human resources to business strategy goals.

HRD can assist managers in adopting strategic thinking and can facilitate the implementation of business strategies [Garavan, Heraty, and Morley]. The role of human resource staff is changing all the time. Their responsibility in the future is to staff projects with people committed to fulfilling business strategy. Human resource functions such as compensation, benefits and recruiting can be out-sourced. The judgment, knowledge, and foresight needed to staff effectively and efficiently will be the most important role of the human resource manager [Weiss].

Developing the skills of this carefully chosen staff is essential to achieving business strategy. Continual education for employees is one of the most vital organizational strategic goals. When the right people are hired and their skills are developed on an on-going basis, the human resource manager is insuring the staffing needs for future projects and goals. It only makes sense to keep good quality people and develop their skills to be exactly what you need. Their ability to adapt and change for newer projects will be a reflection of the development preparation that they have received.

Employees need to have good people skills in every organization. This certainly helps them to relate to customers. It also aids the organization by having a staff that can work well together. The development of human-relation skills can help to improve communication, which decreases conflict in the long-run.

Better understanding and effective communication abilities will no doubt increase productivity amongst staff. This creates a more positive work environment that motivates employees. Human-relation skill development means improved performance, which is a main business strategy goal [Dilenschneider].

#### Assessment

Part of development includes realizing the skills and abilities that employees already have. Even the most well trained employees will perform poorly if they are not assessed properly. Reinforcing previously covered information, teaching new concepts, and introducing new ideas are development aspects that must be measured and assessed. Employees need to know what is expected of them. Acceptable performance can only be known if the employees are assessed and if the assessment information is communicated to them. Then, the measurement of what people have learned after training will be more accurate. Feedback from managers to subordinates and vice versa is essential to the development function.

Research conducted over the past 70 years indicates tests to evaluate intellectual ability, the ability to draw conclusions from verbal or numerical information, and an individual's interests



can help in selecting successful managers [Cascio]. An employee needs to be assessed for readiness to accept management responsibilities. Assessment centers can focus on business simulations as well as formal assessments. These programs allow the employee to develop his/her skills in a structured and focused process. This kind of development encourages promotion and increases job satisfaction. Weaknesses are identified and the employee is empowered to tailor development to fit his or her future career plans.

These centers use multiple assessment techniques, such as situational tests, tests of mental abilities, and interest inventories. They also use standardized methods to make inferences from these techniques as well as pooled judgments from multiple assessors to rate each candidate's behavior. The assessment center prediction doesn't help very much if you are only trying to predict performance in management such as the clarification and evaluation of the promotion system in an organization. They are, however, helpful in capturing the promotion policy of the organization.

Both job and person analyses need to be included in assessment of the trainee [Cavanaugh].

Personality, motivation and the actual task can affect self-efficacy. This trait plays a big part in eventual performance on the job [Gist and Mitchell]. Development aimed at improving skills should increase self-efficacy.

It is important to remember that no one predictor of performance is perfectly valid and some mistakes in selection are inevitable. Conscious selection of managers and lower-level employees based on their fit with demonstrated job requirements, the strategic direction of a business, and organizational culture will minimize mistakes and enable you to make optimum choices.

Post development evaluation criteria and processes are essential. People-management and management of change issues are the key future training and development needs for both multinational and indigenous organizations [Tregaskis]. Garavan, Heraty, and Morley discuss the differing interest groups' perceptions on evaluation of HRD programs. Senior and line managers use quantitative measures such as optimal utilization of human resources, increased productivity and enhanced employee flexibility to evaluate HRD success. HRD specialists and individual learners place more emphasis on qualitative criteria such as the number of training days, how many and who participated, and improved performance and career options. Individual learners were primarily concerned about their enhanced employability resulting from certification, the range of competencies developed and the financial investment in their training.

## **Return on Investment**

By retaining employees, the value of their development increases. They will increase productivity and contribute to the over-all success of the organization. Their expanded knowledge makes them valuable assets for the company. Over time, this added value will more than cover the costs of their development.

This reflects a pay-back model with an emphasis on quantitative and tangible results. However, senior managers, education

providers, and HR and HRD specialists believe in the pay-forward model, i.e., results should accrue in the longer term primarily as cultural change and increased incorporation of corporate goals by individual employees. The pay-forward model "... is more in tune with the contribution..." HRD specialists believe they can make [Garavan, Heraty, and Morley].

## **Technology**

The responsibility for managing new technological advances has fallen on the human resource manager. Proper development of technical skills from understanding how to use a computer to interfacing with networks is increasingly difficult. If technical goals and strategies are expanded, the job of developing employees will be more focused.

Technological changes will alter the face of communication and also the way in which employees learn. People should be encouraged to develop their abilities individually especially with the ease of delivery of information through the Internet. Sharing knowledge, exchanging resources and learning can be improved within an organization. Interactive forums and tutorials allow learning to be done from even the most remote area. Real-time conferencing allows employees to be students in virtual classrooms.

All levels of business functions need technological development. HRD should focus on competent trainers. These will be the people with initial responsibility for working on technical skills. Then, as programs are further developed, people will welcome the technological change as it works its way into the organizational culture. For example, if the accounting department is up and running with new systems, why isn't the administrative level? Employees will welcome chances to develop their technical skills to keep the internal competitive climate more equal.

Changes in organizational structure will enable management to develop technical skills. They should allow an organization to restructure by enabling employees to learn, make contacts, and develop more efficiently. This can be done with effective strategic goals that allow development to take place. An example would be to have development designed internally, but the actual training would be out-sourced.

Electronic performance support systems (EPSS) are the latest wave in the training and development arena [Marquardt]. These systems use computers to gain access to information, save it, and distribute it throughout an organization. This helps development because employees can gain a lot of information in a short period of time on an individual and basis staff support is minimal. HRD managers must know this system and how it relates to the work procedures of the organization.

Preparation for technology is the key. Seeking out instruction from people with technological backgrounds is a first step. Check out on-line tutorials with commercial services. Seminars, conferences and training programs are the best places to get the most up to date technological development information for yourself as well as for subordinates. Many academic programs offer technological expertise. Books, magazines, and journals on technology are readily available. They also give information about the Internet, EPSS and other on-line services. There are

thousands of on-line sites that deal directly with technology and its impact on human resource development.

## Who

HRD needs to consider the multiple interests, expectations and perceptions of HRD constituents. These “actors” include senior/top managers, HRD managers/specialists, line managers, trade union representatives, professional HRD consultants, individual learners/employees, national training agencies, external training providers, and educational establishments. Each constituent has a varying degree of power and/or influence. See Table 1 for a listing of HRD issues/philosophies supported by each constituent.

It is important for the organization to carefully select the highest-caliber managers and lower-level employees who will profit from development programs because innovative and motivated performers don't evolve from marginal performers. Every employee has the right to feel valued and needs career development rewards. A promotion is an obvious motivator. However, career development is not that simple. Managers need to foster the skills and abilities of people. By helping employees to develop their skills, they risk losing the employee to an advanced position in another organization. Nonetheless, the manager must contribute to career development to establish loyalty. It is ironic, but the most loyal employees in an organization are the ones most likely to leave and pursue other employment options if not properly rewarded.

People go through many changes in life. Marriage, children, divorce, relocation, and aging are examples. Personal backgrounds and experiences will shape the way in which development can occur. Managers need to focus on the development tasks that employees have to handle in the early, middle, and late stages of their careers. There are specific groups that need special emphasis on development.

## Women & Minorities

Companies wanting to have a competitive edge in the workforce area also want to establish development programs for women and minorities. The number of women and minorities in the workforce is increasing rapidly and they will continue to be promoted into top positions, start their own businesses and be prominent leaders in the business community. Organizations will be wise to acquire women and minorities who will commit themselves to strategic positions.

The value of human resources must be maximized. What better way to boost value than to invest in HRD skills? By recruiting more women and minorities, organizations are leveling the playing field that has been dominated by white men. Developing their skills and abilities will help the organization to outplay the competition.

Mentoring can lead to development, growth, and learning. It can also maximize our natural capacity to form attachments [Collier]. Specialized leadership programs are an excellent mentoring tool that can be utilized. By following examples, women and minorities can develop strong leadership styles, confidence, and boost self-esteem. Communication skills can be improved so that innovative ideas can be seen as more effective when delivered in the right way.

Women and minorities will network in the business world through leadership programs. The more open the development of their skills, the more willing women and minorities will be to speak freely. Good ideas will not be lost and the organization is sure to gain. This networking is an opportunity for self-advancement and promotion beyond the scope of their job.

Keep in mind that good leadership skills are not gender specific. Women and minorities need to be able to handle all kinds of business people. The opportunities for open and desirable work places need to be there for all employees. In this way, the development of women and minorities will encourage them to advance to leadership positions.

Career transitions sweeping the world generate macroeconomic developments that emphasize cross-cultural and cross-national differences which will impact how people are managed and developed [Sparrow]. Improved understanding may also come with diversity training. The increase of minorities and women in the workforce can shape organizational practices and create cultural differences amongst staff [Tregaskis]. A workforce of minorities and women will be better able to work and to feel that they belong when the employees are trained in diversity awareness issues.

## Older Workers

The work force is aging. People are healthier and living longer. They face reduced retirement funds and must continue to work. Managers can capitalize on the knowledge and experience that older workers have. Older workers have the potential to learn and be devoted to developing their work skills [Judy and D'Amico].

Age and performance have been shown to be unrelated [Judy and D'Amico]. Therefore, aging and the loss of ability to function that accompanies it are not factors with older workers. Aging only affects performance when it is linked to the stability and growth of the individual.

Older workers can enhance communication in an organization. This is because they can act as mentors or responsible examples. To attract this kind of worker, managers need to make jobs, benefits and development opportunities better than the option of retirement. By retaining would-be retirees as consultants or in full- or part-time positions, companies are eliminating the need to find replacements for people who already know and are committed to their jobs.

## Youth

Employers need to identify necessary work skills and to hire and train young people. This kind of development sets the foundation for the workforce in a positive way. Paradoxically, the United States has both the highest levels of degree achievement and the highest levels of educational underachievement [Tregaskis]. Local governments, business associations, and employers need to aid in education expansion, training, and employment opportunities for young people who are given needed opportunities for jobs [Judy and D'Amico]. Adult mentors can build confidence as well as help youth take responsibility for their behavior. They can help the student learn technical skills and develop realistic goals and expectations

[Collier]. Eventually employers will get mature and responsible adults to work in their organizations.

Schools, communities, parents, employers and youth should create partnerships for the assessment and planning of resources [Puglisi]. The assessment would help to plan the actions for providing for the needs of young workers. Planning reasonable part-time work schedules, providing education, and assisting in various physical and learning disabilities are examples of how these needs can be met.

## Contingent Workers

With contingent workers, it is important to remember budget limitations. Training the contingent worker is often necessary so that they are able to improve their performance and to produce the best results. Contingent workers are hired to complete specific tasks. It might be assumed that they already have the exact skills that you are looking for to get the job done in the best way. Otherwise, you would have trained a permanent employee to do the job. If contingent workers will not be a permanent part of an organization, training/development dollars should be committed to existing and/or future permanent workers.

## Senior Level Executives

Executive development programs should enhance an executive's leadership abilities in terms of profits and reducing costs. Leadership models help to define actions required by managers. This leadership emphasis is reinforced in the organization through effective and responsible managerial staff [Mailliard].

Senior level executives are a resource that will be targeted by job recruiters and headhunters. If development has been productive and thorough, excluding huge salary raises and sign-on bonuses, the executive will choose to stay. The level of individual interest in employee development should be strong enough to encourage loyalty [Koonce].

## HR Managers

HRD managers spend so much time developing their employees' careers that they overlook their own. They too need to understand that they are responsible for themselves. They can not get too focused on budgeting and time constraints, otherwise they will be overwhelmed and not able to tend to their own career development needs [Overman].

These managers need to make strategic decisions for themselves as well as for their organization. They should view themselves as part of the teams, not just the function that supports the team. Senior management wants human resource technicians as well as open thinkers. It is difficult to have both in the same people. A varied mix will help to balance the needs of the managers, their employees and the organization as a whole.

The human resource generalist role is becoming obsolete and HR professionals are now expected to provide support, service, consulting and leadership [Walker]. Expanding current job descriptions for themselves involves increased responsibility. Risks will have to be taken in order to expose the human resource manager to other areas of an organization. They may find that they are pleased where they are. Or, they may choose to move into an entirely different discipline, say accounting, for the sake of broadening abilities, knowledge, and skills.

## Training

Training in the Nineties has become an absolute necessity. Organizations are spending increasing amounts of money to make sure that they have employees that are well qualified. "Training consists of planned programs designed to improve performance at the individual, group, and/or organizational levels" [Cascio].

By centralizing course development and delivery, training efforts can be expanded without increasing cost. This happens when different business cultures are combined into cohesive units that focus on the customer. Training is not a cure for what is broken with a company and its staff, development of abilities is [Modic].

## How

In order to provide meaningful development opportunities, the material must be appropriate and substantial [Moore]. Also, practice and feedback are essential. Businesses (with government help) need to concentrate on 70% of non-college graduates who enter the U.S. workforce. Also, schools and employers must develop closer ties.

As a result of increased demands for readiness and flexibility and ongoing changes in the business environment, organizations need to shift from static fit to dynamic adjustment by their workforce. They "... need to devote additional attention to non-task-specific competences and their significance for efficiency, competitiveness, and career mobility" [Nordhaug]. These competences include firm-specific, non technology-related tasks. Under the current neoclassical human-capital theory, the development of firm-specific knowledge and skills is paid for by the employer but the development of general competence is financed by the individual, although these skills are transferable across employers. Nordhaug lists six competence categories:

1. Meta-competences are predominantly interpersonal and conceptual skills related to people management as well as analytical problem-solving skills. Technical skills are largely ignored.
2. General industry competences - are top-level managers able to be shifted from one industry to another with ease or are there industry- and firm-specific conditions like technology, culture and traditions that prevent transferability?
3. Intraorganizational competences focus on internal networking capabilities, and knowledge of firm-specific information and culture.
4. Standard technical competences include knowledge about processes, techniques, tools, etc., related to the business.
5. Technical trade competences are related to knowledge and skills limited to one industry or public sector generated through vocational education, on-the-job training, apprenticeships, etc.
6. Idiosyncratic technical competences are the narrow range of knowledge and skills that generate congruence and do not facilitate change within the organization.

Table 1 lists some dominant issues/philosophies on HRD as described by Garavan, Heraty, and Morley. Where the learning needs are individual in focus, HR specialists, senior managers

and education providers believe the primary responsibility for financial, motivation and commitment falls on the individual learner. Also, the U.S. has the highest mobility rate, which is sometimes used as an excuse for U.S. employers' not investing in training and development [Tregaskis].

Table 1		
Issue/philosophy	Description	Espoused by
Instrumental	Views HRD in terms of formal courses with a focus on subject matter and plenty of trainers	HRD specialists, line managers, trade unions and national training advisors
Existentialist	Preference for one-on-one learning situations, self-managed learning, facilitation rather than information transfer, and self-evaluation	Senior managers, individual learners, HRD specialists and education providers
Interventionism	The organization has primary responsibility to develop and educate its human resources	Trade unions, HRD specialists, individual learners, and HRD consultants
Centralism	The training and development activity is controlled by central department	HRD and training consultants
Decentralization	Training and development should not be disseminated from a central point	Line specialists, trade unions, and individual learners
Traditionalism	Most important investment in HRD should occur at the beginning, i.e., front-loading, because it assumes low levels of skill obsolescence and low rates of technological development over the career	Individual learners and trade unions
Continuous development	Where learning is ongoing, varied and subject to individual learner priorities	Management education providers and HRD consultants
Humanism	Emphasizes the priorities of the learner and the longer-term contribution to the HRD investment	Individual learners, trade unions and HRD specialists
Utilitarianism	Development should have immediate value to the organization	Senior managers, line managers and HRD specialists
Maintenance orientation	Reinforces the status quo with no change in current practices and values	Individual learners, trade unions and line specialists
Change orientation	Concentrates on individual, team and organizational change that includes facilitation of structural change, innovation, teamwork and improved performance	HRD specialists, senior managers, HR specialists and education providers
Structural-functional perspective	Believe the role of HRD is to repair skill gaps and other deficiencies	Individual learners, national training advisers and trade-unions
Mechanistic learning process	Structured, one-time process aimed at large groups	Trade unions, individual learners and line managers
Flexible learning process	Flexible and focused on the learner	Senior managers, HRD specialists, and educational HRD providers
Priority	Organizational vs. individual learning needs	Most espoused organizational priority with trade unions and individual learners placing a higher priority on individual needs
HRD as change-agent and consultant	HRD is responsible for flexibility and suggesting innovations	Senior management, HR managers, HRD specialists
HRD as diagnostic function	HRD is responsible to identify, coordinate and provide learning activities to cost-effectively repair skill gaps	Trade unions, external training providers and individual learners

See Table 2 for some a list of flaws with suggested improvements in the current system for developing managers.

Table 2	
Flaw	Suggested improvements
The current process takes too long.	Hire search firms to identify new board members who can step in as CEO if necessary.
The current system produces leaders who are too insular and therefore need to rely on their internal authority.	Broaden the experience of would-be CEOs enough to give them visibility outside the organization.
Methods tie executives too closely to tradition.	Focus more on the ability to adapt to change than on a specific skill during development.
People may be trained in skills they already possess.	Research the individual's work history and tailor the program to meet his/her specific needs. Pay careful attention to reliability and validity of the knowledge to be imparted.
The development budget may be wasted on "rest and recuperation" sessions.	Ensure that the program does not merely entertain and that job skills or job knowledge is imparted.
The budget may be spent on fancy hardware that meets the training director's needs but not the organization's.	Specify the kinds of competencies that are necessary and ensure that development goals are clear.

## Control and Ownership

According to Garavan, Heraty and Morley, ownership and control of HRD activities is subject to actor perceptions, which make it difficult to determine accountability. Line specialist groups feel they should control and that HRD's role is to provide effective service. Individual learners and external training providers prefer shared ownership and collaboration. Trade unions, senior managers and HR specialists believe line specialists and individual learners should own HRD while control is the responsibility of HRD. There has been a shift in responsibility for HRD investment to the individual learner. This probably reflects today's reduced job security and the utilization of development to build commitment and increase the employee's future employment as well as his/her competencies. It is generally believed that it is senior management's role to provide financial and psychological support and demonstrate commitment to investment.

High-flyer programs [Larsen, London, Weinstein and Raghuram] [Tregaskis], i.e., fast-track career-development programs for designated high-potential managers, were common in the 1960s and 1970s in large, bureaucratic and stable organizations. This all changed in the 1980s when companies needed to downsize and did not require as many fast-track trainees. These programs are also used to enhance corporate-image for external recruiting [Tregaskis]. However, fast-tracking by-passes the talents of the subordinates of program participants causing discontent and jealousy while putting tremendous pressure on the selected few. Larsen, London, Weinstein and Raghuram discuss the human-capital theory (concentrates on the actual competence level of the individual) and the organizational-structure approach (argues that career opportunities are determined by internal activities such as organizational changes, redesigning of jobs, the competition for specific vacancies when they arise, etc.). They believe that

high-flyer programs may continue to be of use for large, mature organizations but companies with more project- or network-based organizations may find them disadvantageous. They also suggest that virtual organizations will have short life expectancies due to the nature of the work and will require external career development programs.

## Why Provide Development Opportunities...

With effective recruitment selection systems created through the HRD function, organizations are encouraging retention. The philosophy is that recruitment needs to initially select those employees with the rights skills who are likely to have good job performance. Use available screening and selection procedures to determine reliability, job-relatedness, and validity of proposed development programs.

Designing and implementing development activities is a difficult challenge for human resource managers. Employee retention is a measurable part of development practices. Other areas of development such as helping employees to be and feel productive are intangibles. Retention will happen if employees are motivated to perform. Developmental techniques to enhance learning and growth may be the key to this necessary motivation.

Job involvement and organizational commitment are ways to predict job turnover. A lack of development opportunities leads to reduced retention rates [Moore]. By performing a job well, employees increase their self-confidence and add to their feeling of being needed. This increases their job involvement and their attitude is positive. The commitment on the part of the organization is to help employees meet their basic living needs such as good pay, benefits, and promotions. This leads to an increased commitment to the organization.

Increasing an individual's employability outside the company increases his/her job security. It enhances their desire to be loyal to their current employer who has taken the time to ensure the future of the employee. Development provides learning opportunities for both the employee and the organization. For the employee, it creates an interesting and challenging work environment. For the organization, it gives them the opportunity to provide feedback to the employee about job performance. Keeping people growing and learning is what keeps them interested.

Research indicates that an individual employee's vocational qualifications and the existence of a policy statement, i.e., company buy-in, are the most important factors. Also, the absence of a company policy leads to reduced training and development programs [Thompson, Mabey, Storey].

A new perspective that promotes HRD as a function that enhances performance, multiple skill development and job advancement rather than simply a mechanism for developing core skills is evolving. This perspective emphasizes development of individuals that will result in boundaryless career opportunities, enhanced employability and continuous personal development [Garavan, Heraty, and Morley].

## Coaching Employees

Coaching is all about **helping employees** at all levels **improve**.

It helps both **employees and managers** become **more accountable** for their decisions and actions. And it **reduces employee turnover** while increasing your employees' **commitment** to do the best job they can.

Employees and Managers should be given the support they need to perform their best, develop leadership skills, and **grow to their full potential**.



You'll gain **greater productivity**, and **hold on to valuable employees**.

Think: Is coaching just for executives?

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Not so . . . The Human Resource Institute's 12th 6 months survey of issues impacting people management today shows that leadership is a top issue. Experts estimate that **effective leadership** contributes to as much as **80 to 90% of an**

**organization's success**. Tom Peters asserts "**All excellent companies have strong leaders at every level.**"

How do you get strong leaders?

By coaching employees to be their best. Coaching managers can do more with limited resources, enhance the work environment, meet greater customer expectations, and deliver results.

Following will help you in knowing what Training to train for coaching includes:

"How to Conduct a Coaching Session"

"How to Practice Coaching with a Peer"

Plus, how to coach when the employee needs to . . .

Show Up on Time

Stifle Gossiping

Get a Positive Attitude

Participate in Company Events

Regain Morale and Enthusiasm

Smile on the Front Line

Follow Through with Customers

Develop Self-Confidence

Take a Proactive Role

Take Decisive Action

Follow Process / Procedure

Communicate to Teammates

Communicate with Clarity

Support Merger or Acquisition

Stay on Schedule

Consistently Meet Deadlines

Avoid Hasty Decisions

Delegate Responsibility

Think "Big Picture"

. . . and more!

## Best Practice

In a recent survey report from The Conference Board, **83%** said **developing leadership skills** is the **primary learning objective** of their people development efforts. One powerful way to impart those skills and develop upcoming leaders is to **partner them with mentors**.

## Mentoring

Mentoring is a tool to help **leverage a company's most valuable resources: PEOPLE**. It is all about pairing a promising employee with an experienced one. The mentor instructs by example, conveys the company's values, demonstrates how to perform specific functions, and serves as the mentee's advocate. Mentoring builds confidence, shortens learning curves, clarifies expectations, and boosts employee retention rates.

Consider which employees could benefit from mentoring. Who could serve as mentors?

1. Match a mentor with each mentee. Use the "Mentee Profile" discussion guide and suggest they explore those topics during their first meeting.

2. Arrange brief introductions, and communicate the benefits and expectations of the relationship. Use our “Mentoring Progress Review” forms to **help them both grow**.
3. Incorporate mentoring responsibilities into the mentor’s performance review. We provide verbiage so you can “**give credit for mentoring**” in performance review.

## Team Building

1. Determine who should be on the team..
2. Give them our “Team Meeting Planner” form to plan their work and conduct team meetings.
3. Employ our “Team Process Review” worksheet to help them appreciate their collective work, discover their strengths, and adjust for improvement.
4. Give them all of our teambuilding tools, such as the “Team Vision” worksheet, “Team Rules” worksheet, “Team Role Assignments” checklist, “Team Meeting Icebreakers” list, “Communication Protocol Guidelines”, and “Team Meeting Closing Activities” list. They’ll delight you with their productivity!

Team building sets the stage for employees to perform beyond their specific assignment or expertise. It can lead to cross-training, cross-functioning, and increased employee commitment, resulting in higher **employee retention**. Team building is serious business, and often critical to an organization’s ability to remain competitive. Teams are effective because they fully **leverage the commitment and collective strength of employees**. We not only show you how . . . **we provide the tools** to do it in your company and suggest you start with a “fun committee” team.

**Put mentoring and teambuilding to work in your company.** Match up mentoring partners this week. Set the stage for your teams to increase leadership capacity in your company! The “Discussion Guides” and “Progress Review” forms for mentoring, the “

## Staff Development and Communication!

**Effective workforce development** is one of the biggest challenges a business has. Whether it’s communicating with your **entire company**, or communicating **one-on-one**, we’ve got the **solutions** that will help you **develop your workforce** and support **peak performance**.

Check out:

Rev up your **Staff Meetings** for maximum communication and motivation. Included are:

- A sample agenda for running a motivating and productive meeting
- Memos and certificates for Service Anniversaries, Team Player Awards, and Great Ideas.

**Performance Reviews** - Provide feedback and **support improvement**. Included are:

- A **new method** for assessing performance against expectations
- How to prepare for a review
- Tips for successfully conducting a review

- Downloadable forms and memos
- A sample improvement plan

**Team Building** - Address challenges with the **combined efforts** of a focused team. Included are:

- Tools for determining and assembling your team
- Clearly defining roles, guidelines, and responsibilities
- Process Reviews to gauge progress and make adjustments

**Employee Coaching Lessons! - 18 quick-reads** that include forms and tips from real-life scenarios. Help your employees to:

- Consistently Meet Deadlines
- Think “Big Picture”
- Follow Through with Customers
- Regain Morale and Enthusiasm

Other **fully developed modules** that will **improve communication** and **support professional growth** include:

**New Employee Orientation** - Shorten the learning curve with an overview and 14 forms and letters.

And don’t forget to **add some fun** to your workweek with **Perks and Events!**

Any Self & Career Development training course is designed for those wishing to review their career so far, decide on future self development, and those looking to take control of their future.

Self & Career Development Training Course Objectives:-

To enable individuals to take more responsibility for their own career and self development

Having completed the training course participants will be able to:

- Identify what drives and motivates them.
- Work on future career goals with a clear focus on the desired outcomes.
- Quantify difficulties that may affect their plans, and develop a strategy for dealing with them.
- Identify additional skills or knowledge required to further their self development.

Generate a range of options within their control which can be used to further their career.

## Self & Career Development Training Course Content

Self Review: Historical review; strengths and key drivers Creating Personal Vision: Techniques and practical session Setting Goals: Types of goals, dealing with barriers, ideas for learning Objectives and Actions: Bridging meaning and doing; first steps	Day 1:  Personal Review:  Historical Drivers & Motivators  Present Review:  How others see me The power of feedback Satisfaction levels  Visioning:	Day 2:  Visioning (cont.):  Techniques for generating future plans Practical session  Creating Goals:  Types of goals Overcoming barriers Learning preferences and options Gap analysis  Setting Objectives Review
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### Article:



### Human Resources : Growing Your Employees

Most workers are concerned about their career development. Wanting to take control of their own career destiny, they're concerned about their future marketability and their ability to be ready for any job they may want in the years ahead. Whether they choose to stay with the same company or not, they want to get all the training and education they can to position themselves for future options.

If you want to retain your employees, help them grow. Provide all sorts of learning opportunities, and there's a greater chance they'll stay with you. Yes, this statement is contrary to the warning that it makes no sense to train people as they'll leave you anyway. If you follow the advice we've shared in this column, there's less chance of them leaving. If you don't provide the growth opportunity they want, your people will leave for greener pastures.

In counselling interviews, which could be the same interviews used for performance appraisals, explore career options with each of your employees. Concentrate first on internal opportunities; as much as possible, focus them on learning and growing

within your company. Build their dedication to continuous improvement.

Be careful not to make any promises about any specific future positions. It's fine to talk about how people can prepare themselves to be eligible for consideration, but don't make promises you may not be able to keep. Concentrate on growth and keeping options open, rather than locking into any particular career path.

As you build each individual's plan, keep the employee's options open. Given the speed of change and the development of opportunities, it's valuable to not be limited. Explore the knowledge, skills, and experience your employee will need for the anticipated career path. Will management and leadership skills be helpful? How about technical knowledge? Experience in other countries? Each person's plan will be different, based on the growth opportunities that will be most appropriate for that individual's personal development.

Establish deliberate plans for competency building. What's the best way to gain the desired knowledge, skills, or experience? How, when, and where will the growth be accomplished? Who will be responsible for assuring that the employee has all the support needed to implement the plan - time, funding, scheduling etc?

Meet with employees periodically to review progress and make any needed adjustments. As people make progress, recognize their achievements. Letters of congratulations or praise from superiors, announcements in company publications or on the company's intranet, or special assignments are recommended.

As necessary or appropriate, consider options outside your organization. Consider having career counselling done by a professional in the career-planning field, someone not employed by your company. Certainly, you're taking some risks here, but you'll send a clear message that you really care about the employee as a person. When people see that you really care about them as individuals, they will look more seriously at their



career development. And they'll have a greater appreciation for your sincerity in helping them. Your loyalty to them will usually be reflected in their dedication to you.

Specific techniques to help people grow include training courses in your company, taught by fellow employees. The instructors might be from your training department; they might be peers with knowledge or experience to share. You could bring in outside professional trainers. Or you could send people to commercial seminars, continuing education courses at community colleges, and training programs offered by trade and professional associations. Tuition reimbursement can also be used to support employees who take academic courses at colleges and universities.

There are ways you can help people grow in their jobs. Challenging assignments, cross-training, and cross-experience enable people to become more than they have been in the past. We promote the concept of learning something new every day - it works! The more competent people feel, the more confident they will be. Confident employees are more productive, more comfortable in their jobs, and more stable in their employment.

### **Activity And Assignment**

1. Why is there a need for employee Development.
2. Write a note on Self Development.
3. How does coaching employee plays a crucial role in HRD.

### **Notes -**

## LESSON 36

### MENTORING AND COACHING

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#### Training, Coaching, Mentoring - Developing People

There are many different training and development methods. On-the-job training, informal training, classroom training, internal training courses, external training courses, on-the-job coaching, life-coaching, mentoring, training assignments and tasks, skills training, product training, technical training, behavioural development training, attitudinal training and development, accredited training and learning, distance learning - all part of the training menu, available to use and apply according to individual training needs and organisational training needs.

Training is not just found in the classroom - it's anything offering learning and developmental experience. Training and development includes attributes such as: ethics and morality; attitude and behaviour; leadership and determination, as well as skills and knowledge. Development isn't restricted to training - it's anything that helps a person to grow, in ability, skills, confidence, tolerance, commitment, initiative, inter-personal skills, understanding, self-control, motivation, and more.

All supervisors and managers should enable and provide training and development for their people - training develops people, it improves performance, raises morale; training and developing people increases the health and effectiveness of the organization, and the productivity of the business.

The leader's ethics and behaviour set the standard for their people's, which determines how productively they use their skills and knowledge. Training is nothing without the motivation to apply it effectively. A strong capability to plan and manage skills training, the acquisition of knowledge, and the development of motivation and attitude, largely determines how well people perform in their jobs.

Training is essential for the organisation. It helps improve quality, customer satisfaction, productivity, morale, management succession, business development and profitability. Training planning and training itself is a step-by-step process -

Training ('Induction Training') is especially important for new starters. Good induction training ensures new starters are retained, and then settled in quickly and happily to a productive role. Induction training is more than skills training. It's about the basics that seasoned employees all take for granted: what the shifts are; where the notice-board is; what's the routine for holidays, sickness; where's the canteen; what's the dress code; where the toilets are. New employees also need to understand the organisation's mission, goals and philosophy; personnel practices, health and safety rules, and of course the job they're required to do, with clear methods, timescales and expectations.

Managers must ensure induction training is properly planned - an induction training plan must be issued to each new employee, so they and everyone else involved can see what's

happening and that everything is included. You must prepare and provide a suitable induction plan for each new starter.

An organisation needs to assess its people's training needs - by a variety of methods - and then structure the way that the training and development is to be delivered, and managers and supervisors play a key role in helping this process. They also should be 'topping-up' the development of their people through their own direct efforts. This type of development should also include mentoring and coaching, which is very effective in producing excellent people, and should be used as an additional training method alongside formal structured training courses.

It's important that as a manager you understand yourself well before you train others - your own skills (do you need training in any important areas necessary to train others?) - your own style (how you communicate, how you approach tasks, your motives - they all affect the way you see the role and the person you are training).

And it's vital you understand the other person's style and personality too - how they prefer to learn - do they like to read and absorb a lot of detail, do they prefer to be shown, to experience themselves by trial and error? Knowing the other person's preferred learning style helps you deliver the training in the most relevant and helpful way. It helps you design activities and tasks that the other person will be more comfortable doing, which ensures a better result, quicker. Various models and tests are available to help understand learning styles

#### Activity-mentoring Training

'Activity-mentoring' training is a highly productive and effective modern method of training and developing people in organizations, especially for staff in teams and departments, **and for developing organizations themselves**. The approach builds on management by objectives (MBO's) principles, but is more participative, voluntary and inclusive. By comparison, MBO's are a 'one-way street'; isolated and individually separate, prescribed along a single-channel towards a task focus. Well-facilitated 'activity mentoring' is consensual, team-orientated, with a personal development and team building focus, across multiple organizational interfaces, particularly to and between management/subordinate/peer levels. Activity mentoring methods also help develop systems (not IT and processes, but overall systems: ie., how an organization works), organizations, management and communications, in an open, dynamic, organic, three-dimensional way. The activity-mentoring approach uses several integrated techniques which produce more reliable and relevant training outputs, in terms of individual skills, attitudinal development, and direct job and organizational performance improvement. The approach is **facilitative rather than prescriptive**, and broadly features:

- strategic assessment of organisational and department priorities and 'high-yield' training needs
- interpreted discussion with line-managers of training delegates and strategic managers of the organisation
- pre-training skills/behavioural needs-analysis - all training delegates - and pre-training preparatory work
- small groups - practical workshops - short sessions - highly participative and situation/solution-based - focused on practical job issues, individual personality/learning style and organisational priorities
- individually agreed tasks and assignments - focused on practical priorities and individual needs
- follow-up coaching and mentoring one-to-one support - giving high accountability and reliable deliverables
- ongoing feedback and review with line-managers and strategic managers - coaching/task notes for line managers

The process works on several different levels: individual, team, task, organisational and strategic. Activity mentoring also gives strong outputs in skills, behaviour and job priority areas, as well as being strongly motivational and where necessary resolving conflict and attitudinal issues.

## Mentoring Cost Analysis and Justification

Mentoring can be provided in various ways and programmes take a variety of shapes. Mentoring can be external, where the mentoring is essentially provided by external people, or an internal activity, using mentors within the organisation.

Due to the newness of mentoring as an organised process, and because mentoring programmes are so varied, statistics as to general costs and returns across industry are not easy to find. Here however are general cost indicators for a program essentially delivered by internally appointed mentors.

The main elements of a mentoring programme that carry quantifiable cost would be:

- **Training of mentor(s)** - comfortably achievable for £1,000/head - it's not rocket science, but selection of suitable mentor is absolutely critical - good ones need little training; poor ones are beyond any amount of training.
- **Mentor time away from normal activities** - needs to be a minimum of an hour a month one-to-one or nothing can usefully be achieved, up to at most a couple of hours a week one-to-one, which would be intensive almost to the point of overloading the mentoree. That said, there may be occasions when the one-to-one would necessarily involve a whole day out for the mentor, for instance client or supplier visits. Say on average a day a month including the associated administration work.
- **Overseeing the program, evaluating and monitoring activity, progress and outputs** - depends on the size of the program, ie number of mentors an number of mentorees - if the mentoring is limited to just a single one-to-one relationship then it's largely self-managing - if it's a programme involving several mentors an mentorees then I'd estimate an hour per quarter (3 mths) per one-to-one mentoring relationship - probably the responsibility of an

HR or training manager. If this person with the overview/monitoring responsibility needs external advice you'd need to add on two or three days consultancy costs.

- **(Mentoree time away from normal activities** - effective mentoring should ideally integrate with the mentoree's normal activities, and enhance productivity, effectiveness, etc., so this is arguably a credit not a debit.)

Having said all this, unless the training aim is simply to impart knowledge, for which conventional classroom training and course work are very appropriate, I'd go for mentoring every time, especially if the aim is to truly develop people and organisational effectiveness.

## What is Workplace Mentoring?

Mentoring - the presence of caring individuals who, along with parents or guardians, provide young people with support, counsel, friendship, reinforcement and a constructive example - is a strategy that can help young people of all circumstances to achieve.

Throughout history, older people have been mentors to young people, mostly through informal, spontaneous arrangements. According to the July-August 1978 Harvard Business Review article Everyone Who Makes It Has a Mentor, mentoring has always been an integral part of the career advancement of the business executive. Today, mentoring is emerging as a formal process to assist young people, often used in conjunction with existing development programs involving education, job training or life skills.

### Workplace mentoring:

- Offers young people the chance to develop a relationship with one or more employees who become friends, role models and advocates for them.
- Typically takes place at the workplace, either during or after school hours.
- Can take several forms, including tutoring, job shadowing, career exploration and game playing.
- Typically asks the mentor for a commitment of at least one year.

## Article

### How to Develop

#### An Operations Manual For Your Mentoring Program

By Jerry Sherk, M.A.

For:

The EMT Group

### Development of an Operations Manual

The Operations Manual is based on the ten Recommended Best Practices for Mentor Programs (QAS) for Youth Mentoring Programs. Experienced program managers understand that the Recommended Best Practices for Mentor Programs are vital in creating safe and effective programs. Essentially a framework for best practices, these standards are also recognized as a valuable tool for promoting mentee safety and personal growth.

When first learning how to develop a mentoring program, it

takes new program managers a long time to understand how utilize the standards. It's our belief that their use can be simplified if program managers develop an operations manual as described below. Remember, the primary uses of an operations manual are A) to develop strategies to be used in running the mentoring program, and B) to chronicle the development of operational procedures so that they can be passed on to subsequent program staff.

**Here's how to begin the development of your operations manual:**

- Purchase a 1 1/2 to 3 inch plastic three-ringed-binder from your office supply store.
- Purchase a set of 15 (or more) subject dividers.
- On the first 10 dividers, put the name of each of the QAS standards starting with
- "Statement of Purpose and Long Range Plan."
- Print a brief description of each of the standards (as given below) on the first page of
- each QAS section as a reminder of what the program is about.
- Throughout the program, chronicle any developments, timelines, plans, successes or failures, etc. in their respective categories.

**How to Develop An Operations Manual for Your Mentoring Program 2**

With the additional dividers, you can consider the following additional headings:

**Risk Management:** Make a separate heading Risk Management, and put the "QAS Risk Management Matrix" in it's entirety into this section. Follow the instructions in part ?? of this training that describe utilization of this tool

**Narrative:** This section can serve as a journal for the program. Whose idea was it to start the program? What personnel were on the original design team? Where did the funding come from? What were some of the early successes and failures? Subsequent program staff can benefit greatly from this information.

**Recommended Best Practices For Mentor Programs: Obtain a copy of the**

Recommended Best Practices for Mentor Programs in their entirety and place in this section.

Sometimes it's good just to read through the standards to see if anything jumps out at you (that you may need to improve on).

**Forms:** Place program forms, letters, sign-off sheets, etc. in this section and periodically assess for possible updating.

**Brief Descriptions of the Ten Recommended Best Practices for Mentor Programs**

As previously noted, paste each descriptor on the first page of each subject heading in your operations manual. Then throughout the life of your program, place any materials, strategies, etc, which pertain to a particular standard in the appropriate divider. (There are longer descriptions available if you wish to place them here.)

**How to Develop An Operations Manual for Your Mentoring Program 3**

1. A Statement of Purpose and a Long Range Plan that includes:

- Who, what, where, when, why and how activities will be performed.
- Input from originators, staff, funders, potential volunteers, and participants.
- Assessment of community need.
- Goals, objectives and timelines for all aspects of the program.
- Funding and resources development plan.

**Statement of Purpose and Long Range Plan** is the guide that steers your program.

This plan begins with "mission statement" and "goals and objectives" and includes who will be mentored, how many, where, how often, by whom. Many aspects of this plan will be integrated into the mentor training manual, as well as other program materials.

**How to Develop An Operations Manual for Your Mentoring Program 4**

2. A Recruitment Plan for both mentors and mentees that includes:

- Strategies that portray accurate expectations and benefits.
- Year round marketing and public relations.
- Targeted outreach based on participant's needs.
- Volunteer opportunities beyond mentoring (i.e., event organization, office support, etc.)
- A basis in your program's statement of purpose and long-range plan.

A year-round **Recruitment Plan** is necessary to tap into resources such as service clubs, schools, corporations, businesses, and professional organizations to find mentors. This plan includes the development of key phrases, speeches, brochures, flyers, public service announcements, and media campaigns that accurately depict your program.

**How to Develop An Operations Manual for Your Mentoring Program 5**

3. An Orientation for mentors and mentees that includes:

- Program overview.
- Description of eligibility, screening process, and suitability requirements.
- Level of commitment expected (time, energy, and flexibility).
- Expectations and restrictions (accountability).
- Benefits and rewards they can expect.
- A separate focus for potential mentors and participants.
- A summary of program policies, including written reports, interviews, evaluation, and reimbursement.

The **Orientation** clarifies roles, responsibilities and expectations of mentors, youth, their families, the mentoring program, and the school (if they are a partner). The orientation is a way of describing the program in detail, including the commitments

and the terms of participation in the program. After the program manager lets everyone know what the program is about, they then ask the participants, “are you still interested?” Note that the mentor orientation is usually much shorter than the initial basic mentor training.

#### **How to Develop An Operations Manual for Your Mentoring Program 6**

##### **4. Eligibility Screening** for mentors and mentees that includes:

###### **Adult Mentors**

- An application process and review.
- Face-to-face interview.
- Reference checks for mentors which must include criminal history record checks (finger printing), and may include character references, child abuse registry check, and driving record checks.
- Suitability criteria that relate to the program statement of purpose and needs of the target population. Could include some or all of the following: personality profile; skills identification; gender; age; language and racial requirements; level of education; career interests; motivation for volunteering; and academic standing.
- Successful completion of pre-match training and orientation.

###### **Youth Mentors**

- An application process which must include a parental consent form.
- Face-to-face interview.
- Reference checks of at least two personal non-related adults.
- Successful completion of a pre-match training and orientation.

**Screening** sets the standards of who is eligible for the mentoring program. Safe programs set eligibility requirements and conduct fingerprint and background checks through the California’s Department of Justice (or through the FBI if the mentor candidate has been in the area for less than two years). This process weeds out persons with felonies and other crimes which indicate the person would present a high risk for youth. Mentees are screened by making sure they meet the eligibility criterion set by the program.

#### **How to Develop An Operations Manual for Your Mentoring Program 7**

##### **5. A readiness and Training Curriculum** for all mentors and mentees that includes:

- Trained staff trainers.
- Orientation to program and resource network, including information and referral, other supportive services, and schools.
- Skills development as appropriate.
- Cultural/heritage sensitivity and appreciation training.
- Guidelines for participants on how to get the most out of the mentoring relationship.
- Do’s and don’ts of relationship management.
- Job and role descriptions.

- Confidentiality and liability information.
- Crisis management/problem solving resources.
- Communication skills development.
- Ongoing sessions as necessary.

**Training Curriculum:** During the initial basic training, mentors learn more fully the requirements, policies and procedures of the program. In addition, mentors are trained on how to build a positive relationship with their mentee. Subject matter can include “proper mentor attitude and expectations, communication skills, diversity issues, child and adolescent development, confidentiality, child abuse reporting, goal setting, academic tutoring, etc.” These and other subjects will be covered during “on-going” trainings also.

Ongoing trainings can take a number of forms such as round table discussions and support groups, or even guest presentations.

The mentees’ training is typically shorter than the mentors’, as it mainly focuses on program procedures, the process of building a stable relationship with an adult, as well as how to get the most out of the mentoring relationship.

#### **How to Develop An Operations Manual for Your Mentoring Program 8**

##### **6. A Matching Strategy** that includes:

- A link with the program’s statement of purpose.
- A commitment to consistency and accountability
- Appropriate criteria for matches, including some or all of the following: skills identification; career interest; gender; age; level of education; motivation for volunteering; and standing within the organization ; life experience; temperament
- A signed statement of understanding that both parties agree to the conditions of the match and the mentoring relationship

**Matching Strategy:** Each program needs a plan for matching mentors and mentees.

Programs should consider not only chemistry, but also interests and other elements, such as race and ethnicity, language, hobbies, etc. Expertise of mentors and difficulty the mentoring task also comes into play, as well as time availability of mentor and mentee.

#### **How to Develop An Operations Manual for Your Mentoring Program 9**

##### **7. A Monitoring Process** that includes:

- Consistent, scheduled meetings with staff, mentors, and participants
- A tracking system for ongoing assessment
- Written records and filing system
- Input from community partners, family, and significant others.
- A process for managing grievances, praise, re-matching, interpersonal problem solving, and premature relationship closure.

**Monitoring** the process of making sure the match is going okay. It is important to find out if the match is still meeting, program rules are being followed, and that everyone is relatively happy. Monitoring can also track the progress of the mentees' function in such areas as school attendance, grades, referrals, general mood, etc.

Having mentors and mentees fill out program logs after each meeting is a central part of the monitoring process. Research shows that matches that are monitored are last longer and are much more successful than those that are not carefully monitored.

The monitoring process includes defining the rules for problem solving, early termination, as well as the rematching of participants should a relationship end early.

#### **How to Develop An Operations Manual for Your Mentoring Program 10**

8. A **Support, Recognition and Retention Component** that may include:

- A formal kick-off event.
- Ongoing peer support groups for volunteers, participants, and others.
- Ongoing training and development.
- Relevant issue discussion and information dissemination.
- Networking with appropriate organizations.
- Social gatherings of different groups as needed.
- Annual recognition and appreciation event.
- Newsletters or other mailings to mentors, mentees, supporters, and funders.

**Note:** Support, Recognition, Retention is the only three-part standard.

**Support** means that each participant has a support system that they can rely on during the program. Support can mean assistance from the program manager and from peers.

Periodic "ongoing trainings" and "group supervisions" are also essential in the support of program participants.

**Recognition** is a way of rewarding mentors and mentees for their involvement. Many programs enlist celebrations and awards of a way of saying thanks.

A **Retention** plan is important so that programs will have continuing participation of mentors and mentees. A retention plan focuses on celebrations, awards, and positive communication with program participants and with parents.

#### **How to Develop An Operations Manual for Your Mentoring Program 11**

9. Closure steps that include:

- Private and confidential exit interviews to de-brief the mentoring relationship between:
- Mentee and staff
- Mentor and staff
- Mentor and mentee without staff
- Clearly stated policy for future contacts between mentor and mentee.

- Assistance for participating in defining next steps for achieving personal goals (for the mentee).

**Closure:** This is an element that is usually very brief in its development and implementation, but is very important. "Closure" means that the program has a strategy for letting participants (especially the mentees) know the length of the mentoring relationship, so that there won't be hard feelings upon termination. Improper closure could make the mentees experience feelings of abandonment and betrayal. Closure also gives program participants the opportunity to discuss with staff how they felt about the support (or nonsupport) from staff and the program in general. Finally, a sound closure policy also clarifies any future contact between mentors and mentees. To reduce program liability, send certified letters with return receipt requested, to document that mentors and parents have received notification that the match will no longer be supervised by the program.

#### **How to Develop An Operations Manual for Your Mentoring Program 12**

10. An Evaluation process based on:

- Outcome analysis of program and relationship.
- Program criteria and statement of purpose.
- Information needs of board, funders, community partners, and other supporters of the program.

The **Evaluation** is the report card for the program. How many youths were mentored by how many adults, and for how long? What costs were incurred? What was the experience of the mentor and mentee? What changes (if any) occurred in the mentee? Did they receive higher grades and testing scores? Less referrals? How did mentoring effect their social skills? Evaluations can include "self-evaluations" or more complex tools such as a "matrix model." Staff should allow mentors and mentees to evaluate the program as well as the trainings. Often called "satisfaction surveys, these evaluations are used to determine if the program is working and also to assess the need for changes and improvements.

# Mentoring Progress Review

## *Mentor Version*

How often do you meet with your mentee?

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Where do you tend to meet? (Check all that apply)

In your office \_\_\_\_\_ Over lunch \_\_\_\_\_ On the telephone \_\_\_\_\_

While performing/observing specific job-related functions \_\_\_\_\_

Other \_\_\_\_\_

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Where have you found to be the most productive place to meet?

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What has been the most valuable aspect of mentoring to date?

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Is your mentee ready to move on to a different mentor, or should this mentoring relationship continue? Is your mentee ready to become a mentor to someone else?

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Do you feel that your mentee was committed to the mentoring relationship?

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Has your mentee exceeded or lived up to your initial expectations? If not, please explain.

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What is best about this mentoring partnership?

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Are there any improvements that you would recommend to the mentoring program?

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Additional Comments:

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*HR files this completed form in mentor's file for later reference.*

## LESSON 37

### ROI OF MANAGEMENT TRAINING

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Dear Students

This lesson will provide you with a insight over the Return on Investment on Management training program.

#### A Note about ROI (return on investment) in Training

Attempting financial ROI assessment of training is a controversial issue. It's a difficult task to do in absolute terms due to the many aspects to be taken into account, some of which are very difficult to quantify at all, let alone to define in precise financial terms. Investment - the cost - in training may be easier to identify, but the benefits - the return - are notoriously tricky to pin down. What value do you place on improved morale? Reduced stress levels? Longer careers? Better qualified staff? Improved time management? All of these can be benefits - returns - on training investment. Attaching a value and relating this to a single cause, ie, training, is often impossible. At best therefore, many training ROI assessments are necessarily 'best estimates'.

If ROI-type measures are required in areas where reliable financial assessment is not possible, it's advisable to agree a 'best possible' approach, or a 'notional indicator' **and then ensure this is used consistently from occasion to occasion**, year on year, course to course, allowing at least a comparison of like with like to be made, and trends to be spotted, even if financial data is not absolutely accurate.

In the absence of absolutely quantifiable data, find something that will provide a useful if notional indication. For example, after training sales people, the **increased number and value of new sales made** is an indicator of sorts. After motivational or team-building training, **reduced absentee rates** would be an expected output. After an extensive management development programme, the **increase in internal management promotions** would be a measurable return. Find something to measure, rather than say it can't be done at all, but be pragmatic and limit the time and resource spent according to the accuracy and reliability of the input and output data. Also, refer to the very original Training Needs Analysis that prompted the training itself - what were the business performance factors that the training sought to improve? Use these original drivers to measure and relate to organizational return achieved.

The problems in assessing ROI are more challenging in public and non-profit-making organizations - government departments, charities, voluntary bodies, etc. ROI assessment in these environments can be so difficult as to be insurmountable, so that the organization remains satisfied with general approximations or vague comparisons, or accepts wider forms of justification for the training without invoking detailed costing.

None of this is to say that cost- and value-effectiveness assessment should not be attempted. At the very least, direct costs must be controlled within agreed budgets, and if it is possible, attempts at more detailed returns should be made.

It may be of some consolation to know that Jack Philips, an American ROI 'guru', recently commented about training ROI: "Organisations should be considering implementing ROI impact studies very selectively on only 5 to 10 per cent of their training programme, otherwise it becomes incredibly expensive and resource intensive."

#### Why Invest In Management Training?

By Dr. Carol McCoy

Have you ever read a Scott Adams' 'Dilbert' cartoon about the pointy-haired manager and felt that Adams was describing your boss and your company? If so, you are not alone. Even though most managers want to be competent managers, ineffective management practices are common in the workplace.

Nothing can be more frustrating to an employee than a new manager who hasn't a clue how to deal with people. Even experienced managers make mistakes, which lower morale and productivity.

Why are management skills so important? Why don't managers know how to manage? How can training help?

Jodi Lerman, director of training and organizational development for Maine Medical Center, says, "Managers have the most significant impact on employee retention and customer satisfaction. By setting clear expectations, breaking down barriers, appreciating and recognizing a job well done, and encouraging personal development, managers create satisfied employees. Satisfied employees create satisfied customers. That's why management training is essential."

Unskilled managers can devastate a company. Being mismanaged leads to worker dissatisfaction, time wasted in workers complaining, mistakes, under-performing, and turnover. One of the top reasons for leaving an organization is having a negative relationship with one's supervisor. Not only do ineffectively managed employees suffer from low morale, they often take their own frustration out on customers. Lack of management skills can lead to an unhealthy work environment, customer dissatisfaction, lower profits, and ultimately business failure.

As Muriel Littlefield, director of human resources for the Maine State Retirement System, sees it: "Managers are in the middle of an organization. They impact it in all directions - up, down, and sideways. Skilled managers are positioned to reinforce new learning and to help the organization make critical changes so that it can stay viable."

Why don't managers know how to manage? Management skill is not simply common sense, and it is not innate. It is learned behavior and knowledge. When looking to promote someone to manager, it is natural to consider people who are excellent individual contributors with outstanding technical skills. Frequently the skill set and motivation needed to excel in



managing people is different from what's needed to do the actual work.

For example, a good salesman is likely to be skilled at prospecting customers, explaining the company's products, and closing the deal. He or she is usually motivated by competition, winning, being rewarded and striving for individual excellence. Sales managers, on the other hand, need to help sales people set goals, monitor performance, provide feedback on what's going well and coach others to improve their skills.

Many top sales people don't initially enjoy or know how to manage people; they are more comfortable selling products than coaching people in how to sell. This same situation can happen with people who excel at working with computers and solving technical problems. They enjoy working with computers and may not be as comfortable in dealing with people problems. This discomfort can cause new managers to avoid communicating with their staffs.

Often people who are technical experts experience frustration with new workers who are not as skilled as they were. New managers forget what it was like not to know something. They may assume that others are familiar with company lingo and processes. It can be especially daunting for people who change industries to be overwhelmed with new jargon and unfamiliar terms. It can seem like people are speaking a foreign language. As new workers struggle to perform well, managers may be tempted to take over their work and do it themselves since it's so much faster and easier than coaching another person. This not only lowers morale and productivity, but it prevents the new person from developing the skills needed to succeed.

Even when managers do try to teach new employees how to do the job correctly, they may not do it well. They may assume that all people learn the way that they did or that lecturing is the best way to train others.

How does management training help improve performance of managers? First, it teaches people the fundamental management knowledge and skills needed to succeed in a particular organization. For example, they learn how to set expectations, discover the needs of their employees, and coach employees to improve their performance. New managers can learn best practices in handling various management situations. Furthermore, training provides managers with valuable reference tools and resources that they can draw upon on the job.

Training in a group setting enables people to meet other managers who can help them in sticky situations. By interacting with other managers who experience similar problems, managers gain a sense of comfort that "we're all in the same boat."

Management training shows new managers that the company cares about their success, which helps to build company pride and loyalty. When managers learn new skills and knowledge, they gain confidence and comfort in their ability to succeed and are more likely to tackle problems than avoid them. Well-trained managers are better equipped to play a leadership role in successfully navigating an organization through the challenges of constant change.

When managers get a chance to build their skills, customers benefit by dealing with more competent employees, employees benefit by having effective managers, and managers benefit by having the tools to do their jobs well.

## **Developing people, Part II: Take the initiative**

By Dr. Carol McCoy

Have you ever left a company because you felt that you were stagnating and not improving your skills? Have your employees left because your organization didn't help them to develop their skills?

Workers today count on learning new skills and knowledge that can help further their careers. What's the best way to help people grow?

Development of new skills and knowledge doesn't have to be complicated or expensive, but development really pays off when it's planned and aimed at something important. This involves creating a developmental plan. How do you do that?

The first step of a developmental plan is identifying learning goals. What do you want to learn? What are the important competencies needed for your current job? What are your strengths and improvement needs relating to your current job?

Do you want to learn new ways to use a strength or do you need to shore up your weakness? For example, can you use your strong analytical skills in new ways, such as managing a budget, reviewing contracts, diagnosing problems, or improving work flow?

If you're interested in moving to a different job, you need to find out what skills and knowledge are critical for you to succeed. Ask your manager if there's a natural career path in your company. See if you can take a look at different job descriptions or speak with other people about their jobs. Taking time to "job shadow" people in different roles can help you identify skills you need to learn.

Next, have a developmental discussion with your manager to fine-tune your plan and get your manager's support. Jean Whitney, Director of Education and Training for Banknorth Group Inc., recommends including specific developmental action plans as part of the annual performance planning process, and following up with quarterly meetings with your manager to check in on progress.

Your manager may be able to find funding for your learning or help you set up a flexible schedule to pursue your education. In any case he or she will need to plan for back-up support if you will be learning during regular work hours.

Your manager can be a rich source of ideas and encouragement as you develop new skills. He or she can help you target your development to areas that will make a difference to you and the company.

In meeting with your manager, set one or two learning goals, then select learning activities to help you achieve your goals. There are many different ways to learn.

Carol Ryan Ertz, Co-Director of UnumProvident Leadership Development gives this advice: "Don't let traditional learning approaches box you in as the only ways. It doesn't always have to be attending a class. Start by breaking down what needs to be

learned -is it some knowledge or awareness versus mastery. Can you gain the knowledge by reading books or articles, doing a web search or attending a professional meeting? Perhaps you can learn by hooking up with someone in the know about a topic.”

How do you learn best? Do you prefer a self-paced learning program through computer, video, audiotape, or reading? There are some excellent audio programs, which you can listen to as you drive to work. Do you learn best when interacting with other people? In this case, you may prefer some kind of classroom activity or coaching.

Fred Frohardt, Human Resource Director of Gates Formed-Fibre Products, Inc., describes some of the ways Gates associates can develop themselves. “Informal on-the-job training goes on every day, including opportunities to take on a leadership role as project manager or to volunteer for project teams that are outside normal job responsibilities. There are also more formal ways to learn. Associates receive 50% tuition reimbursement for completing college courses leading to a degree. People can attend company-paid seminars and vendor-sponsored seminars as well as internal training programs and computer based tutorials at no cost.”

Does your company provide tuition-reimbursement for attending college courses? Can you take advantage of structured training programs-either computer-based or class room-based-relating to skills you want to enhance?

Are there any conferences or workshops sponsored by associations or universities? Meeting people from outside your organization can enhance your perspective. Can you find a coach, either your manager, or someone else who has the skills you desire? Ask your coach to provide you with feedback when you try something new.

Perhaps the best way to learn is to take on a challenging assignment, which causes you to stretch your skills and knowledge. I never learned more than when I moved from being a trainer to managing a small training department for a new business within the same company.

In that job I learned about strategic planning, project management, budgeting, marketing, and a host of other skills. This assignment built the foundation for all my future work, and taught me skills I needed to succeed as a consultant.

In the words of Jean Whitney, “being on a project team to solve an important problem provides a great opportunity for people to develop new skills. Working on a real business scenario with a mentor or coach not only builds skills, but it also has an immediate pay-off for the organization as well.”

Whether you learn by completing a college course, listening to an audiotape, taking a computer-based program or learning from a colleague, building your skills and knowledge will have benefits for you as well as your organization

## **Developing people, Part I: A worthwhile investment**

By Dr. Carol McCoy

Let's say you're a manager in a growing company. As the business year ends and the company wants to reduce expenses, senior management asks you to trim your budget.

What's the first area you think of cutting back? Is it training?

Why is training and development often the first area to go when the budget must be cut? Has your manager ever held you back from training or have you ever cancelled training because of immediate job pressures? Why is personal development seen as expendable?

Perhaps it's because the benefits are long-term compared to the benefits of addressing what appears to be a crisis. Unfortunately people often treat any immediate business need as a crisis. They put out the fire, but at the expense of their long-term growth.

You may not be able to see the immediate payoff of increased skill or knowledge as easily as you can see the emotions of a disappointed customer. Stephen Covey in *First Things First* discusses the pressure that people feel to respond to an immediate situation rather than to pursue activities which support their highest, long-term values.

Why is developing yourself and your employees so important? What's the big deal about skipping development opportunities?

First, there are obvious benefits to companies that develop people. Jack Quirk, Performance Management Consultant, Anthem Blue Cross and Blue Shield, explains the business imperative of developing people:

”The most important asset that any organization has is its people. To remain competitive, organizations must be constantly changing, improving their methods of doing business, getting people to work harder and smarter. If you want to change and be more competitive, you have to train everybody. Developing people is the only way your business is going to stay in business.”

Skilled and knowledgeable workers not only do their jobs better and provide better service, but they are also in a better position to take on more responsibility. No one wants to feel poorly equipped to handle a work situation.

Recently I went shopping at one of the mega-stores to get a bargain on perennials. When I asked a nearby worker for help on selecting plants, he actually said to me, “All people with knowledge of plants have left the building.” I heard similar comments about lawnmower knowledge when I was trying to buy a new mower.

No one wants to say to customers, “I'm sorry I don't know that. I'll have to call my supervisor.” Even worse, “my supervisor doesn't know either.”

Studies by the American Society for Training and Development show that companies who are willing to invest in the developing people tend to have better business results and better stock performance. Furthermore, training and development can help companies meet one of today's biggest challenges — attracting and retaining competent people.

People on the fast track want an opportunity to grow, and want to know that they can keep current by learning new knowledge and skills.

Carol Ryan Ertz, Co-Director of UnumProvident Leadership Development, explains why investing in people is so important:

”Any company that is not developing its people is in danger of losing its competitive edge and its institutional knowledge to a competitor. According to a recent Gallup survey, two of the 12 key requirements of a Great Place to Work point to the value of investing in employee development — ‘Is there someone at work who encourages my development?’ and ‘This year, have I had opportunities at work to learn and grow.’ If the company is not providing developmental opportunities, employees leave and prospective employees never sign on.”

Unlike workers who expected to stay with one company for their entire career, today’s workers expect to change careers and employers several times. They are looking for ways to make themselves more marketable by learning transferable skills.

Some companies are afraid to invest in training and developing an employee, because that skilled worker becomes more attractive and marketable to other companies. On the other hand, investing in an employee’s development tends to increase the worker’s positive feelings and loyalty about their company as well as their ability to contribute to the company’s success and to assume increased responsibilities. Development also gives them feelings of job satisfaction because they can do a competent job, enhance their skills, and move up in the company.

Jean Whitney, Director of Education and Training, Banknorth Group, Inc. is a strong proponent of the value of training and development. Jean explains the benefits of training this way: “As organizations grow, positions become more complex and job responsibilities increase in their scope. Training and development of employees is critical to success in achieving business goals and it also helps to attract and retain top notch people. People want to feel good about what they’re doing and be able to take on new projects and initiatives. Development helps people to succeed in their jobs and supports their growth both in their current positions and in new positions. “

So, the next time you think of cutting the training budget or skipping personal development, think twice. Next month’s column will focus on ways to develop your skills and knowledge.

### Evaluation of Management Training Programme

The specification of values forms a basis for evaluation. The basis of evaluation and the mode of collection of information necessary for evaluation should be determined at the planning stage. The process of training evaluation has been defined as “any attempt to obtain information on the effects of training performance, and to assess the value of training in the light of that information.” Evaluation leads to controlling and correcting the training programme. Hamblin suggested five levels at which evaluation of training can take place, viz., reactions, learning, job behaviour, organisation and ultimate value.

- i. **Reactions:** Training programme is evaluated on the basis of trainee’s reactions to the usefulness of coverage of the matter, depth of the course content, method of presentation, teaching methods etc.
- ii. **Learning:** Training programme, trainer’s ability and trainee ability are evaluated on the basis of quantity of content

learned and time in which it is learned and learner’s ability to use or apply, the content he learned.

- iii. **Job Behaviour:** This evaluation includes the manner and extent to which the trainee has applied his learning to his job.
- iv. **Organisation:** This evaluation measures the use of training, learning and change in the job behaviour of the department/organisation in the form of increased - productivity, quality, morale, sales turnover and the like.
- v. **Ultimate Value:** It is the measurement of ultimate result of the contributions of the training programme to the Company goals like survival, growth, profitability etc., and to the individual goals like development of personality and social goals like maximising social benefit.

### Essential Ingredients for a Successful Evaluation

There are three essential ingredients in a successful evaluation. They are:

- i. Support throughout the evaluation process. Support items are human resources, time finance, equipment and availability of data source, records etc.,
- ii. Existence of open communication channels among top management, participants and those involved in providing data etc., and
- iii. Existence of sound management process.

**Bases of Evaluation:** Training programme can be evaluated on the basis of various factors like production factor, general observation, human resource factor, performance, tests, cost-value relationship etc.

**Production Factors:** In operative training, the prime measure of worth is that of productivity. Productivity rates covering both quantity and quality are good indicators of the values of training. In most business situations these rates will have to be obtained before and after training. In an experimental situation, a control group that does not receive training could be compared with the one that does in order to ascertain the effect of training. Management will generally look first at production and wastage rates to determine the worth of operative training. The other production factors are decrease in unit time and unit cost of production and reduction in space or machine requirements.

### General Observations

General observation should not be overlooked as a means of training evaluation. The immediate supervisor is often a good judge of the skill level of his subordinates. For on-the-job training programmes, the supervisor is, in effect, the judge of his or her own efforts. If the supervisor is treated as a part of the professional management of the organisation and is properly selected and trained, this self-analysis and appraisal can be quite accurate and objective. The efficient supervisor observes accurately the level of skill and knowledge acquired by the trainee during the training programme. He also observes how effectively the trainees apply the acquired skill and knowledge to the present and future jobs.

Training programme can also be evaluated on the basis of employee satisfaction which in turn can be viewed on the basis of:

- v. Evaluation of trainee's skill level before and after training programme.
- vi. Measurement of improvement in trainees on the job behaviour.
- vii. Examination of testing system before and after sometime of the training programme.
- viii. Measurement of trainee's attitudes after training programme.
- ix. Cost-benefit analysis of the training programme.
- x. Seeking opinion of trainee's colleagues regarding his/her job performance and behaviour.
- xi. Measurement of levels in absenteeism, turnover, wastage/ scrap, accidents, breakage of the machinery during pre and post period of the training programme.
- xii. Seeking opinions of trainee's subordinates regarding his/ her job performance and behaviour.

In the immediate sense, the specific course of training can be evaluated in terms of written and performance tests. The test is supported by a sample of what the trainee knows or can do. Successful accomplishment of the tests would indicate successful training. But the true test is whether or not what has been learned in training is successfully transferred and applied to the job. It is dangerous to rely upon tests alone to demonstrate the true value of training. Performance appraisal on the job before and after training may be supplemented to the tests.

Cost factor in training should be taken into consideration in evaluating the training effectiveness. Cost of various techniques of training and their value in the form of reduced learning time, improved learning and higher performance can be taken into account. Cost of training includes cost of employing trainers, and trainees, providing the means to learn, maintenance and running of training centres, wastage, low level of production, opportunity cost of trainers and trainees etc. The value of the training includes increased value of human resources of both the trainee and trainer and their contribution to raise production, reduce wastage, breakage, minimisation of time requirement etc. Cost-value relationship of a training programme or a training technique is helpful in: (a) determining the priorities for training (for present and potential managers, age structure of the trainees etc.) , (b) matching the employee and job through training, (c) determining the work of management sacrifices (like time taken by training programme, non-availability of staff for production during training period etc.), (d) choosing the right training method.

- i. Immediate assessment of trainees' reaction to the programme.
- ii. Trainees' observation during training programme.
- iii. Knowing trainees' expectations before the training programme and collecting their views regarding the attainment of the expectations after training.
- iv. Seeking opinion of trainee's superior regarding his/her job performance and behaviour before and after training.

Training evaluation information should be provided to the trainer and/or instructors, trainees and all other parties concerned for control, correction and improvement of trainees activities. Further the training evaluator should follow it up to ensure implementation of the evaluation report at every stage. Feedback information can be collected on the basis of questionnaire or through interview.

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## LESSON 38

### TRAINING PRACTICES

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#### Developmental History of Training in the United States and Europe

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December, 1993

Since prehistoric times the jobs of adults have been taught to children to prepare them for adulthood. Throughout the centuries societies have changed, have become more complex. The kinds of work to be done, the skills needed, and the tools used to do the work have also changed. In order to manage these changes in the complexity, volume, and content of work, job training also evolved. This paper describes how and why job training changed as work changed.

When humans created artifacts, the need for teaching others how to use those artifacts became necessary. Teaching others to use a tool to perform a task was one of the first goals of training. “As man invented tools, weapons, clothing, shelter, and language, the need for training became an essential ingredient in the march of civilization” (Steinmetz, 1976, p. 1-3). As the artifacts became more complex, different ways of training were developed to be more effective and efficient. “Instructional practices were developed that served the needs of the times, evolving into accepted instructional paradigms” (Brethower and Smalley, 1992, p. 26). These different practices were developed at different times, and some of them changed through the years, but all of them are used today, depending on the training need and situation.

Training is different from education. Training teaches the learner how to do a specific task, such as running a machine, or making a shirt. Education is instruction in the more general knowledge of the society, such as the history of the society, or knowledge of mathematics. As societies developed, there accumulated more knowledge than people could pick up on their own or learn informally from others. At some point it became necessary to formally educate young people in the amassed knowledge of their society in order to help them function in that society.

#### Antiquity: On-The-Job Training

On-the-job training, sometimes called direct instruction (or sit-by-me training in England; King, 1964, p. xvii), is the earliest kind of training. On-the-job training (OJT) is a face-to-face, one-on-one kind of training at the job site, where someone who knows how to do a task shows another how to do it. In antiquity, the kind of work that people did was mainly unskilled or semiskilled work not requiring specialized knowledge. Parents or other members of the group usually knew how to do all the jobs necessary for survival, and could pass their knowledge on to the children through direct instruction.

OJT was used in antiquity because it did not require learners to

be able to read or write. Even after writing systems were developed, most peasants and craftsmen could not read or write. Therefore a type of training where one person showed another how to do a task was necessary. The type of work most people did was farming or making crafts, and the tools used were fairly simple. In addition, the volume of production was low, so that only a few artisans at a time needed to be trained in order to handle the work.

On-the-job training is still used today. In fact, it is probably the most popular method of training because at its minimal level it requires only a person who knows how to do the task, and the tools the person uses to do the task. The company doesn't have to arrange for special training other than to assign an experienced worker to train an inexperienced one. It may not be the most effective or the most efficient method, but it is the easiest to arrange.

The advantages of on-the-job training include instant feedback about what the learner is doing right or wrong, allowing correction of the erroneous action immediately. Because the training takes place on the job, it is realistic, therefore no transfer of learning is required. It is inexpensive because no special equipment is needed other than what is normally used on the job.

On the other hand, on-the-job training takes the trainer and materials out of production for the duration of the training time, and requires many experienced trainers—depending on the number of trainees—since the trainer is usually training one person at a time. However, if the volume of production is low, so that the personnel and equipment are available for on-the-job training, then it is the most economical method of training to use. It may not be the most efficient at teaching a task, however; this depends on the learner, the job to be learned, and the teaching abilities of the trainer.

#### The Middle Ages: Apprenticeship

Although apprenticeships had begun much earlier (according to Steinmetz (1976), rules for governing apprenticeships were included in the Code of Hammurabi in 2100 B. C.), they became more widespread during the Middle Ages. As tools became more complex, and the required knowledge and skills to use them became more specialized, parents or townspeople could no longer teach their children everything. Some children were then apprenticed to craftsmen who had the specialized skills and tools for a particular trade. In exchange for work, the craftsman would teach the child the craft at which he was an expert. “Apprentices usually lived with the master and received practically no pay, except maintenance and training” (Steinmetz, 1976, p. 1-4).

During the Middle Ages artisans produced their wares one at a time, which was sufficient to meet the demand. Because the skills are more specialized and there are more of them to

master, apprenticeships last longer than on-the-job training, frequently for years. Apprenticeship continues today in the United States, and is, according to Patterson (1942):

...essentially a program of training beginners in the skilled trades, and that by an all-round skilled trade is meant one that takes at least two years to learn. It does not, properly speaking, apply to specialized one- or two-machine jobs...He [the successful apprentice] can adapt himself to different types of machines, and while he might not at first be quite so productive, he soon becomes proficient. Furthermore, he is not limited in the range of his adaptability. It is, then, to this latter all-round type of work that the term apprenticeship properly applies...an apprentice is not the same as a learner.' The latter term applies in connection with occupations which, in the opinion of the industry concerned, require a relatively short time to learn (pp. 136-137).

Modern apprenticeship principles protect both the master and the apprentice in terms of spelling out what work is to be done, how training is to be accomplished, how long the apprenticeship is to continue, and under what conditions it is to be carried out (Patterson, 1942, pp. 138-147).

### **The Industrial Revolution: The Classroom**

It wasn't until the Industrial Revolution that training changed much from on-the-job and apprenticeships. In the 1800s factory schools were created, in which workers were trained in classrooms within the factory walls. In 1872 Hoe and Company, a manufacturer of printing presses in New York City, "had such a volume of business that it was necessary to establish a factory school to train machinists. The old-style apprentice system was inadequate" (Steinmetz, 1976, pp. 1-6). Classrooms by that time had become the customary places of education, and were simply recreated in the factories, with the classroom subjects being how to do the tasks required in the factory.

Why did factories turn to classroom training at that time? The machines of the Industrial Revolution greatly increased the ability of the factory to produce concrete goods quickly and cheaply, so more workers were needed to run the machines. The factory owners wanted the workers trained quickly because there was a large demand for the produced goods. Since the machines were much more complicated than the tools of the agrarian society of the past, and training needed to be accomplished quickly, the training methods of the past were inadequate.

Whenever it has become vital for a company to train large numbers of men on machine operations, especially on today's complicated machines, previously used methods have frequently proved inadequate. Most of the training programs conducted by industry were established to handle normal employment" (Smith, 1942, p. 59).

Unlike on-the-job training and apprenticeship, classroom training could train many workers at the same time and under a single trainer, so fewer trainers were needed. Learning away from the job kept distractions from the production floor at a minimum and did not take equipment out of production for use in training.

Classroom training may have been economically feasible, but it had some drawbacks that on-the-job training did not. Since

workers were now learning away from the job, they had to remember not only what they had learned in the classroom until they could get onto the floor of the production line, but they also had to transfer what they had learned abstractly in a classroom onto a real machine in a real work environment. In the classroom the worker was now one student among many, and had to learn at the teacher's pace. Feedback was given less often, and sometimes not immediately after the learning. It was more difficult to ask questions without disturbing the rest of the class and without perhaps appearing stupid for asking the question.

Classroom teaching, whether by conventional lecture or by novel and exciting stimulus media, invariably addresses a hypothetical average student who might, in fact, not exist. The rapid learner is held back, and the slow learner—who might, nonetheless be a good student—is dragged forward too quickly. Few students have a chance to respond in any given session, and the teacher might favor those who are most likely to give gratifying answers (Cook and Mechner, 1962, p. 5).

### **Vestibule Training**

A method of training was developed around 1900 that combined the benefits of the classroom with the benefits of on-the-job training and was a popular form of training in both world wars. This was called vestibule training, or "near-the-job" training. In vestibule training, a classroom or training room, located as close as conditions permit to the department for which the worker is being trained, is furnished with the same machines as are used in production. There are six to ten workers per trainer, who is a skilled worker or supervisor from the company (Smith, 1942, p. 62).

Vestibule training creates a miniature of the department for which the training program is carried on. It utilizes machinery similar to that in operation on the production floor. Qualified instructors, usually highly skilled operators or supervisors, are provided to conduct the program in this special section. Here the new employees are given a course of training in the particular machines they will be required to use and on the exact work they will do when they become a part of the regular production force (Smith, 1942, p. 59).

The advantages of vestibule training are many. The workers are trained as if on the job, but, according to Smith, "this training [vestibule training] will not interfere with the more vital task of producing, but will still serve to equip these needed employees for their jobs" (Smith, 1942, p. 60). Workers do not have to transfer their knowledge from a classroom to the work floor, and there are few enough workers per trainer that trainees may receive immediate feedback and be able to ask questions more easily than in a classroom. And finally, accidents are minimized because new workers' nervousness about working with unfamiliar machines is abated through simulated production.

There are some disadvantages to vestibule training. Vestibule training is expensive, because it duplicates the production line. Therefore it is best used when large numbers of workers need to be trained quickly, and for unskilled or semiskilled tasks that do not require long training periods, says Hardman (1963, p. 29). Because of the equipment and space requirements, numerous operations and machines cannot be duplicated for

this training, particularly long-cycle operations and bulky machinery. Vestibule training is also “...very costly because full-time instructors are necessary, space must be allotted, and machinery must be either taken from production or purchased for this particular purpose (large initial expenditure and continued sizable operating costs). However, considering the savings achieved and the value of this type of training, these costs are extremely insignificant” (Smith, 1942, p. 66).

The vestibule training method, dusted off and brought up to date, has demonstrated great possibilities in helping industry meet the problem of training new employees for war production. It does not attempt to replace other methods of training but merely to supplement them where they are weakest. Its value is greatest where there are large numbers of men to be trained on unskilled or semiskilled machines or mass-production operations in a relatively short period of time. The present methods must still be used for the training of skilled help or of smaller numbers. But vestibule training, properly utilized, will fill today’s urgent needs (Smith, 1942, p. 66-67).

### **The World Wars: Systematic Training**

The world wars brought an urgent need to train large numbers of defense workers quickly to fill the huge demand for products. “With the growing complexity and size of factories, expanding markets that exerted a strong demand for an increase in the volume of production, and a rising engineering profession, there emerged a new and pressing concern to systematize the administration, control, coordination, and planning of factory work” (Zuboff, 1984, p. 41).

Many of the experienced workers were enlisting, so not only were workers needed to fill those positions, but to fill numerous new positions to meet the demand for goods. To this end, methods were sought that would train workers more quickly and thoroughly than previous methods had.

Around 1915 Frederick Taylor conceived of a method for shortening the amount of time a task took by studying workers doing the task and removing “non-productive time.” He called this method Scientific Management. Frank and Lillian Gilbreth added to Taylor’s work by studying workers’ movements on the job and suggesting ways to simplify the job and minimize the number of movements (Westgaard, 1993, p. 87).

During World War I a system was proposed for on-the-job training that would provide more consistent and efficient training in order to more quickly produce trained workers. In 1917, in response to the need of 450,000 new workers by the Emergency Fleet Corporation of the U.S. Shipping Board, Charles R. Allen developed a way of training shipbuilders, which involved four steps: 1) SHOW or prepare, 2) TELL or present, 3) DO or apply, and 4) CHECK or inspect. From Allen’s work and from research done by the Army during World War I several principles of training instruction were developed (McCord, 1976, p. 32-6):

- Training should be done within industry by supervisors who should be trained how to teach.
- Training should be done in groups of nine to eleven workers.
- The job should be analyzed before training.

- Break-in time is reduced when training is done on the job.
- When given personal attention in training, the worker develops a feeling of loyalty.

These principles of instruction were used in industrial training, but no method of systematic training appeared until World War II. According to McCord (1976), “... some discussion did take place as the result of Allen’s work and although a few books on how to instruct did appear during the 20s and 30s, not until the need for defense production became serious in 1940 were steps taken to develop a method of instruction” (p. 32-37).

In 1925 Gardiner (1925) in *Practical Foremanship* described how a foreman should teach his “green” men to do the job, employing the principles of industrial instruction and the studies by Taylor and the Gilbreths on job simplification. “There is a one best way to do a job, and it is assumed that a foreman knows the one best way to do each job in his department” (p. 122).

In order to know the one best way to do a job, the foreman first had to analyze and simplify the job, then teach each separate operation. He was to pass on the little hints that experience teaches and the common-sense facts of the job, as well as the whys and wherefores of the job (Gardiner, 1925, pp. 122-123).

Instead of assuming that workers had to be pushed to produce, he was to set the learner at ease about the work and his fears of awkwardness and stupidity, and was to make difficulties appear small. He was to teach one thing at a time and make sure that the learner understood the first point before teaching the second. He was to ask questions of the learner that showed if the learner actually understood what he had learned, and was to follow up on the employee’s progress (Gardiner, 1925, pp. 123-125).

During World War II, the need for a method of fast and efficient training became urgent. Training Within Industry, an advisory service formed by the National Defense Advisory Commission, developed the systematic on-the-job training method called JIT (Job Instruction Training). There were four steps to this method (Hardman, 1963, p. 97):

- First, prepare the learner. Put him at ease, explain what the job is, and explain the importance of the job.
- Second, give a step-by-step presentation of the job. Explain the what, when, how, why and where of the job, then demonstrate them. Have the learner explain each step, then let the learner demonstrate each step.
- Third, do the performance tryout. Have the learner do the steps under supervision.
- Fourth, follow-up. Inspect the work regularly.

According to Hardman (1963), JIT is useful primarily in teaching manipulative skills, but could be disappointing with more complicated tasks. An advantage of JIT is its flexibility; one variation has the teacher and learner switch roles. In order to be successful JIT requires adequate supervision and uniform application throughout the plant.

## After World War II: Individualized Instruction

During World War II training departments had become established in many companies. Business was booming as the world rebuilt itself. Companies wanted their workers trained, but as usual they wanted a more efficient, less expensive method of training. Upon the concept of job analysis and the behaviorism of B.F. Skinner was created the concept of individualized automated instruction. Just as in industrial work, training itself was about to become automated.

Individualized instruction in essence replaces the teacher with systematic or programmed materials. Programmed materials are instruction that has been divided into small steps which are easily understood by the learner. After each step is required an active response by the learner in the form of answering a question, drawing a graph, solving a problem, and so on. Immediate feedback is given after each response. Individualized instruction can be print-based, computer-based, or can use other media as long as the instruction is based on the concepts listed above. Although logical subject matter is easier to individualize into programmed materials, Lysaught (1962) had not found any subject matter that could not be programmed.

Sidney Pressey's testing device in 1926 and B.F. Skinner's behaviorist theory of learning in 1954 were the basis for the new programmed instruction, and the teaching machines in which it could be automated. Skinner's model of programmed learning was linear, in that the author of the materials decided what step to present next, and that step was presented, no matter what the learner wanted. According to Westgaard (1993), "many programmed learning materials are reminiscent of the Gilbreths' thinking" in terms of designing work so there are as few as possible decisions to be made by the worker, or branches by the program (p. 88).

But Robert Glaser "had spoken of the desirability of having a provision for skipping' items in an otherwise sequential program, thus permitting the rapid learner to by-pass items which might seem redundant to him, but which were desirable for those students encountering difficulty with the program" (Lysaught, 1962, pp. 30-31). Norman Crowder developed what he called "intrinsic" programming, in which the learner's possible responses are multiple choice, and the program branches according to the response chosen (Lysaught, 1962, pp. 30-31). In this way students could skip steps they already knew, or study remedial material on information already presented.

Individualized instruction was originally presented in book form, and sometimes still is. In order to prevent students from looking at the answers in the book ahead of time, some individualized instruction was automated by inserting it into a teaching machine. Teaching machines are "devices that house, display, and present printed programmed instruction...A display aperture exposes each instructional frame, and a second aperture provides a space for the response. Feedback is given when the program is advanced through actuation of a lever, knob, or button, and the correct answer comes to view. It is probably best that the frame and the learner's answer both remain in view when the feedback is presented" (Cook and Mechner, 1962, p. 11). Although teaching machines could score selected answers,

they could not score constructed answers. This problem has continued to this day in computer-based training, although some progress has been made in getting the computer to be able to recognize and evaluate constructed answers.

The advantages of individualized instruction are many: it allows a learner to work through the material at his or her own pace, and provides privacy in which to make mistakes and correct them. Individualized instruction reduces learning time, produces a low error rate in the learner, improves learning through immediate feedback, and provides consistent teaching.

It reduces the amount of training needed to do a job by "incorporating automatic, on-line feedback signals...Thus, the magnitude of the task assigned to training is reduced" (Cook and Mechner, 1962, p. 13). Individualized instruction can also reduce the aptitude needed to do a job. "The increased instructional effectiveness that programming will bring might well alter the strategic role of selection tests and broaden the base of recruitment to a wider population range. Allocation strategies for already selected men similarly might become more flexible" (Cook and Mechner, 1962, p. 12).

As with anything, there are disadvantages, too. Individualized instruction is expensive to produce because it takes a long time and requires skilled people to analyze the subject matter and prepare the materials. It teaches only what the author includes. Finally, it is usually learned off-task, requiring the learner to transfer that learning to the job.

### Modern Types of Individualized Instruction

Individualized instruction is the basis for computer-based training, which is used extensively in many companies today. Computer-based training (CBT) provides individualized instruction via the medium of computers. It was a natural progression from printed individualized instruction and teaching machines to the computer with its speed, branching capability and visual display. CBT was developed in the 1970s on mainframe computers, when the increasing capability and capacity of computers and their decreasing cost made CBT technologically feasible (Gery, 1987).

The definition of CBT is very close to the definition of individualized training used earlier: "an interactive learning experience between a learner and a computer in which the computer provides the majority of the stimulus, the learner must respond, and the computer analyzes the response and provides feedback to the learner" (Gery, 1987, p. 6). The computer can go beyond the original print- or teaching machine-based instruction because it has more capability for automatic branching and scoring. CBT can be used to teach almost any kind of subject matter, as long as the design of the instruction is sound. Its multimedia function has added the capability of displaying information in audio, graphic, and motion video form, which makes the teaching of skills and processes more effective than if only text were used. Individualized instruction delivered over the World Wide Web is a further development of computer-based training. Web-based instruction can be used with any type of computer that can access the internet and that has web browser software.



A specialized form of computer-based training is called embedded training. Developed by and used primarily in the military, embedded training “involves incorporating training functions, either in whole or in part, into an operational system” such as air-to-air engagement and air combat maneuvering (Jorgensen, 1991, p. 947). Since the operational system is computer-based, the training function must be computer-based as well. The military uses embedded training to teach tasks that are critical and perishable. “Perishability was defined as the extent to which a particular skill requirement...tends to decay without periodic reinforced practice. Criticality has its usual definition of importance to mission success” (p. 948). The Navy uses embedded training to train its personnel to proficiency on various systems. “Certainly, an operational system should not be used for training already accomplished in schools or elsewhere before personnel are assigned to the job. However, if skills are perishable, that is they are lost over time, repeated training may be required to maintain required performance levels, and ET can provide that” (p. 951).

The study reported by Jorgensen listed several potential benefits of embedded training: more opportunities for realistic training and feedback; increased availability and accessibility of training in operational units; and more opportunities for conducting training in tasks where training is currently limited by costs, safety, or air traffic restrictions” (p. 947). The disadvantages include trying to maintain it and keep its documentation up to date, problems common to any computer-based training.

## **The End of the 20th Century: Job Support**

The adaptive process which we call “learning” is obviously fundamental to any understanding of the nature of training. — King (1964, p. xix)

All training methods so far have had as their basic goal that the workers learn what is presented. That is why the quotation from King at the beginning of this section was true when he wrote it in 1964, and why it is true as long as the work is fairly stable and concrete, as it was until the advent of the knowledge society. The knowledge society is a society where “...the use of knowledge and information dominates work and employs the largest proportion of the labor force. The distinguishing feature of a knowledge society is that it emphasizes intellectual work more than manual work—the mind more than the hands” (Newstrom and Davis, 1993, p. 333).

At the end of the 20th century we are in the middle of the information revolution, where the amount of knowledge required to do a job is growing steadily, work procedures may change rapidly, and frequently the goods produced are not concrete, but abstract, that is, information. In such a work environment, learning the changing procedures and all the information needed to do the job is practically impossible. A new form of training is needed to manage such a change in work.

Job support is a form of training that does not require the worker to learn, but simply to know where to find the changing information they need. Job support tools contain step-by-step instructions on how to do a task, they are designed to be used on or just before the task, and the worker does not need to learn the steps as long as he or she knows where to look to find

the specific job support tool needed at the time. Instead of learning the information needed to do a task long before the task is to be done, as in a classroom, the worker can simply follow the instructions on the job support tool at the time the instructions are needed. In fact, job support tools have transformed from training tools into job tools.

A well-known type of job support tool that has been in use for decades is the job aid, which traces its modern roots to the JIT method used in World War II. Chalupsky and Kopf (1967) define a job aid as “...documentation or auxiliary information storage and presentation devices used on the job to provide instructions and reference information. They are designed to facilitate employee performance through direct usage either during the course of task performance or perhaps immediately prior to beginning a task” (p. 7).

The job aid began as a printed card that contained step-by-step instructions for performing a specific task. The worker did not need to memorize the steps because they are remembered for him on the card. “Job aids are considered instructional interventions because they also mediate knowledge/skills problems. However, job aids are not really intended to produce learning—they substitute for learning. Learning that does occur as a result of using the job aid (surely considerable at times) is incidental” (Ruyle, 1990, p. 4).

Not every task is suitable for “learning substitution,” however. Jobs that are done frequently, so that the worker learns the steps anyway, need no support. Jobs that require quick thinking and action, such as emergency procedures in an airplane must be learned to mastery so they may be performed quickly and effectively when necessary because there may not be time to read and follow a step-by-step job support tool. But jobs that are done infrequently or must be done absolutely correctly or in a particular order every time are a prime candidate for job support. An example of such a job support tool is the flight departure checklist. The pilot and copilot of a plane likely remember what steps to take to prepare for takeoff. But what if they forgot one step? What if they reversed the order of two crucial steps? Many people could die. Because the steps must all be done, and done in the correct order, pilots use a departure checklist before taking off.

Another example of a job whose performance can be improved by support is patient care. “The critical importance of the patient care tasks and the need for extreme accuracy and attention to detail, coupled with problems of high personnel turnover and the need to improve the efficiency of personnel utilization, further argue for consideration of the patient care areas as a test bed for job aid demonstration” (Chalupsky and Kopf, 1967, p. 66).

Another type of job support tool is an expert system, a computer program that has been given rules to follow which contain the knowledge of experts in a given area. A worker doing a task in that area can ask the expert system a question and receive advice as if from an expert.

According to Chalupsky and Kopf (1967), the advantages of job support tools are reduction in training time; lowering of selection standards; improved quality and reduction in job errors; increased reliability of job performance; greater produc-

tivity; increased scope and complexity of tasks performed” (p. 7).

There are disadvantages with job support tools. They can be difficult to follow if there are distracting interruptions. They are not useful when quick responses are required because the worker has to read, understand, and follow them at the time of the task. They do not support complex tasks very well because they become too complex to be of much use. “They also lose their effectiveness when they pile up to the point that the individual has trouble keeping track of them” (Carr, 1992, p. 179). In addition, some of the advantages may be seen as disadvantages from a different point of view. If the use of job support tools can lower personnel selection standards, the tools may be deskilling jobs, taking the cognition effort out of the job and reducing it to a simple mechanical exercise. Effective job performance aids, by reducing the information retention load in a job, can ideally serve as an alternative to the continual expansion or graining that must otherwise result as jobs become more complex or as the input quality of the work force decreases (Chalupsky and Kopf, 1967).

### **The Information Revolution and Beyond: Integrated Performance Support**

As work changed, training changed to support that work. The changes in training methods appear to have been caused by changes in the kind of work being done. These changes in work involved the kind of goods produced (concrete or abstract), the kind of skills the job required (unskilled, semiskilled, or skilled), and the size of the demand for the goods. The changes in work were caused by war, by advances in technology, or by other changes in societies.

Those in charge of workers are always looking for ways to speed up training, ways to make it more economical, efficient and effective, ways to minimize the need for it. Just as many scientific discoveries can be used constructively or destructively, so new methods of training can be helpful or destructive. Frederick Taylor’s Scientific Management concept and the Gilbreths’ time and motion studies helped simplify and speed up work, but they also dehumanized the workplace and the worker by doing so.

Workers, for Taylor, were simply parts of a mechanical process. Like tools and machines, they could be replaced when they wore out. His goal was to reduce the skill needs of workers to as close to zero as possible and, thereby, eliminate drains on productivity like the need to train workers or retain them when they began to ask for higher wages (Westgaard, 1993).

Frank and Lillian Gilbreth “strove to increase linearity and reduce branching in a process. The goal was, in effect, to develop step-by-step processes driven by their own inertia. In the ideal process, workers had no choices. Workers had to do the right thing at the right time...The key to success was to identify and eliminate elements (usually human tendencies) that blocked the process. The goal was to remove any decision points in the process” (Westgaard, 1993, p. 87). Donald Norman says that what is wrong with the design of technology is that it “requires people to behave in machine-centered ways, ways for which people are not well suited” (Norman, 1993, p. 11). This is what

Taylor and the Gilbreths were attempting to do, to make workers part of the machines they were using.

According to Chalupsky and Kopf (1967), job aids “...can compensate for lack of training and experience...” (p. iii) and perhaps for basic aptitude deficiencies. If this is the case, does job support deskilling the work, making it less satisfying to do? Is this always the case with new training methods and technology, that they are more economical and effective because they reduce the reliance on human brains and skill? If so, what will be the likely result of such a progress? Zuboff (1984) notes that “in diminishing the role of the worker’s body in the labor process, industrial technology has also tended to diminish the importance of the worker. In creating jobs that require less human effort, industrial technology has also been used to create jobs that require less human talent” (p. 22).

Performance support technology seems to present two sides of the same problem: 1) the potential deskilling of work, and 2) the potential capability of compensating for basic aptitude deficiencies. Workers that can do the present form of the job may not like the job if it is less of a challenge to do. On the other hand, workers that cannot do the present job, but need work, may be relieved to find work they can do. With regard to the deskilling of work, Zuboff says that information technology, by changing work activities to the abstract, can “imply reconstruction of knowledge of a different sort.”

Information technology, however, does have the potential to redirect the historical trajectory of automation [deskilling of jobs and easing of physical labor]...The new technology signals the transposition of work activities to the abstract domain of information. Work becomes the manipulation of symbols, and when this occurs, the nature of skill is redefined. The application of technology that preserves the body may no longer imply the destruction of knowledge; instead it may imply the reconstruction of knowledge of a different sort” (Zuboff, 1984, p. 23).

This different sort of knowledge, Zuboff thinks, will be intellectual skill, “...a shift away from physical cues, toward sense-making based more exclusively upon abstract cues; explicit inferential reasoning used both inductively and deductively; and procedural, systemic thinking” (p. 95). Workers’ essential skills will likely change as the sort of knowledge required changes, but there will always be essential skills that a machine cannot do.

Instead of replacing workers’ skill, Carr calls instead to preserve the workers’ core competence. “Neither job aids nor any other form of training should ever reduce workers’ competence in any core functions of their jobs. Conversely, whenever a firm can reduce the time and attention that workers have to pay to their inessential duties it should make every effort to do so (Carr, 1992, p. 179).

Because performance support systems can use expert systems to make decisions formerly made by humans, there’s a real temptation to use them to replace the skills of workers...If you attempt to substitute expert system-based performance support systems for essential employee skills, you’ll reduce workers’ core competence and thus the overall core competence of your firm. On the other hand, if you use these same systems to take over the often irritating inessential tasks, you’ll preserve core

competence. You'll also make your workers happy" (Carr, 1992, p. 181).

If management were to believe and follow Carr's exhortation and preserve core competence while using support tools to "make it easy for individuals to do the inessential parts of their jobs—so they can concentrate on the essential or core tasks" (p. 178), then the problem becomes to identify what is essential and what is inessential about a job. I would guess that an individual worker could do this fairly easily for his or her own job. But what happens when the job changes because of technology? How will the worker identify the new skills essential for the job then?

One of the research recommendations of Chalupsky and Kopf (1967), authors of a study of job aids in the 1960s, was to learn the potential contribution of job aids for reducing basic aptitude requirements. "...depending upon their design and usage, job performance aids can compensate for lack of training and experience, improve job quality, and increase productivity. Evidence is generally lacking concerning the extent to which job performance aids can compensate for basic aptitude deficiencies. The impact of job aids is particularly apparent in complex or lengthy tasks, diminishing in effectiveness as tasks are subdivided into short cycle, repetitive operations (p. iii). Performance support systems may be able to reduce basic aptitude requirements. But is this all bad? People with less aptitude and education have to make a living, too.

What jobs are being created now and will be created, and what kinds of skills will they require? What kinds of jobs are disappearing, and what kinds of skills did they require? Do workers feel a need for technology that would make jobs available to them that currently require too much education and experience? There are many questions still to be answered and many questions not yet asked.

## Notes -

## LESSON 39

### TRAINING PRACTICES

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This lesson provides statistics about training practices based on comprehensive research work.

#### **BLS Reports on Employer-Provided Formal Training**

#### **1995 Survey of Employer Provided Training-Employee Results**

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Technical Information: (202) 606-7386 USDL 96-515

Media Contact: (202) 606-5902 For release: 10:00 A.M.

EST Thursday, December 19, 1996

#### **Bls Reports on the Amount of Formal and Informal Training**

##### **Received by Employees**

Employees who work in establishments with 50 or more workers received an average of 44.5 hours of training in the period May-October 1995, according to a survey of employees conducted by the Bureau of Labor Statistics of the U.S. Department of Labor. Of these total training hours, 70 percent, or 31.1 hours, were spent receiving informal training, while 13.4 hours were in formal training. The survey also found that in the May-October 1995 period, and estimated \$647 per employee was spent on wage and salary costs of training, with about 65 percent of the amount spent on informal training.

The 1995 Survey of Employer-Provided Training (SEPT95) was sponsored by the Employment Training Administration of the U.S. Department of Labor and involved two major components: (1) a survey of establishments and (2) a survey of randomly-selected employees in the surveyed establishments. In an earlier news release (July 10, 1996, USDL#96-268), BLS reported on findings from the SEPT95 establishment survey, focusing on the amount of formal training provided and selected costs of formal training. This news release provides results from the employee survey, including information on the amount of formal and informal training received and the wage and salary cost of the time that employees spent in both formal and informal training.

Over 1,000 employees were surveyed from May through October 1995. Each employee had a personal-visit interview and provided information on his/her age, sex, race/ethnicity, occupation, education, earnings, and tenure, as well as information on his/her past training and its benefits. In addition to this background information, employees were asked to answer a series of questions on the new skills or information they learned each day over a 10- day period. Information was collected on the nature, length, and type of each learning activity. These learning activities were then categorized by BLS as either formal training, informal training, or self learning. (See technical note for additional details on data collection and measurement methods.)

##### **Training by type and delivery method**

While working for their current employers, 84 percent of employees received some kind of formal training and 96 percent received some kind of informal training. (See table 1.) During the six-month survey period, employees received an average of 44.5 hours of training, of which 13.4 hours were spent in formal training and 31.1 hours in informal training. (See table 2.) In other words, 70 percent of the training was conducted through informal instruction.

Job-skills training. Computer training, both formal and informal, was the most commonly received type of job-skills training. Thirty-eight percent of employees received formal computer training and 54 percent received informal training in computers while working for their current employer. Professional- and technical-skills training, management training, and sales and customer-relations training also were common types of training: between 27 and 31 percent of employees received these types of formal training while working for their current employer. In terms of informal training, computer training was followed by production- and construction-related training, management training, sales and customer-relations training, and clerical and administrative support skills training. Between 30 and 34 percent of employees received each of these types of informal training while working for their current employer.

During May-October 1995, employees received more hours of computer training and production- and construction- related training than any other type of job-skills training. On average, employees received 11.8 hours of computer training during this period. About 5.1 hours, or 43 percent, of computer training was conducted formally, compared with an average of 30 percent for all types of training. In contrast, only 19 percent of the 10.6 hours of production- and construction-related training received was spent in formal training. Clerical, sales, and service-related training also had higher-than-average shares of training that were conducted informally.

General-skills training. Among the types of general-skills training, occupational-safety training was the most common with 58 percent of employees receiving formal training in this area while working for their current employer. Communications, employee-development, and quality training was the next most common at 40 percent. The percentages for receipt of informal training were 48 and 33 percent, respectively. The receipt of basic-skills training (i.e., training in elementary reading, writing, arithmetic, and English language skills) was much less common. Only 7 percent of employees received formal training and 3 percent received informal training in basic skills while working for their current employer.

In May-October 1995, employees received roughly 2-1/2 hours of training in both occupational-safety and communications, employee-development, and quality training compared with only 18 minutes of basic-skills training. Communications,

employee-development, and quality training stood out as the only type of general-skills training where the majority of the training was conducted formally rather than informally.

### Training by Demographic Characteristics

**Age.** The youngest and oldest workers were less likely to have received formal training during the last 12 months than were workers ages 25 to 54. (See table 3.) Similarly, the total hours of training during the May-October 1995 period were lowest for the youngest and oldest workers. Workers 24 years of age or younger and workers 55 years or older received about half as many hours of total training as prime-aged workers. (See table 4.) This general pattern is in evidence for both hours of formal and informal training, but particularly for hours of formal training. The relatively low hours of formal training among the very young provides some support for the idea that employers and/or employees may be delaying their investment in training until they are sure the employment arrangement is likely to last. The low hours of training for workers 24 years or younger may also be influenced by the fact that very young workers tend to change jobs frequently and may not have settled into their chosen career. **Sex.** Men received an estimated 48 hours of training during the six-month survey period compared with 42 hours for women. However, this difference is too small relative to the precision of the estimates to conclude that the hours of training are substantially different between men and women.

**Race and ethnicity.** In general, white workers tended to receive more hours of training (48.5 hours) over the six-month period than either black (27.7 hours) or Hispanic workers (32.7 hours). While blacks received about the same number of hours of formal training as white workers, they received significantly fewer hours of informal training.

**Educational attainment.** Employees with a high-school education or less were not as likely to have received formal training during the last 12 months as more educated counterparts. About 60 percent of those with a high-school diploma or less received formal training during the last 12 months, compared with 90 percent of those with a bachelor's degree or higher. Hours of training in May-October 1995 also were smallest for the least-educated group, though the differences in hours of training per employee across different educational attainment groups were not substantial.

### Training by Employment Characteristics

**Tenure.** The number of total training hours per employee over the May-October 1995 period appears to follow a U-shaped pattern with respect to tenure with current employer. For instance, employees with fewer than two years of tenure received an average of 65 hours of training; workers with more than two years but fewer than five years at the establishment received an average of 24 hours, and those with 5-10 years of tenure received 47 hours. (See table 6.)

**Full- or part-time.** Full-time workers (35 or more hours per week) were more likely to have received formal training in the last 12 months than were part-time workers (72 percent versus 56 percent). (See table 5.) Similarly, during the May-October 1995 period, full-time workers received an average of 49 hours of training, versus 13 hours for part-time workers. Full-time

workers received nearly five times as much informal training (34 hours for full- versus 8 hours for part-time workers) and three times as much formal training (15 hours versus 5 hours).

**Occupation.** Service workers are less likely than those in other occupations to have received formal training during the last 12 months. Professional and technical workers received the highest number of hours of both formal and informal training in May-October 1995. For formal training alone, there was a considerable gap between the number of hours of training received by professional and technical workers (22 hours) and the number received by employees in most other occupations, particularly managers (4 hours) and service workers (6 hours).

**Earnings quartiles.** Those in the bottom quartile of the earnings distribution were less likely to receive formal training and received fewer hours of formal training than higher earners. Sixty-two percent of those in the bottom quartile received formal training in the last 12 months compared with 84 percent of those in the top quartile. Low earners received 4 hours of formal training during the six-month survey period versus 23 hours for the top quartile. For informal training, however, significant differences across earnings quartiles are not observed.

### Training by Establishment Characteristics

**Establishment size.** Employees in small establishments (50-99 employees) were less likely to have received formal training than those in larger ones. Some 62 percent of those in small establishments received formal training in the last 12 months, versus 73 percent of those in establishments with 100-499 employees and 71 percent in establishments with 500 or more employees. (See table 7.)

Hours of formal training per employee increased with size, ranging from 8 hours for small establishments and 17 hours for large ones (500 or more employees) between May and October, 1995. There is no clear relationship between establishment size and the hours of informal training per employee. (See table 8.)

**Industry.** The amount of training received by employees ranged from a low of 34 hours per employee in wholesale trade to a high of 51 hours per employee in durable manufacturing during the six-month survey period. Industries varied in the extent to which they relied upon formal training, with the proportion of total hours of training spent in formal training spanning from a low of 12 percent for retail trade to a high of 59 percent for durable manufacturing.

**Benefits.** Employees at establishments providing a greater number of the selected benefits listed in our questionnaire were more likely to have received formal training during the last 12 months. For instance, 77 percent of workers in establishments with eight or more of the selected benefits received formal training in the last 12 months, versus 57 percent in establishments with fewer than four of the selected benefits.

**Contract workers.** Employees in establishments that used some contract workers were more likely to have received formal training during the last 12 months than employees in establishments that did not (77 percent versus 66 percent). They also received more formal training during the six-month survey period (19 hours per employee) than employees in establish-

ments that did not use contract workers (9 hours per employee).

**Employee Turnover.** A relatively small proportion of employees in high-turnover establishments received formal training in the last 12 months (61 percent compared with 75 percent for medium-turnover and 78 percent for low-turnover establishments). The amount of total training received by employees over the May-October 1995 period does not vary much on the basis of an establishment's turnover rate as measured over the three months preceding the survey date. However, workers at establishments with high rates of turnover received less formal training than those with medium or low levels.

**Benefits Employees Received from Training**

Among those employees who received formal training while working for their current employer, about 14 percent indicated that they received a promotion when the training was satisfactorily completed or soon thereafter, and 19 percent received a higher rate of pay or bonus. Less than one percent of trained employees indicated that they received no benefits from their formal training. The most commonly cited benefit was that employees “learned a valuable skill that improved their job performance”, chosen by 78 percent of trainees. (See table 9.)

**How formal training is delivered**

Classes or workshops conducted by company training personnel were the most common types of formal training activities in which employees participated; 76 percent of those receiving formal training reported this activity. This activity was followed by “classes or workshops conducted by outside trainers” and “attending lectures, conferences or seminars” at 48 and 36 percent, respectively. Only 17 percent of those who received formal training in the last 12 months indicated that they had taken courses at educational institutions. (See table 10.)

**Wage and Salary Costs of Training by Establishment Characteristics**

The wages and salaries that employees receive while in training represents an indirect cost to employers of providing training, as the time that employees spend in training is time that could have been spent working at their jobs. The value of that time can be estimated by multiplying an employee's hourly wage by the hours he/she spent in training. This measure is referred to as the wage and salary costs of training. Over the May-October 1995 period, small establishments spent \$462 per employee for wage and salary costs, versus \$654 for medium-sized establishments and \$754 for large ones. The lower spending levels of small establishments were primarily the result of less spending on formal training. Retail trade employers spent the least per employee—\$49 per employee as compared with \$149 for wholesale trade (the next lowest) and \$418 for mining (the highest). (See table 11.)

An estimated total of \$37 billion was spent on the indirect wage and salary costs of training during May- October 1995. Establishments with 100-499 employees accounted for the largest share of the total (\$16.7 billion), compared with \$14.6 billion for establishments with 500 or more employees and \$5.7 billion for those with 50-99 employees. The service industry

spent the most on training, \$12.5 billion, primarily reflecting its large share of employment. Mining, with the smallest share of employment, accounted for the least spending, about \$306 million. (See table 12.)

**Technical Note**

**Scope of the Survey**

The data presented in this release represent the universe of employees in private establishments in the 50 states and the District of Columbia that had 50 or more employees during the fourth quarter of 1993 and were classifiable into one of the following 2-digit Standard Industrial Classifications (SIC) based on the 1987 Standard Industrial Classification Manual:

Industry	SIC code
Mining	10, 12 - 14
Construction	15 - 17
Nondurable manufacturing	20 - 23, 26 - 31
Durable manufacturing	24, 25, 32 - 39
Transportation and public utilities	41, 42, 44 - 49
Wholesale trade	50, 51
Retail trade	52 - 59
Finance, insurance, and real estate	60 - 65, 67
Services	07, 70, 72, 73, 75, 76, 78 - 84, 86, 87, 89.

**Major definitions and concepts**

A broad view of training is adopted in the employee portion of the 1995 Survey of Employer-Provided Training (SEPT95). A training activity may occur any time employees are taught a skill or provided with information to help them do their jobs better. The skill or information may be learned through formal or informal training methods.

Formal training is defined in the survey as training that is planned in advance and has a structured format and defined curriculum. Examples include attending a class conducted by an employee of the company, attending a seminar given by a professional trainer, or watching a planned audio-visual presentation.

Informal training is unstructured, unplanned, and easily adapted to situations or individuals. Examples include having a co-worker show you how to use a piece of equipment or having a supervisor teach you a skill related to your job.

Job-skills training refers to training that upgrades employee skills, extends employee skills, or qualifies workers for a job.

Management training is training in supervising employees and in implementing employment practices. Examples include training in conducting employee appraisals, managing employees, resolving conflicts, following selection/hiring practices, and implementing regulations and policies.

Professional and technical skills training is training in professional areas such as engineering, nursing, accounting, science, law, medicine, training, education, and business; or in technical areas such as drafting, electronics, and medical technology.

Computer procedures, programming, and software training includes training in computer literacy, security, programming,

use of standard commercial and other software, and methods for developing software applications.

Clerical and administrative support skills training is training in areas such as typing, data entry, filing, business correspondence, and administrative record keeping, including budget and payroll.

Sales and customer relations training is training in areas ranging from how to maintain or improve customer relations to specific selling techniques. Examples include training in how to deal with angry customers and information about specific product lines.

Service-related training includes training in the traditional service occupations—food, cleaning, protective, or personal services. Examples include training in waiting tables, preparing food, using cleaning equipment, conducting security work, providing care for children or the elderly, tailoring, and barbering.

Production- and construction-related training is training in areas such as operating or repairing machinery and equipment; manufacturing, assembling, distributing, installing, or inspecting goods; and constructing, altering, or maintaining buildings and other structures.

General-skills training refers to training that is not closely tied to specific job-related skills and/or training that is usually provided to a wide range of workers. It includes: basic skills; occupational safety; employee health and wellness; orientation; awareness; and communications, employee development, or quality training.

Basic skills training is training in elementary reading, writing, arithmetic, and English language skills, including English as a second language.

Occupational safety training provides information on safety hazards, procedures, and regulations. Employee health and wellness training provides information and guidance on personal health issues such as stress management, substance abuse, nutrition, and smoking cessation.

Orientation training introduces new employees to personnel and workplace practices and to overall company policies. Awareness training provides information on policies and practices that affect employee relations or the work environment, including Equal Employment Opportunity practices (EEO), affirmative action, workplace diversity, sexual harassment, and AIDS awareness.

Communications, employee development, and quality training is training in public speaking, conducting meetings, writing, time management, leadership, working in groups or teams, employee involvement, total quality management, and job reengineering.

An establishment is an economic unit which produces goods or services. It is usually at a single physical location and is engaged predominantly in one type of economic activity.

The list of establishment benefits included: Paid vacation, paid sick leave, health-care plan, employee-assistance program, employee-wellness program, pension plan, profit sharing, flexible work schedules, flexible work site or telecommuting, employer-financed child care, and paid parental/family leave.

The list of establishment workplace practices included: Pay increases directly linked to mastering new skills, employee involvement in technology and equipment decisions, job redesign or reengineering, job rotation, just-in-time inventories, co-worker review of employee performance, quality circles, total quality management, and self-directed work teams.

Labor turnover is measured by computing the ratio of hires and separations in a three-month period to average employment levels.

Employment change is measured by computing the ratio of change over a three-month period to the average employment over those three months.

### **Data Collection Procedures**

The employee component of SEPT95 was conducted in tandem with the employer survey. (For technical information on the employer survey, see USDL#96-268.) Two survey instruments were utilized—an employee questionnaire and an employee training log. The employee questionnaire focused on employment and demographic characteristics. Questions were included on job, employer and occupational tenure, income, weeks and hours worked, education, sex, age, race and ethnicity, marital status, and number of children. In addition, the employee questionnaire included general questions on types of training provided by the employer during the employee's tenure and in the last 12 months and on the benefits of training. The employee log collected detailed information on all training and learning activities the employee participated in over a 10-day period. The requested information on the activity included a description, its duration, who was involved, and what type of training medium was used.

Experienced field economists in the BLS regional offices requested permission from establishment representatives to randomly sample and interview two employees. During the interview, field economists administered the employee questionnaire to the respondent using computer-assisted personal interviewing (CAPI). The field economist then collected the employee log via paper and pencil for the three-day period prior to the day of the interview and left behind a training log for the employee to complete over the next seven days and mail back to the field economist.

### **Sampling Procedures**

The sampling frame for the employee survey was a listing (usually a payroll listing) of employees supplied by the establishment respondent. The total number of employees on the listing was required to match that reported by the establishment respondent. Field economists used a computer-generated random number program based on a simple random selection method to randomly sample two employees from all of the employees in the establishment. If one or more of the employees was unavailable, the field economists could generate up to six random numbers to try to secure the participation of two employees. For the Employee Questionnaire, each participating employee was assigned an Employee Sampling Factor equal to the total number of employees in the establishment divided by the number of participating employees in that establishment. For the Employee Training Log, each participating employee was assigned a Day Sampling Factor which was

equal to the number of days in the survey's reference period (184) divided by the number of days (3 to 10) on the employee training log.

## Response

Of the 1,543 establishments selected, 1,433 were eligible for survey participation (excluding those out-of-business or out-of-scope), and 1,062 participated in the employer survey. The desired employee sample size for the employee survey was 2,866 (two employees from each of the 1,433 eligible sampled establishments). Usable employee questionnaires were collected from 1,074 employees for a response rate of 37.5 percent. Usable employee logs were collected from 1,013 employees for a response rate of 35.3 percent. Using the 1,062 establishments that participated in the employer survey as the eligible pool for employees, the number of eligible employees changes to 2,214, and the response rate changes to 50.6 percent for the employee questionnaire and 47.7 percent for the employee log.

## Estimation

**Missing data:** Weighting class non-response adjustment procedures were used for each of the survey's instruments—the employee questionnaire and the employee training log—and account for the number of sampled establishments that did not provide any data for the instrument or provided data for only one employee. For otherwise usable instruments, a hot-deck procedure was used to impute a value for any item on the instrument for which the establishment or employee could not provide data.

**Benchmarking:** To increase the precision of the estimates, the weights of the usable instruments were adjusted to make the weighted occupational distribution of the instruments the same as the weighted occupational distribution in the BLS Occupational Employment Survey.

**Weighting:** Each of the usable employee instruments has a Final Weight associated with it. For the Employee Questionnaires, the Final Weight is the product of the Establishment Sampling Weight, Subsampling Factor, Employee Sampling Factor, Questionnaire Nonresponse Adjustments, and

**Questionnaire Benchmark Adjustment:** For the Employee Training Log, the Final Weight is the product of the Establishment Sampling Weight, Subsampling Factor, Employee Sampling Factor, Day Sampling Factor, Log Nonresponse Adjustments, and Log Benchmark Adjustment. For technical information on weighting for the employer survey, see news release USDL#96-268.

**Estimates:** For this release, the population total for a variable of interest is estimated by summing, over all usable instruments, the product of an instrument's Final Weight and the instrument's value for the variable of interest. Proportions are estimated by dividing the estimated total for the variable in the numerator by the estimated population count. Rates are estimated by dividing the estimated total for the variable in the numerator by the estimated total for the variable in the denominator. For subpopulation estimates, the summation is over only the instruments that fall within the subpopulation.

## Reliability of Estimates

The estimates in this release are based on a probability sample

rather than a census of the population. The samples selected for the employer and employee survey were one of many possible samples, each of which could have produced different estimates that may have differed from the results obtained from a census of the population. This "sampling error" or the variation in the sample estimates across all possible samples that could have been selected is measured by the standard error. The standard error of each of the estimates given in this release was calculated using balanced repeated replication.

## Non-sampling Error and Quality Control Measures

In addition to sampling errors, estimates are subject to non-sampling errors that can be attributed to many sources: definitional difficulties; differences in the interpretation of questions; errors in recording, coding, or processing the data, etc. Several processes were used in the survey to reduce the non-sampling errors.

**Survey development.** The survey instruments were developed and tested by BLS. There were a number of major testing activities involving the employee survey. The employee questionnaire and log was tested in four focus groups involving 48 employees, 24 one-on-one in-depth interviews, and 10 establishment site visits. Final survey procedures were tested in a 25-establishment field test of the employer/employee survey conducted by BLS field economists.

**Validation and review.** Survey participation was validated for approximately 5 percent of establishments. The establishments contacted for the validation were randomly selected and survey respondents were contacted by telephone to verify participation in the employer and employee components of the survey. Since this was the first time SEPT95 had been conducted, 100 percent of the individual and summarized data were subject to professional review to verify the accuracy and reasonableness of the data. In addition, edit checks were programmed into the CAPI system used by the field economist and also were carried out on the aggregate survey data.

A detailed comparison was conducted of training-related characteristics of establishments that did and did not give us permission to interview employees. The comparison indicated that this source of nonresponse bias was not large enough to substantially affect estimates.

An analysis of estimates generated using only employees that were selected with the first two random numbers (418 employees) and of estimates generated using employees selected with the first through sixth random numbers (1,074 employees) demonstrated that using the larger sample to generate estimates did not introduce significant bias into the estimates but did significantly reduce the sampling errors of the estimates.

## Additional Information

BLS plans to issue a report that provides more detailed information and analysis of SEPT95. For further information, please contact (202) 606-7386.

**Table 2. Hours of training per employee by type of training, May-October 1995**

Table 2. Hours of training per employee by type of training, May-October 1995



Characteristic	Hours of Training		
	Total	Formal	Informal
Total			
All employed*	44.5	13.4	31.1
Job skills			
Management	1.7	.6	1.1
Professional and technical skills	6.2	1.9	4.3
Computer procedures, programming, and software	11.8	5.1	6.8
Clerical administrative support skills	3.4	.6	2.8
Sales and customer relations	3.2	.6	2.6
Service-related	2.1	.3	1.8
Production and construction-related	10.6	2.0	8.6
General skills			
Basic skills	.3	.0	.2
Occupational safety	2.4	.6	1.8
Communications, employee development, and quality training	2.6	1.5	1.2
Other	.2	.2	.0

\*Employees working in establishments of 50 or more employees.

**Table 11. Wage and salary Costs of training per employee by selected establishment characteristics, May-October 1995**

Table 11. Wage and salary costs of training per employee by selected establishment characteristics, May-October 1995

Characteristics	Wage and salary costs		
	Total	Formal training	Informal training
TOTAL			
All employees <sup>1</sup>	\$ 646.9	\$ 224.1	\$422.8
Industry			
Mining	741.9	418.0	323.8
Construction	746.5	195.0	551.6
Manufacturing:			
Durables goods	815.2	346.5	468.6
Nondurables goods	591.9	353.8	238.1
Transportation, communications, and public utilities	471.3	236.8	234.5
Wholesale trade	542.6	149.4	393.1
Retail trade	463.4	49.1	414.2
Finance, insurance, and real estate	878.9	235.3	643.6
Services	718.1	252.4	465.7
Establishment size			
50 to 99 employees	462.0	110.2	351.8

100 to 499 employees	654.3	215.3	439.0
500 employees or more	753.5	307.5	446.0
Number of selected establishment benefits <sup>2</sup>			
Fewer than 4	704.2	52.8	651.4
4 or 5	451.2	167.9	283.3
6 or 7	575.8	249.1	326.7
8 or more	890.0	274.3	615.7
Number of selected establishment work practices <sup>3</sup>			
0	814.0	181.2	632.8
1 or 2	356.1	73.7	282.5
3 or 4	730.6	231.3	499.3
5 or 6	685.4	321.9	363.5
7 or more	846.3	380.1	466.2
Presence of contract employees			
None	512.8	142.0	370.8
Some	797.1	316.1	481.0
Turnover rate <sup>4</sup>			
Low	886.6	546.2	340.4
Medium	712.4	243.4	469.0
High	501.6	137.7	364.0
Employment change over the last 3 months			
Declining	643.5	205.9	437.6
Stable	528.4	184.1	344.3
Increasing	687.1	244.9	442.2
Part-time employment			
None	724.3	247.6	476.7
Some, but less than 10%	651.0	253.5	397.5
10 percent or more	607.4	191.4	416.0

1. Employees working in establishments of 50 or more employees.
2. The survey questionnaire asked respondents of the establishment to select which, if any, of 11 listed benefits they provided to their employees.
3. The survey questionnaire asked respondents of the establishment to select which, if any, of nine listed workplace practices they used at their establishment.
4. A turnover rate of less than 1.0 percent of average employment over the prior three months was defined as low, 1 to 25 percent was considered medium, and 25 percent or more was considered high.

**Table 3. Percent of employees who received training by selected demographic characteristics**

Table 3. Percent of employees who received training by selected demographic characteristics

Characteristic	Received formal training		
	Received	While with current employer	Within the last 12 months
			Informal training while with current employer
Total			
All employed*	84.4	69.8	95.8
Age			
24 years and younger	81.6	63.4	100.0
25 to 34 years	91.3	78.5	96.9
35 to 44 years	88.1	74.7	97.7
45 to 54 years	77.9	64.7	93.7
55 years and over	74.4	50.7	89.9
Sex			
Men	81.7	66.5	96.2
Women	87.2	73.1	95.4
Race and origin			
White	85.2	70.4	95.5
Black	82.6	70.6	96.4
Hispanic origin	90.8	73.7	96.9
Educational attainment			
High school graduates or less	82.3	60.1	95.0
Some college	79.1	67.8	96.2
Bachelor's degree or higher	96.8	89.7	96.6

\*Employees working in establishments of 50 or more employees.

Table 5. Percent of employees who received training by selected employment characteristics

Characteristic	Received formal training		
	Received	While with current employer	Within the last 12 months
			informal training while with current employer
Total			
All employed*	84.4	69.8	95.8
Usual hours worked			
Under 35 hours	68.5	56.1	98.9
35 hours or more	86.6	71.6	95.4
Earnings			
First quartile	76.7	61.8	97.9
Second quartile	87.6	74.5	96.7
Third quartile	77.8	62.0	92.4
Fourth quartile	98.5	84.0	97.1

Occupation			
Managerial and administrative	87.1	80.2	89.6
Professional, paraprofessional, and technical	95.3	84.8	93.4
Sales, clerical, and administrative support	89.3	72.5	97.6
Service	70.7	49.8	93.6
Production, construction, operating, maintenance, and material handling	80.0	66.3	98.4
Tenure with current employer			
Up to 2 years	73.3	67.5	95.7
More than 2, up to 5	74.8	56.8	94.0
More than 5, up to 10	96.0	79.7	96.8
More than 10 years	94.0	75.3	96.9
Tenure in current occupation			
Up to 2 years	81.3	73.4	99.2
More than 2, up to 5	87.3	68.4	91.3
More than 5, up to 10	84.1	68.9	98.5
More than 10 years	84.6	69.2	95.1
Tenure in current job			
Up to 2 years	81.5	73.4	97.2
More than 2, up to 5	80.5	59.7	91.2
More than 5, up to 10	92.1	78.1	98.8
More than 10 years	94.2	66.5	97.7

\*Employees working in establishments of 50 or more employees.

Table 6. Hours of training per employee by selected employment characteristics, May-October 1995

Table 6. Hours of training per employee by selected employment characteristics, May-October 1995			
Hours of Training			
Characteristic	Total	Formal	Informal
Total			
All employed*	44.5	13.4	31.1
Usual hours worked			
Under 35 hours	12.5	4.8	7.7
35 hours or more	48.8	14.6	34.2
Earnings			
First quartile	34.7	4.1	30.6
Second quartile	42.1	11.6	30.5
Third quartile	55.5	15.9	39.6
Fourth quartile	43.9	22.8	21.1
Occupation			
Managerial and	26.7	4.3	22.4

administrative				Transportation,			
Professional,	61.1	22.3	38.7	communications, and	93.2	81.4	98.1
paraprofessional, and				public utilities			
technical				Wholesale trade	79.7	68.1	94.2
Sales, clerical, and	33.3	10.2	23.2	Retail trade	70.0	48.8	91.4
administrative support				Finance, insurance,	91.6	87.4	96.4
Service	27.7	5.6	22.1	and real estate			
Production, construction,	53.7	15.2	38.5	Services	84.3	70.7	97.3
operating, maintenance, and				Establishment size			
material handling				50 to 99 employees	78.9	61.6	97.1
Tenure with current employer				100 to 499 employees	84.7	73.0	95.0
Up to 2 years	65.3	8.9	56.5	500 employees or more	87.7	71.0	96.1
More than 2, up to 5	24.1	4.5	19.5	Number of selected			
More than 5, up to 10	46.5	19.5	27.0	establishment benefits <sup>2</sup>			
More than 10 years	41.6	21.1	20.5	Fewer than 4	71.0	57.2	88.5
Tenure in current occupation				4 or 5	70.0	57.8	93.4
Up to 2 years	77.2	12.5	64.7	6 or 7	91.5	74.4	95.6
More than 2, up to 5	29.9	7.5	22.4	8 or more	90.3	76.5	99.7
More than 5, up to 10	29.5	9.6	20.0	Number of selected			
More than 10 years	43.8	19.4	24.4	establishment			
Tenure in current job				work practices <sup>3</sup>			
Up to 2 years	62.1	13.2	48.9	0	71.8	57.4	94.6
More than 2, up to 5	24.9	4.6	20.3	1 or 2	84.0	66.5	97.7
More than 5, up to 10	36.9	22.6	14.4	3 or 4	75.8	66.8	96.5
More than 10 years	37.3	23.6	13.7	5 or 6	94.9	80.5	97.9
*Employees working in establishments of 50 or more				7 or more	95.0	74.6	88.9
employees.				Presence of contract			

**Table 7. Percent of employees who received training by selected establishment characteristics**

Table 7. Percent of employees who received training by selected establishment characteristics

Received formal training

Received

Characteristic	While with current employer	Within the last 12 months	informal training while with current employer
Total			
All employed <sup>1</sup>	84.4	69.8	95.8
Industry			
Mining	98.0	94.7	98.8
Construction	88.8	71.2	92.5
Manufacturing:			
Durables goods	94.1	78.3	99.0
Nondurables goods	93.7	85.4	96.9

employees			
None	79.5	63.6	95.9
Some	90.1	77.0	95.8
Turnover rate <sup>4</sup>			
Low	87.4	78.0	98.0
Medium	89.8	74.7	97.3
High	75.5	60.7	93.2
Employment change over the last 3 months			
Declining	82.6	70.3	98.6
Stable	88.3	74.3	94.9
Increasing	83.9	68.0	95.0
Part-time employment			
None	88.1	73.5	96.7
Some, but less than 10%	90.4	72.8	95.0
10 percent or more	78.3	65.8	96.1
1. Employees working in establishments of 50 or more employees.			
2. The survey questionnaire asked respondents of the establishment to select which, if any, of 11 listed benefits they provided to their employees.			

3. The survey questionnaire asked respondents of the establishment to select which, if any, of nine listed workplace practices they used at their establishment.
4. A turnover rate of less than 1.0 percent of average employment over the prior three months was defined as low, 1 to 25 percent was considered medium, and 25 percent or greater was considered high.

**Table 8. Hours of training per employee by selected establishment characteristics, May-October 1995**

Table 8. Hours of training per employee by selected establishment characteristics, May-October 1995

Hours of Training			
Characteristic	Total	Formal	Informal
Total			
All employed <sup>1</sup>	44.5	13.4	31.1
Industry			
Mining	36.1	17.2	18.9
Construction	47.5	11.4	36.1
Manufacturing:			
Durables goods	51.1	20.8	30.3
Nondurables goods	40.2	21.7	18.5
Transportation, communications, and public utilities	37.2	17.6	19.7
Wholesale trade	33.8	8.3	25.4
Retail trade	36.8	4.2	32.6
Finance, insurance, and real estate	50.5	15.9	34.7
Services	50.2	13.2	37.0
Establishment size			
50 to 99 employees	40.1	8.2	31.9
100 to 499 employees	48.0	13.5	34.5
500 employees or more	42.6	16.6	26.0
Number of selected establishment benefits <sup>2</sup>			
Fewer than 4 or 5	458.4	5.9	52.6
4 or 5	42.5	12.8	29.7
6 or 7	38.7	13.9	24.8
8 or more	50.6	14.8	35.9
Number of selected establishment work practices <sup>3</sup>			
0	57.8	14.7	43.0
1 or 2	29.8	5.8	24.0
3 or 4	57.6	15.9	41.7
5 or 6	36.7	15.3	21.4

7 or more	49.0	19.1	29.9
Presence of contract employees			
None	41.9	8.7	33.2
Some	47.4	18.7	28.7
Turnover rate <sup>4</sup>			
Low	46.3	27.3	19.0
Medium	45.9	15.6	30.4
High	41.8	7.6	34.2
Employment change over the last 3 months			
Declining	52.0	13.3	38.6
Stable	34.7	10.9	23.9
Increasing	44.5	14.3	30.2
Part-time employment			
None	57.6	14.7	42.9
Some, but less than 10%	43.0	15.8	27.2
10 percent or more	39.4	11.0	28.3

1. Employees working in establishments of 50 or more employees.
2. The survey questionnaire asked respondents of the establishment to select which, if any, of 11 listed benefits they provided to their employees.
3. The survey questionnaire asked respondents of the establishment to select which, if any, of nine listed workplace practices they used at their establishment.
4. A turnover rate of less than 1.0 percent of average employment over the prior three months was defined as low, 1 to 25 percent was considered medium, and 25 percent or greater was considered high.

**Table 10. Percent of trained employees participating in any of the following formal training activities within the last 12 months by selected demographic characteristics**

Table 10. Percent of trained employees participating in any of the following formal training activities within the last 12 months by selected demographic characteristics

Classes or workshops Courses Attended Conducted by Conducted paid for lectures, Characteristic company by outside by employer conferences, personnel trainer taken at or seminars trainers educational or institutions on work time				
TOTAL				
All employees*	75.7	48.3	17.1	36.3
Age				
24 years and younger	81.1	23.4	11.4	24.6
25 to 34 years	79.0	44.1	15.9	30.7
35 to 44 years	70.9	58.6	19.6	41.7
45 to 54 years	74.5	52.7	20.4	43.9
55 years and over	78.5	38.9	7.3	27.0

Sex				
Men	70.3	50.0	11.2	30.1
Women	80.7	46.7	22.6	42.0
Race and origin				
White	74.8	50.4	18.5	41.1
Black	76.0	38.2	7.1	13.6
Hispanic origin	85.9	41.6	12.2	17.5
Educational attainment				
High school graduates, or less	80.9	34.0	8.1	19.9
Some college	78.1	49.0	21.5	43.9
Bachelor's degree, or higher	66.7	63.9	21.8	45.5

\*Employees working in establishments of size 50 or more employees who received formal training within the last 12 months.

**Table 11. Total wage and salary costs of training by industry and size class, May-October 1995**

Table 12. Total wage and salary costs of training by industry and size class, May-October 1995 (In thousands of dollars)

Wage and salary costs

Characteristic	Total	Formal training	Informal training
All employees*	\$37,061,259	\$12,838,575	\$24,221,982
Industry			
Mining	305,571	172,181	133,390
Construction	1,321,935	345,217	976,718
Manufacturing:			
Durables goods	7,655,647	3,254,112	4,400,978
Nondurables goods	3,668,602	2,192,938	1,475,664
Transportation, communications, and public utilities	1,614,793	811,305	803,444
Wholesale trade	1,278,848	352,234	926,614
Retail trade	6,285,244	666,128	5,619,116
Finance, insurance, and real estate	2,425,810	649,319	1,776,391
Services	12,504,809	4,395,142	8,109,667
Establishment size			
50 to 99 employees	5,652,306	1,348,650	4,303,656
100 to 499 employees	16,781,558	5,521,417	11,260,007
500 employees or more	14,627,394	5,968,508	8,658,319

\*Employees working in establishments of 50 or more employees.

## Other Practices

Technical Information: (202) 606-7386 USDL 96-515

Media Contact: (202) 606-5902 For release: 10:00 A.M. EST Thursday, December 19, 1996

## BLS Reports on the Amount of Formal and Informal Training Received by Employees

Employees who work in establishments with 50 or more workers received an average of 44.5 hours of training in the period May-October 1995, according to a survey of employees conducted by the Bureau of Labor Statistics of the U.S. Department of Labor. Of these total training hours, 70 percent, or 31.1 hours, were spent receiving informal training, while 13.4 hours were in formal training. The survey also found that in the May-October 1995 period, an estimated \$647 per employee was spent on wage and salary costs of training, with about 65 percent of the amount spent on informal training.

The 1995 Survey of Employer-Provided Training (SEPT95) was sponsored by the Employment Training Administration of the U.S. Department of Labor and involved two major components: (1) a survey of establishments and (2) a survey of randomly-selected employees in the surveyed establishments. In an earlier news release (July 10, 1996, USDL#96-268), BLS reported on findings from the SEPT95 establishment survey, focusing on the amount of formal training provided and selected costs of formal training. This news release provides results from the employee survey, including information on the amount of formal and informal training received and the wage and salary cost of the time that employees spent in both formal and informal training.

Over 1,000 employees were surveyed from May through October 1995. Each employee had a personal-visit interview and provided information on his/her age, sex, race/ethnicity, occupation, education, earnings, and tenure, as well as information on his/her past training and its benefits. In addition to this background information, employees were asked to answer a series of questions on the new skills or information they learned each day over a 10-day period. Information was collected on the nature, length, and type of each learning activity. These learning activities were then categorized by BLS as either formal training, informal training, or self learning. (See technical note for additional details on data collection and measurement methods.)

## Training by Type and Delivery Method

While working for their current employers, 84 percent of employees received some kind of formal training and 96 percent received some kind of informal training. (See table 1.) During the six-month survey period, employees received an average of 44.5 hours of training, of which 13.4 hours were spent in formal training and 31.1 hours in informal training. (See table 2.) In other words, 70 percent of the training was conducted through informal instruction.

**Job-skills training.** Computer training, both formal and informal, was the most commonly received type of job-skills training. Thirty-eight percent of employees received formal

computer training and 54 percent received informal training in computers while working for their current employer. Professional- and technical-skills training, management training, and sales and customer-relations training also were common types of training: between 27 and 31 percent of employees received these types of formal training while working for their current employer. In terms of informal training, computer training was followed by production- and construction-related training, management training, sales and customer-relations training, and clerical and administrative support skills training. Between 30 and 34 percent of employees received each of these types of informal training while working for their current employer.

During May-October 1995, employees received more hours of computer training and production- and construction- related training than any other type of job-skills training. On average, employees received 11.8 hours of computer training during this period. About 5.1 hours, or 43 percent, of computer training was conducted formally, compared with an average of 30 percent for all types of training. In contrast, only 19 percent of the 10.6 hours of production- and construction-related training received was spent in formal training. Clerical, sales, and service-related training also had higher-than-average shares of training that were conducted informally.

**General-skills training.** Among the types of general-skills training, occupational-safety training was the most common with 58 percent of employees receiving formal training in this area while working for their current employer. Communications, employee-development, and quality training was the next most common at 40 percent. The percentages for receipt of informal training were 48 and 33 percent, respectively. The receipt of basic-skills training (i.e., training in elementary reading, writing, arithmetic, and English language skills) was much less common. Only 7 percent of employees received formal training and 3 percent received informal training in basic skills while working for their current employer.

In May-October 1995, employees received roughly 2-1/2 hours of training in both occupational-safety and communications, employee-development, and quality training compared with only 18 minutes of basic-skills training. Communications, employee-development, and quality training stood out as the only type of general-skills training where the majority of the training was conducted formally rather than informally.

### Training by Demographic Characteristics

**Age.** The youngest and oldest workers were less likely to have received formal training during the last 12 months than were workers ages 25 to 54. (See table 3.) Similarly, the total hours of training during the May-October 1995 period were lowest for the youngest and oldest workers. Workers 24 years of age or younger and workers 55 years or older received about half as many hours of total training as prime- aged workers. (See table 4.) This general pattern is in evidence for both hours of formal and informal training, but particularly for hours of formal training. The relatively low hours of formal training among the very young provides some support for the idea that employers and/or employees may be delaying their investment in training until they are sure the employment arrangement is likely to last. The low hours of training for workers 24 years or younger may

also be influenced by the fact that very young workers tend to change jobs frequently and may not have settled into their chosen career.

**Sex.** Men received an estimated 48 hours of training during the six-month survey period compared with 42 hours for women. However, this difference is too small relative to the precision of the estimates to conclude that the hours of training are substantially different between men and women.

**Race and ethnicity.** In general, white workers tended to receive more hours of training (48.5 hours) over the six- month period than either black (27.7 hours) or Hispanic workers (32.7 hours). While blacks received about the same number of hours of formal training as white workers, they received significantly fewer hours of informal training.

**Educational attainment.** Employees with a high-school education or less were not as likely to have received formal training during the last 12 months as more educated counterparts. About 60 percent of those with a high-school diploma or less received formal training during the last 12 months, compared with 90 percent of those with a bachelor's degree or higher. Hours of training in May-October 1995 also were smallest for the least-educated group, though the differences in hours of training per employee across different educational attainment groups were not substantial.

### Training by Employment Characteristics

**Tenure.** The number of total training hours per employee over the May-October 1995 period appears to follow a U- shaped pattern with respect to tenure with current employer. For instance, employees with fewer than two years of tenure received an average of 65 hours of training; workers with more than two years but fewer than five years at the establishment received an average of 24 hours, and those with 5-10 years of tenure received 47 hours. (See table 6.)

**Full- or part-time.** Full-time workers (35 or more hours per week) were more likely to have received formal training in the last 12 months than were part-time workers (72 percent versus 56 percent). (See table 5.) Similarly, during the May-October 1995 period, full-time workers received an average of 49 hours of training, versus 13 hours for part- time workers. Full-time workers received nearly five times much informal training (34 hours for full- versus 8 hours for part-time workers) and three times as much formal training (15 hours versus 5 hours).

**Occupation.** Service workers are less likely than those in other occupations to have received formal training during the last 12 months. Professional and technical workers received the highest number of hours of both formal and informal training in May-October 1995. For formal training alone, there was a considerable gap between the number of hours of training received by professional and technical workers (22 hours) and the number received by employees in most other occupations, particularly managers (4 hours) and service workers (6 hours).

**Earnings quartiles.** Those in the bottom quartile of the earnings distribution were less likely to receive formal training and received fewer hours of formal training than higher earners. Sixty-two percent of those in the bottom quartile received formal training in the last 12 months compared with 84 percent

of those in the top quartile. Low earners received 4 hours of formal training during the six-month survey period versus 23 hours for the top quartile. For informal training, however, significant differences across **earnings quartiles are not observed**.

### Training by Establishment Characteristics

**Establishment size.** Employees in small establishments (50-99 employees) were less likely to have received formal training than those in larger ones. Some 62 percent of those in small establishments received formal training in the last 12 months, versus 73 percent of those in establishments with 100-499 employees and 71 percent in establishments with 500 or more employees. (See table 7.)

Hours of formal training per employee increased with size, ranging from 8 hours for small establishments and 17 hours for large ones (500 or more employees) between May and October, 1995. There is no clear relationship between establishment size and the hours of informal training per employee. (See table 8.)

**Industry.** The amount of training received by employees ranged from a low of 34 hours per employee in wholesale trade to a high of 51 hours per employee in durable manufacturing during the six-month survey period. Industries varied in the extent to which they relied upon formal training, with the proportion of total hours of training spent in formal training spanning from a low of 12 percent for retail trade to a high of 59 percent for durable manufacturing.

**Benefits.** Employees at establishments providing a greater number of the selected benefits listed in our questionnaire were more likely to have received formal training during the last 12 months. For instance, 77 percent of workers in establishments with eight or more of the selected benefits received formal training in the last 12 months, versus 57 percent in establishments with fewer than four of the selected benefits.

**Contract workers.** Employees in establishments that used some contract workers were more likely to have received formal training during the last 12 months than employees in establishments that did not (77 percent versus 66 percent). They also received more formal training during the six-month survey period (19 hours per employee) than employees in establishments that did not use contract workers (9 hours per employee).

**Employee Turnover.** A relatively small proportion of employees in high-turnover establishments received formal training in the last 12 months (61 percent compared with 75 percent for medium-turnover and 78 percent for low-turnover establishments). The amount of total training received by employees over the May-October 1995 period does not vary much on the basis of an establishment's turnover rate as measured over the three months preceding the survey date. However, workers at establishments with high rates of turnover received less formal training than those with medium or low levels.

### Benefits Employees Received from Training

Among those employees who received formal training while working for their current employer, about 14 percent indicated

that they received a promotion when the training was satisfactorily completed or soon thereafter, and 19 percent received a higher rate of pay or bonus. Less than one percent of trained employees indicated that they received no benefits from their formal training. The most commonly cited benefit was that employees "learned a valuable skill that improved their job performance", chosen by 78 percent of trainees. (See table 9.)

### How Formal Training is Delivered

Classes or workshops conducted by company training personnel were the most common types of formal training activities in which employees participated; 76 percent of those receiving formal training reported this activity. This activity was followed by "classes or workshops conducted by outside trainers" and "attending lectures, conferences or seminars" at 48 and 36 percent, respectively. Only 17 percent of those who received formal training in the last 12 months indicated that they had taken courses at educational institutions. (See table 10.)

**Wage and salary costs of training by establishment characteristics**

The wages and salaries that employees receive while in training represents an indirect cost to employers of providing training, as the time that employees spend in training is time that could have been spent working at their jobs. The value of that time can be estimated by multiplying an employee's hourly wage by the hours he/she spent in training. This measure is referred to as the wage and salary costs of training. Over the May-October 1995 period, small establishments spent \$462 per employee for wage and salary costs, versus \$654 for medium-sized establishments and \$754 for large ones. The lower spending levels of small establishments were primarily the result of less spending on formal training. Retail trade employers spent the least per employee—\$49 per employee as compared with \$149 for wholesale trade (the next lowest) and \$418 for mining (the highest). (See table 11.)

An estimated total of \$37 billion was spent on the indirect wage and salary costs of training during May-October 1995. Establishments with 100-499 employees accounted for the largest share of the total (\$16.7 billion), compared with \$14.6 billion for establishments with 500 or more employees and \$5.7 billion for those with 50-99 employees. The service industry spent the most on training, \$12.5 billion, primarily reflecting its large share of employment. Mining, with the smallest share of employment, accounted for the least spending, about \$306 million. (See table 12.)

### Technical Note

#### Scope of the Survey

The data presented in this release represent the universe of employees in private establishments in the 50 states and the District of Columbia that had 50 or more employees during the fourth quarter of 1993 and were classifiable into one of the following 2-digit Standard Industrial Classifications (SIC) based on the 1987 Standard Industrial Classification Manual:

Industry	SIC code
Mining	10, 12 - 14
Construction	15 - 17

Nondurable manufacturing	20 - 23, 26 - 31
Durable manufacturing	24, 25, 32 - 39
Transportation and public utilities	41, 42, 44 - 49
Wholesale trade	50, 51
Retail trade	52 - 59
Finance, insurance, and real estate	60 - 65, 67
Services	07, 70, 72, 73, 75, 76, 78 - 84, 86, 87, 89.

## Major Definitions and Concepts

A broad view of training is adopted in the employee portion of the 1995 Survey of Employer-Provided Training (SEPT95). A training activity may occur any time employees are taught a skill or provided with information to help them do their jobs better. The skill or information may be learned through formal or informal training methods.

Formal training is defined in the survey as training that is planned in advance and has a structured format and defined curriculum. Examples include attending a class conducted by an employee of the company, attending a seminar given by a professional trainer, or watching a planned audio-visual presentation.

Informal training is unstructured, unplanned, and easily adapted to situations or individuals. Examples include having a co-worker show you how to use a piece of equipment or having a supervisor teach you a skill related to your job.

Job-skills training refers to training that upgrades employee skills, extends employee skills, or qualifies workers for a job.

Management training is training in supervising employees and in implementing employment practices. Examples include training in conducting employee appraisals, managing employees, resolving conflicts, following selection/hiring practices, and implementing regulations and policies.

Professional and technical skills training is training in professional areas such as engineering, nursing, accounting, science, law, medicine, training, education, and business; or in technical areas such as drafting, electronics, and medical technology.

Computer procedures, programming, and software training includes training in computer literacy, security, programming, use of standard commercial and other software, and methods for developing software applications.

Clerical and administrative support skills training is training in areas such as typing, data entry, filing, business correspondence, and administrative recordkeeping, including budget and payroll. Sales and customer relations training is training in areas ranging from how to maintain or improve customer relations to specific selling techniques. Examples include training in how to deal with angry customers and information about specific product lines.

Service-related training includes training in the traditional service occupations—food, cleaning, protective, or personal services. Examples include training in waiting tables, preparing food, using cleaning equipment, conducting security work,

providing care for children or the elderly, tailoring, and barbering.

Production- and construction-related training is training in areas such as operating or repairing machinery and equipment; manufacturing, assembling, distributing, installing, or inspecting goods; and constructing, altering, or maintaining buildings and other structures.

General-skills training refers to training that is not closely tied to specific job-related skills and/or training that is usually provided to a wide range of workers. It includes: basic skills; occupational safety; employee health and wellness; orientation; awareness; and communications, employee development, or quality training.

Basic skills training is training in elementary reading, writing, arithmetic, and English language skills, including English as a second language.

Occupational safety training provides information on safety hazards, procedures, and regulations.

Employee health and wellness training provides information and guidance on personal health issues such as stress management, substance abuse, nutrition, and smoking cessation.

Orientation training introduces new employees to personnel and workplace practices and to overall company policies.

Awareness training provides information on policies and practices that affect employee relations or the work environment, including Equal Employment Opportunity practices (EEO), affirmative action, workplace diversity, sexual harassment, and AIDS awareness.

Communications, employee development, and quality training is training in public speaking, conducting meetings, writing, time management, leadership, working in groups or teams, employee involvement, total quality management, and job reengineering.

An establishment is an economic unit which produces goods or services. It is usually at a single physical location and is engaged predominantly in one type of economic activity.

The list of establishment benefits included: Paid vacation, paid sick leave, health-care plan, employee-assistance program, employee-wellness program, pension plan, profit sharing, flexible work schedules, flexible work site or telecommuting, employer-financed child care, and paid parental/family leave.

The list of establishment workplace practices included: Pay increases directly linked to mastering new skills, employee involvement in technology and equipment decisions, job redesign or reengineering, job rotation, just-in-time inventories, co-worker review of employee performance, quality circles, total quality management, and self-directed work teams.

Labor turnover is measured by computing the ratio of hires and separations in a three-month period to average employment levels.

Employment change is measured by computing the ratio of change over a three-month period to the average employment over those three months.



## Data Collection Procedures

The employee component of SEPT95 was conducted in tandem with the employer survey. (For technical information on the employer survey, see USDL#96-268.) Two survey instruments were utilized—an employee questionnaire and an employee training log. The employee questionnaire focused on employment and demographic characteristics. Questions were included on job, employer and occupational tenure, income, weeks and hours worked, education, sex, age, race and ethnicity, marital status, and number of children. In addition, the employee questionnaire included general questions on types of training provided by the employer during the employee's tenure and in the last 12 months and on the benefits of training. The employee log collected detailed information on all training and learning activities the employee participated in over a 10-day period. The requested information on the activity included a description, its duration, who was involved, and what type of training medium was used.

Experienced field economists in the BLS regional offices requested permission from establishment representatives to randomly sample and interview two employees. During the interview, field economists administered the employee questionnaire to the respondent using computer-assisted personal interviewing (CAPI). The field economist then collected the employee log via paper and pencil for the three-day period prior to the day of the interview and left behind a training log for the employee to complete over the next seven days and mail back to the field economist.

## Sampling Procedures

The sampling frame for the employee survey was a listing (usually a payroll listing) of employees supplied by the establishment respondent. The total number of employees on the listing was required to match that reported by the establishment respondent. Field economists used a computer-generated random number program based on a simple random selection method to randomly sample two employees from all of the employees in the establishment. If one or more of the employees was unavailable, the field economists could generate up to six random numbers to try to secure the participation of two employees. For the Employee Questionnaire, each participating employee was assigned an Employee Sampling Factor equal to the total number of employees in the establishment divided by the number of participating employees in that establishment. For the Employee Training Log, each participating employee was assigned a Day Sampling Factor which was equal to the number of days in the survey's reference period (184) divided by the number of days (3 to 10) on the employee training log.

## Response

Of the 1,543 establishments selected, 1,433 were eligible for survey participation (excluding those out-of-business or out-of-scope), and 1,062 participated in the employer survey. The desired employee sample size for the employee survey was 2,866 (two employees from each of the 1,433 eligible sampled establishments). Usable employee questionnaires were collected from 1,074 employees for a response rate of 37.5 percent. Usable employee logs were collected from 1,013 employees for a

response rate of 35.3 percent. Using the 1,062 establishments that participated in the employer survey as the eligible pool for employees, the number of eligible employees changes to 2,214, and the response rate changes to 50.6 percent for the employee questionnaire and 47.7 percent for the employee log.

## Estimation

Missing data. Weighting class non-response adjustment procedures were used for each of the survey's instruments—the employee questionnaire and the employee training log—and account for the number of sampled establishments that did not provide any data for the instrument or provided data for only one employee. For otherwise usable instruments, a hot-deck procedure was used to impute a value for any item on the instrument for which the establishment or employee could not provide data.

Benchmarking. To increase the precision of the estimates, the weights of the usable instruments were adjusted to make the weighted occupational distribution of the instruments the same as the weighted occupational distribution in the BLS Occupational Employment Survey.

Weighting. Each of the usable employee instruments has a Final Weight associated with it. For the Employee Questionnaires, the Final Weight is the product of the Establishment Sampling Weight, Subsampling Factor, Employee Sampling Factor, Questionnaire Nonresponse Adjustments, and Questionnaire Benchmark Adjustment. For the Employee Training Log, the Final Weight is the product of the Establishment Sampling Weight, Subsampling Factor, Employee Sampling Factor, Day Sampling Factor, Log Nonresponse Adjustments, and Log Benchmark Adjustment. For technical information on weighting for the employer survey, see news release USDL#96-268.

Estimates. For this release, the population total for a variable of interest is estimated by summing, over all usable instruments, the product of an instrument's Final Weight and the instrument's value for the variable of interest. Proportions are estimated by dividing the estimated total for the variable in the numerator by the estimated population count. Rates are estimated by dividing the estimated total for the variable in the numerator by the estimated total for the variable in the denominator. For subpopulation estimates, the summation is over only the instruments that fall within the subpopulation.

## Reliability of Estimates

The estimates in this release are based on a probability sample rather than a census of the population. The samples selected for the employer and employee survey were one of many possible samples, each of which could have produced different estimates that may have differed from the results obtained from a census of the population. This "sampling error" or the variation in the sample estimates across all possible samples that could have been selected is measured by the standard error. The standard error of each of the estimates given in this release was calculated using balanced repeated replication.

## Non-sampling Error and Quality Control Measures

In addition to sampling errors, estimates are subject to non-sampling errors that can be attributed to many sources:

definitional difficulties; differences in the interpretation of questions; errors in recording, coding, or processing the data, etc. Several processes were used in the survey to reduce the non-sampling errors.

**Survey development.** The survey instruments were developed and tested by BLS. There were a number of major testing activities involving the employee survey. The employee questionnaire and log was tested in four focus groups involving 48 employees, 24 one-on-one in-depth interviews, and 10 establishment site visits. Final survey procedures were tested in a 25-establishment field test of the employer/employee survey conducted by BLS field economists.

**Validation and review.** Survey participation was validated for approximately 5 percent of establishments. The establishments contacted for the validation were randomly selected and survey respondents were contacted by telephone to verify participation in the employer and employee components of the survey. Since this was the first time SEPT95 had been conducted, 100 percent of the individual and summarized data were subject to professional review to verify the accuracy and reasonableness of the data. In addition, edit checks were programmed into the CAPI system used by the field economist and also were carried out on the aggregate survey data.

A detailed comparison was conducted of training-related characteristics of establishments that did and did not give us permission to interview employees. The comparison indicated that this source of nonresponse bias was not large enough to substantially affect estimates.

An analysis of estimates generated using only employees that were selected with the first two random numbers (418 employees) and of estimates generated using employees selected with the first through sixth random numbers (1,074 employees) demonstrated that using the larger sample to generate estimates did not introduce significant bias into the estimates but did significantly reduce the sampling errors of the estimates.

#### Additional Information

BLS plans to issue a report that provides more detailed information and analysis of SEPT95. For further information, please contact (202) 606-7386.

**Table 1. Percent of employees who received training by type of training**

Received formal training

Received Characteristic While with Within the informal current last 12 training employer months while with current employer

Total			
All employed*	84.4	69.8	95.8
Job skills			
Management	28.4	16.3	32.3
Professional and technical skills	30.9	21.4	27.7
Computer procedures, programming, and software	38.4	23.5	54.3
Clerical and administrative			

support skills	18.7	8.4	30.1
Sales and customer relations	26.6	15.1	30.9
Service-related	12.5	5.9	14.7
Production and construction-related	21.0	11.3	34.1
General skills			
Basic skills	6.7	2.3	2.9
Occupational safety	58.0	42.8	47.7
Communications, employee development, and quality training	40.2	22.8	32.6
Other	3.4	1.4	.8

\*Employees working in establishments of 50 or more employees.

**Table 2. Hours of training per employee by type of training, May-October 1995**

Hours of Training

support skills	Total	Formal	Informal
Characteristic			
Total			
All employed*	44.5	13.4	31.1
Job skills			
Management	1.7	.6	1.1
Professional and technical skills	6.2	1.9	4.3
Computer procedures, programming, and software	11.8	5.1	6.8
Clerical administrative support skills	3.4	.6	2.8
Sales and customer relations	3.2	.6	2.6
Service-related	2.1	.3	1.8
Production and construction-related	10.6	2.0	8.6
General skills			
Basic skills	.3	.0	.2
Occupational safety	2.4	.6	1.8
Communications, employee development, and quality training	2.6	1.5	1.2
Other	.2	.2	.0

\*Employees working in establishments of 50 or more employees.

**Table 3. Percent of employees who received training by selected demographic characteristics**

Received formal training			
Received			
Characteristic	While with current employer	Within the last 12 months	informal training while with current employer
Total			
All employed*	84.4	69.8	95.8
Age			
24 years and younger	81.6	63.4	100.0
25 to 34 years	91.3	78.5	96.9
35 to 44 years	88.1	74.7	97.7
45 to 54 years	77.9	64.7	93.7
55 years and over	74.4	50.7	89.9
Sex			
Men	81.7	66.5	96.2
Women	87.2	73.1	95.4
Race and origin			
White	85.2	70.4	95.5
Black	82.6	70.6	96.4
Hispanic origin	90.8	73.7	96.9
Educational attainment			
High school graduates or less	82.3	60.1	95.0
Some college	79.1	67.8	96.2
Bachelor's degree or higher	96.8	89.7	96.6
*Employees working in establishments of 50 or more employees.			

**Table 4. Hours of training per employee by selected demographic characteristics, May-October 1995**

Hours of Training			
Characteristic	Total	Formal	Informal
Total			
All employed*	44.5	13.4	31.1
Age			
24 years and younger	24.1	2.7	21.4
25 to 34 years	46.5	14.0	32.5
35 to 44 years	45.7	15.4	30.3
45 to 54 years	56.2	17.2	39.0
55 years and over	22.9	5.7	17.1
Sex			
Men	47.6	12.2	35.4
Women	41.5	14.6	26.9
Race and origin			
White	48.5	13.6	35.0

Black	27.7	13.8	13.9
Hispanic origin	32.7	11.0	21.7
Educational attainment			
High school graduates or less	35.7	10.9	24.8
Some college	51.2	14.3	37.0
Bachelor's degree or higher	47.9	16.1	31.8

\*Employees working in establishments of 50 or more employees.

**Table 5. Percent of employees who received training by selected employment characteristics**

Received formal training			
Received			
Characteristic	While with current employer	Within the last 12 months	informal training while with current employer
Total			
All employed*	84.4	69.8	95.8
Usual hours worked			
Under 35 hours	68.5	56.1	98.9
35 hours or more	86.6	71.6	95.4
Earnings			
First quartile	76.7	61.8	97.9
Second quartile	87.6	74.5	96.7
Third quartile	77.8	62.0	92.4
Fourth quartile	98.5	84.0	97.1
Occupation			
Managerial and administrative	87.1	80.2	89.6
Professional, paraprofessional, and technical	95.3	84.8	93.4
Sales, clerical, and administrative support	89.3	72.5	97.6
Service	70.7	49.8	93.6
Production, construction, operating, maintenance, and material handling	80.0	66.3	98.4
Tenure with current employer			
Up to 2 years	73.3	67.5	95.7
More than 2, up to 5	74.8	56.8	94.0
More than 5, up to 10	96.0	79.7	96.8
More than 10 years	94.0	75.3	96.9
Tenure in current occupation			

Up to 2 years	81.3	73.4	99.2
More than 2, up to 5	87.3	68.4	91.3
More than 5, up to 10	84.1	68.9	98.5
More than 10 years	84.6	69.2	95.1
Tenure in current job			
Up to 2 years	81.5	73.4	97.2
More than 2, up to 5	80.5	59.7	91.2
More than 5, up to 10	92.1	78.1	98.8
More than 10 years	94.2	66.5	97.7

\*Employees working in establishments of 50 or more employees.

**Table 6. Hours of training per employee by selected employment characteristics, May-October 1995**

Hours of Training			
Characteristic	Total	Formal	Informal
Total			
All employed*	44.5	13.4	31.1
Usual hours worked			
Under 35 hours	12.5	4.8	7.7
35 hours or more	48.8	14.6	34.2
Earnings			
First quartile	34.7	4.1	30.6
Second quartile	42.1	11.6	30.5
Third quartile	55.5	15.9	9.6
Fourth quartile	43.9	22.8	21.1
Occupation			
Managerial and administrative	26.7	4.3	22.4
Professional, paraprofessional, and technical	61.1	22.3	38.7
Sales, clerical, and administrative support	33.3	10.2	23.2
Service	27.7	5.6	22.1
Production, construction, operating, maintenance, and material handling	53.7	15.2	38.5
Tenure with current employer			
Up to 2 years	65.3	8.9	56.5
More than 2, up to 5	24.1	4.5	19.5
More than 5, up to 10	46.5	19.5	27.0
More than 10 years	41.6	21.1	20.5
Tenure in current occupation			
Up to 2 years	77.2	12.5	64.7
More than 2, up to 5	29.9	7.5	22.4
More than 5, up to 10	29.5	9.6	20.0
More than 10 years	43.8	19.4	24.4

Tenure in current job			
Up to 2 years	62.1	13.2	48.9
More than 2, up to 5	24.9	4.6	20.3
More than 5, up to 10	36.9	22.6	14.4
More than 10 years	37.3	23.6	13.7

\*Employees working in establishments of 50 or more employees.

**Table 7. Percent of employees who received training by selected establishment characteristics**

Received formal training			
Received			
Characteristic	While with current employer	Within the last 12 months	informal training while with current employer
Total			
All employed <sup>1</sup>	84.4	69.8	95.8
Industry			
Mining	98.0	94.7	98.8
Construction	88.8	71.2	92.5
Manufacturing:			
Durables goods	94.1	78.3	99.0
Nondurables goods	93.7	85.4	96.9
Transportation, communications, and public utilities	93.2	81.4	98.1
Wholesale trade	79.7	68.1	94.2
Retail trade	70.0	48.8	91.4
Finance, insurance, and real estate	91.6	87.4	96.4
Services	84.3	70.7	97.3
Establishment size			
50 to 99 employees	78.9	61.6	97.1
100 to 499 employees	84.7	73.0	95.0
500 employees or more	87.7	71.0	96.1
Number of selected establishment benefits <sup>2</sup>			
Fewer than 4	71.0	57.2	88.5
4 or 5	70.0	57.	93.4
6 or 7	91.5	74.4	95.6
8 or more	90.3	76.5	99.7
Number of selected establishment work practices <sup>3</sup>			
0	71.8	57.4	94.6
1 or 2	84.0	66.5	97.7

3 or 4	75.8	66.8	96.5	Retail trade	36.8	4.2	32.6
5 or 6	94.9	80.5	97.9	Finance,insurance, and real estate	50.5	15.9	34.7
7 or more	95.0	74.6	88.9	Services	50.2	13.2	37.0
Presence of contract employees				Establishment size			
None	79.5	63.6	95.9	50 to 99 employees	40.1	8.2	31.9
Some	90.1	77.0	95.8	100 to 499 employees	48.0	13.5	34.5
Turnover rate <sup>4</sup>				500 employees or more	42.6	16.6	26.0
Low	87.4	78.0	98.0	Number of selected establishment benefits <sup>2</sup>			
Medium	89.8	74.7	97.3	Fewer than 4	58.4	5.9	52.6
High	75.5	60.7	93.2	4 or 5	42.5	12.8	29.7
Employment change over the last 3 months				6 or 7	38.7	13.9	24.8
Declining	82.6	70.3	98.6	8 or more	50.6	14.8	35.9
Stable	88.3	74.3	94.9	Number of selected establishment work practices <sup>3</sup>			
Increasing	83.9	68.0	95.0	0	57.8	14.7	43.0
Part-time employment				1 or 2	29.8	5.8	24.0
None	88.1	73.5	96.7	3 or 4	57.6	15.9	41.7
Some, but less than 10%	90.4	72.8	95.0	5 or 6	36.7	15.3	21.4
10 percent or more	78.3	65.8	96.1	7 or more	49.0	19.1	29.9
1. Employees working in establishments of 50 or more employees.				Presence of contract employees			
2. The survey questionnaire asked respondents of the establishment to select which, if any, of 11 listed benefits they provided to their employees.				None	41.9	8.7	33.2
3. The survey questionnaire asked respondents of the establishment to select which, if any, of nine listed workplace practices they used at their establishment.				Some	47.4	18.7	28.7
4. A turnover rate of less than 1.0 percent of average employment over the prior three months was defined as low, 1 to 25 percent was considered medium, and 25 percent or greater was considered high.				Turnover rate <sup>4</sup>			

**Table 8. Hours of training per employee by selected establishment characteristics, May-October 1995**

Hours of Training			
Characteristic	Total	Formal	Informal
Total			
All employed <sup>1</sup>	44.5	13.4	31.1
Industry			
Mining	36.1	17.2	18.9
Construction	47.5	11.4	36.1
Manufacturing:			
Durables goods	51.1	20.8	30.3
Nondurables goods	40.2	21.7	18.5
Transportation, communications,and public utilities	37.2	17.6	19.7
Wholesale trade	33.8	8.3	25.4

Declining	52.0	13.3	38.6
Stable	34.7	10.9	23.9
Increasing	44.5	14.3	30.2
Part-time employment			
None	57.6	14.7	42.9
Some, but less than 10%	43.0	15.8	27.2
10 percent or more	39.4	11.0	28.3
1. Employees working in establishments of 50 or more employees.			
2. The survey questionnaire asked respondents of the establishment to select which, if any, of 11 listed benefits they provided to their employees.			
3. The survey questionnaire asked respondents of the establishment to select which, if any, of nine listed workplace practices they used at their establishment.			

4. A turnover rate of less than 1.0 percent of average employment over the prior three months was defined as low, 1 to 25 percent was considered medium, and 25 percent or greater was considered high.

**Table 9. Percent of employees receiving benefits from completing formal training activities while working for current employer\***

Characteristic	Percent of employees
Promotion received when training was satisfactorily completed	14.0
Received a higher pay rate or bonus	19.0
Completion certificate placed in file	47.9
Training was necessary for future advancement	40.1
Training was mandatory	70.0
Learned valuable skill that improved job performance	78.1
Helped employee stay current with new regulations,laws, and/or technologies	66.1
Other	2.7
No benefits	0.8

\* Employees working in establishments of 50 or more employees.

**Table 10. Percent of trained employees participating in any of the following formal training activities within the last 12 months by selected demographic characteristics**

Classes or workshops Conducted by outside taken at institutions on work time	Courses paid for by employer or seminars	Attended lectures, conferences, personnel educational or	Conducted by Characteristic company trainer
TOTAL			
All employees*	75.7	48.3	17.1 36.3
Age			
24 years and younger	81.1	23.4	11.4 24.6
25 to 34 years	79.0	44.1	15.9 30.7
35 to 44 years	70.9	58.6	19.6 41.7
45 to 54 years	74.5	52.7	20.4 43.9
55 years and over	78.5	38.9	7.3 27.0
Sex			
Men	70.3	50.0	11.2 30.1
Women	80.7	46.7	22.6 42.0
Race and origin			
White	74.8	50.4	18.5 41.1
Black	76.0	38.2	7.1 13.6
Hispanic origin	85.9	41.6	12.2 17.5
Educational attainment			

High school graduates, or less	80.9	34.0	8.1	19.9
Some college	78.1	49.0	21.5	43.9
Bachelor's degree, or higher	66.7	63.9	21.8	45.5

\*Employees working in establishments of size 50 or more employees who received formal training within the last 12 months.

**Table 11. Wage and salary costs of training per employee by selected establishment characteristics, May-October 1995**

Wage and salary costs Characteristics	Total	Formal training	Informal training
TOTAL			
All employees1	\$ 646.9	\$ 224.1	\$422.8
Industry			
Mining	741.9	418.0	323.8
Construction	746.5	195.0	551.6
Manufacturing:			
Durables goods	815.2	346.5	468.6
Nondurables goods	591.9	353.8	238.1
Transportation, communications,and public utilities	471.3	236.8	234.5
Wholesale trade	542.6	149.4	393.1
Retail trade	463.4	49.1	414.2
Finance,insurance, and real estate	878.9	235.3	643.6
Services	718.1	252.4	465.7
Establishment size			
50 to 99 employees	462.0	110.2	351.8
100 to 499 employees	654.3	215.3	439.0
500 employees or more	753.5	307.5	446.0
Number of selected establishment benefits2			
Fewer than 4	704.2	52.8	651.4
4 or 5	451.2	167.9	283.3
6 or 7	575.8	249.1	326.7
8 or more	890.0	274.3	615.7
Number of selected establishment work practices3			
0	814.0	181.2	632.8
1 or 2	356.1	73.7	282.5
3 or 4	730.6	231.3	499.3
5 or 6	685.4	321.9	363.5

7 or more	846.3	380.1	466.2
Presence of contract employees			
None	512.8	142.0	370.8
Some	797.1	316.1	481.0
Turnover rate <sup>4</sup>			
Low	886.6	546.2	340.4
Medium	712.4	243.4	469.0
High	501.6	137.7	364.0
Employment change over the last 3 months			
Declining	643.5	205.9	437.6
Stable	528.4	184.1	344.3
Increasing	687.1	244.9	442.2
Part-time employment			
None	724.3	247.6	476.7
Some, but less than 10%	651.0	253.5	397.5
10 percent or more	607.4	191.4	416.0

\*Employees working in establishments of 50 or more employees.

1. Employees working in establishments of 50 or more employees.
2. The survey questionnaire asked respondents of the establishment to select which, if any, of 11 listed benefits they provided to their employees.
3. The survey questionnaire asked respondents of the establishment to select which, if any, of nine listed workplace practices they used at their establishment.
4. A turnover rate of less than 1.0 percent of average employment over the prior three months was defined as low, 1 to 25 percent was considered medium, and 25 percent or greater was considered high.

**Table 12. Total wage and salary costs of training by industry and size class, May-October 1995 (In thousands of dollars)**

Wage and salary costs			
Characteristic	Total	Formal training	Informal training
All employees*	\$37,061,259	\$12,838,575	\$24,221,982
Industry			
Mining	305,571	172,181	133,390
Construction	1,321,935	345,217	976,718
Manufacturing:			
Durables goods	7,655,647	3,254,112	4,400,978
Nondurables goods	3,668,602	2,192,938	1,475,664
Transportation, communications, and public utilities	1,614,793	811,305	803,444
Wholesale trade	1,278,848	352,234	926,614
Retail trade	6,285,244	666,128	5,619,116
Finance, insurance,	2,425,810	649,319	1,776,391

## LESSON 40

### TRAIN THE TRAINER

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Friends,

After reading above lessons now you are in position to explain training and development program.

Also now you can conduct training sessions in a effective way.

After reading this lesson you will be able to understand and explain the significance of trainers role in training programs.

Also as a trainer you will be able to develop certain skills in you which will make training effective.

#### Training & Development Specialist

In the present concept of HRD, the role of T & D specialist is really a complex one as it is conditioned by the combination of the objectives and climate of the organisation and the subjective & personal elements brought out by the line managers. Besides this his own conceptions of his role and personal skill do influence his role as specialist.

Furthermore the technological competence, awareness in work force, legal threats and level of education linked with higher expectations of the organisations for productivity have made this role more complex. Now the specialist is required to add human values in personal profile

#### Profile of T & D Specialist

As such this personality is difficult to define firmly and accurately as it requires continuous redressing and reshaping in accordance with changing technological and socio-economic scenario. However a sketch below can give sufficiently clear picture of an effective T & D specialist which can be retouched as and when required to match with the, changing background of organizational objectives, philosophy, business strategies etc

- A man who keeps on increasing his inventory of simple, catchy and refreshing words and thought.
- A man who strives for improvement and not for perfection.
- A creative personality who stimulates the trainee to do something as desired.
- A counsellor who understands psychology & behavioural science.
- A consultant who suggests the ways to improve efficiency.
- A futurist to set organisational goals to keep pace with changing techniques and social culture.
- An innovator to develop latest, teaching, training programmes and methodology.
- An analytical examiner to evaluate personnel training programmes and methodology.
- A manager who institute discipline in Task & Time.
- An architect to shape employees to suit to present and future jobs.

#### Role Of T & D Specialist

The profile of T & D specialist and the understanding of the following will help to identify major variation in the role of a T & D specialist.

- The organizational strategic plans for present and future goals.
- The likely changes in the environment and their impact on the training and
- Development activities.
- The management process to implement the above strategic decisions.
- The present philosophy of HRD and the role of the T & D in it. The recent development in the T & D.

**The T & D specialist is to therefore:**

1. Act as consultant or advisor
2. Act as exponent
3. Act as diagnostician
4. Act as an effective manager

#### As Consultant/Advisor

This is perhaps the most common role under which he suggests the strategic schemes for human resource planning recruitment staffing depending upon the Sales, Finance, Production, R & D and Quality Control strategies. He advises on production. of T & D schemes, design of T & D programmes, course material selection etc. to justify the objectives of the organisation and the deficiencies of human resources to be removed. Being specialist on learning/training methods he provides the bridge between learning theories and methodology to be used for a given target group.

He In true role helps the manager to train and evaluate the T & D- programmes The consultative skill of T & D specialist involves knowing what question to be asked when to ask and how to create environment in which facts are surfaced out.

The performance problem is the legitimate and obligatory concern of the T & D specialist.

#### As An Exponent

In this role he directly implements the training functions. At one extreme he is an instructor and at the other he motivates



the learning habits. He is also to describe the nature of change in the training depending on the analysis of the training need – identification

As exponent he will be required to lecture to run the group discussion, to lead a case analysis to demonstrate technique and to analyse the performance. In exercising these functions he is also seen acting as an administrator.

Apart from the above, he in this role, sets the policies, the time table for the T & D programme, locations for the programme and selecting a homogenous group for an effective output.

As a delivery agent to implement teaching functions he must have a skill in facilitating learning in others.

### **As Diagnostician**

In this role T & D specialist virtually performs the part of an advisor's role; also he is supposed to:

1. Diagnose the training needs
2. Analyse employees performance
3. Justify the need of T & D
4. Device questionnaire for training needs survey
5. Establish relationship with the people.

The diagnostician is asked and is able to look for the alternative definitions of the performance problem and the training and development solutions. He may survey the whole range of activities in an organisation using the well established tools of behavioural science.

He may diagnose the inherent attributes of managers, supervisors and suggests the corrective actions. His diagnosis may recommend training experiences such as managerial grid etc

### **An Effective Manager**

This T & D specialist will have some staff reporting him to fulfil the T & C objective and therefore not only contributes to manage himself but also exercises many other managerial functions to bring effectiveness to his department or to the team.

He specifies the personnel the needs, he coordinates their efforts, allocates the responsibilities according to the skills and qualities of his staff and properly controls their functions. As a leader of the team he also monitors their performance

In organising and delegating the work to the staff, motivating the staff monitoring and controlling the training programmes, brings him closer to the general problems of the leadership and the appropriate style to adopt

Making decisions, whatever is the style, is another feature of his role as a manager. Apart from the above roles the modern management has added one more dimension to it as an economist. The measurement of the human resources as an investment calls for an economist to purpose a budget, work out the viability monitor and control the cost to evaluate adequate return on this investment to the organization

### **Changing Role of Trainers**

As discussed above the trainer has to perform the varying roles and each role has its own significance. The trainer is to strive for enriching and enlarging his role apart from his knowledge and skill to match the changing technology and social culture. He is

supposed to be a change agent in the organisation and for his effectiveness there is a need to sharpen his sensing skills and knowledge so that he can perform his task and facilitate T & D activities.

### **Summary**

In the developing countries like ours, the role of HRD departments and that of T & D specialist is very vital and challenging. Today every organisation is striving hard to achieve excellence yet they have the constraints of expertise and the costly High Tech technology. Atleast in our country human resource is abundant, what is required is to transform the human being into human resources and develop them to perform their best in the given situation and within laid down objectives.

HRD thus plays an important role in developing both individuals and the organisations. It can be summarised that right from helping in designing organisational strategies, HRD helps in :

- Recruiting the quality of human resources
- Appraising them for remoulding and reshaping
- Diagnosing the strengths and weaknesses.
- Budgeting the investment on HR and HRD
- Justifying the cost and working out (Return on Investment) Rol on HR Planning, organising and monitoring the HRD activities.
- Designing, conducting and evaluating the HRD functions and activities.
- Assigning various roles to individuals in the organisational hierarchy.
- Maintenance of human resources.
- Developing organisational culture
- Planning and implementing management development plans

The effectiveness of HRD department will however depends on the expertise available, top management support and the correct diagnosis of training and development needs.

With the changing scenario of industrialisation and socio-economic infrastructure the T & D specialists are required to keep pace with the HRD technology, watch on behavioural changes of human being and updating their own knowledge and skills.

HRD's role is not limited to the industries only. Any organisation formed by the people work for the people and run by the people will require effective HRD to enhance the productivity profitability or in broad sense the return on the investment

Since 1980s the HRD concept has gathered a good momentum in our country. Even Central and State Govts. have realised its significance. Human resource development plan, in 6th & 7th five year plans have reflected the effect of HAD as an increasing per capi~a income in agriculture, banking and commercial organisation apart from industries.

However, the roles and the activities of the HAD need to be clearly defined and the specifications of T & D specialist to be constantly updated to make these activities more effective. .

## Skills of An Effective Trainer

### Introduction

When the strategies and tactics for training are selected the skills demanded of the trainers are often overlooked. The assumptions are made that those who are full time trainers are omniscient and those who could be described as occasional trainers need only to have technical competence to be able to train others. Then trainers who are involved in the delivery of training would have to call upon a variety of skills which is not always appreciated by training managers nor many of the direct trainers themselves.

Further, an increasing number of practicing trainers are beginning to adopt the language of OD consultant and are moving into the kind of work to do with directly intervening in the organisation than with the traditional activities associated with trainers. Increasingly in the training literature, the terms 'intervention' and 'training consultant' are appearing. Thus there is a wide range of specific skills needed to undertake one-to-one coaching, team building, facilitating, counseling, besides being an interventionist, and change agent.

The problem is that a large proportion of trainers and of training is still traditional in nature. This section is devoted to consider the several dimensions of the roles, competencies and skills of the trainers.

The first reading "Trainer Skills" emphasizes great care in the selection of trainers. It identified the negative qualities found in trainers and how the "various positive and role related skills could be developed after identifying the training needs of trainers.

"The Role of the Management Trainer" calls for change in the basic model because of the changing role of training and changes in the emphasis of activities of training. It presents a basic taxonomy of interventions which describes the peculiar activities and skills a trainer can contribute to the organisation as he develops a more interventionist stance and role. The caution is that the taxonomy is not the final framework because in practice one may find that a slightly different taxonomy might work better the reading "Trainer As Change Agent" describes the role of the trainer as a change agent. As protean, changing difficult to describe- and practically impossible to Generalize. It says that the change agent's role is professional, marginal, and ambiguous Insecure and risky.

### Trainer Skills

There is a range of specific skills that are needed to undertake one-to-one coaching training groups, facilitating, counseling and supporting distance learning materials. However appropriate the strategy or tactic may be when measured against the constraints, target population, budget and then principles of learning, unless the trainers have been selected and trained to meet high standards, the training will not be effective.

When selecting tactics for training the perceived advantages of on-job training or "Sitting by Nellie" as it is sometimes described has meant that in many circumstances the training has been introduced and conducted in a less than professional manner. This has come about because of two fundamental and interrelated assumptions about "Nellie" training.

The first of these assumptions is that "Nellie" training is a natural and familiar process. This assumption has origins in the earliest form of training and learning given by parent to child. There are also historical precedents for "Nellie" training to be found in craft apprenticeships. Many master craftsmen were highly motivated trainers as they were an integral part of the process of ensuring continuity within their trade. These kinds of relationship are found between personal tutors and pupils in private and higher institutes of learning. However, despite our familiarity with some of these forms of learning and teaching, it is neither logically nor factually correct to conclude that being an affective one-to-one trainer will come naturally to everyone.

In the second assumption it is often believed that if the technical expertise is available within a particular area any associated training problem will be solved automatically.

From this, it seems that sitting by Nellie training is regarded by many as simply a matter of observing an expert and that learning will occur by some process of psychological osmosis. Furthermore, there is a tendency to be complacent about or even antagonistic towards the notion of and the need for the training of "Nellie's".

With these attitudes prevailing it is hardly surprising that training by "Nellie" is often a hit-and-miss affair leading to inconsistent results. Such unpredictable outcomes have no doubt, helped Nellie training to acquire unprofessional connotations.

Given this situation, there is an obvious requirement for the basic assumptions

About "Nellie" training to be examined critically. In many circumstances it will be necessary to replace sitting by Nellie with systematically designed training and properly training one-to-one trainers.

The training of one-to-one trainers is an area of considerable neglect. When one of the aims of 'Sitting by Nellie' has been to reduce the costs of training, it seems unreasonable to managers they should have to invest time, effort and money into training the trainer. However assuming that management does take the appropriate steps to select right person, it would be remiss to them to ignore the need for adequate training.

Normally more attention is given to the training of those trainers who teach groups of trainees on courses although there are many examples to be found of the 'instant trainer'. This happens when trainers are selected for their technical expertise with little or no regard for the skills they have to use as trainers. This is not to say that technical expertise is not important; the credibility of the trainer hinges on technical expertise. However, that expertise is almost totally wasted if the trainer cannot 'put it over' efficiently. In some cases the trainers are found to be inadequate even after having been trained in instructional techniques and therefore it is worth the investment to give close consideration to the selection of trainers.

In order to decide what criteria should be used for their selection and also what their training needs are, it is important to identify the positive and negative qualities found in trainers.

The characteristics which have been observed in poor trainers include:

- Adopting a highly directive style of teaching which does not allow participation nor confirmation that learning has taken place.
- Making unrealistic assumptions about the trainees' level of knowledge or failing to establish their level of knowledge in the first place.
- Displaying impatience or intolerance when trainees fail to understand or are slow to learn.
- Lacking commitment to the subject being taught or to training as an important function in the organization.
- Lacking in verbal/oral skills.
- Trying to teach too much too quickly.
- Refusing to accept criticism or advice on teaching methods.
- Lacking in sociability and interest in the trainees.
- Having an untidy appearance.

No doubt, readers will be able to think of other poor qualities that they have experienced or observed. Similarly the list of examples which follows is not intended to be exhaustive but to illustrate the qualities good trainers have. Apart from the opposites to those shown above, one might add:

- Demonstrating technical competence in the area being taught.
- Showing a natural ability to teach and gain satisfaction from it.
- Possessing a high level of interpersonal skills.
- Being good listeners and questioners.
- Having a genuine interest in people.
- Being flexible in the use of training strategies and tactics.
- Valuing the need for thorough planning and preparation.
- Accepting a share of accountability for the trainee's future performance.

It might be that sophisticated selection and assessment instrument need to be developed in order to find the best trainers. The training centers of some organizations have potential tutor courses which provide the opportunity for candidates to observe current training in progress, to talk with tutors and to present a period of instruction so that their potential can be judged. When this is not possible or when it is not cost effective to employ a selection strategy which might be the case with one-to-one trainers a simple matching system can be used which compares the qualities of the potential trainer with those of a good trainer.

- Areas in which these qualities could be reflected include:
- Outside interests, particularly those which are people-oriented and exercise interpersonal skills or which may involve teaching others.
- Simulated exercises which resemble training situations.
- Informal judgments based on relationships within the work situation.
- Formal judgments based on performance appraisal, group meetings,
- Developmental training.

Above all the people selected should actually want to be trainer. In the past it has been thought that the subject expert has been the ideal trainer. Undoubtedly, in most circumstances there is a requirement for subject competence. However, it may be more profitable in the long term to improve the technical competence of someone with potentially good trainer qualities rather than try to develop the interpersonal skills, etc. of the subject expert who is unsuited or unwilling to be a trainer.

To begin with, there is the need to systematize and to organise the training for potential trainers. This can be examined in terms of the knowledge, skills and attitudes required to be an effective trainer.

It is important for trainers to appreciate that people learn in different ways and have preferred learning styles which may be influenced by individual differences of personality, age, experience etc. Knowledge of some of the interrelated principles of human learning and motivation help the trainer to arrange the appropriate learning conditions for the trainee. In connection with these principles it would be useful to have in mind a profile of the nature of trainees in one-to-one situations.

While it is accepted that on occasions the trainer may have to deal with the over confident and the unwilling the majority of students who undertake training programmes are usually well motivated. They may feel apprehension about the experience and about the possible consequences of failing to learn.

However, they place trust in their trainer and have a desire to do well. There is often a failure to appreciate this and to take it into consideration in both the preparation for and the conduct of training, to order to structure a training session the trainer needs to have diagnostic skills and a range of technical, interpersonal and judgmental skills. The technical skills would

include preparing and planning a period of instruction deciding the style and methods of presentation. Organizing the logistics of syndicates, role-playing and other activities, making visual aids and using them correctly.

There is a need to develop questioning skills, to design tests or test sample pieces. These are closely associated with the judgmental skills required to make an appraisal and gain an impression of the nature of the trainee to set realistic goals during training and to recognize when the trainee is sufficiently competent to apply what has been learned.

The interpersonal skills which the one-to-one trainer has to expertise are described by Megginson and Boydell (1979) as being similar to those required by the skilful counselor. This includes attending observing remaining silent, drawing out, giving and receiving feedback and suspending judgment. The importance of these skills become clear when it is remembered that coaching is undertaken at all levels in the organization where individuals are being developed to undertake greater responsibilities.

The same, and additional skills, have to be exercised by the trainer who is involved with groups of trainees without a thorough appreciation of, and training in the appropriate skills then activities such as syndicate exercises, discussions, role-plays, etc can deteriorate into time fillers or rest periods for the trainer. These activities or tactics should be used to achieve objectives

and demand a range of skills from the trainer which in addition to those listed above, include listening, analysing, correcting, guiding, promoting, controlling and summarizing. In exercising these skills the trainer acts as a facilitator which is quite different from the role which many trainers usually adopt. One of the reasons that tactics such as role-play and discussion may not be effective is because the trainer or those who have designed the training do not understand the demands that facilitating makes on the trainer.

In discussing one-to-one and group training, it has been seen that control over the direction and content of the training has been exercised by the trainer. Facilitating places the trainer in a position where he or she becomes an enabler for students to learn by themselves. The trainer and the trainees become interdependent and draw upon one another's knowledge and skills to achieve the learning objective. In effect, control over the learning process passes in varying degrees, depending on the tactic to the trainee.

In the facilitating mode the trainees contribute knowledge, skills and experience which have been acquired over a number of years. Facilitators have to adapt their approach to meet the needs of the trainees and individuals within the group which could involve a change in, or development of, the trainers attitudes. There must be an acceptance of openness within the group so that it can establish its own ground rules to work together as a cohesive unit and that the facilitator is a resource for the group to draw upon to direct activity and contribute to their learning. In performing this function, the facilitator will need to exercise a variety of skills. There is a need to be aware of and to monitor, the individual learning and emotional needs of members of the group, to create a secure climate to structure the learning experiences and activities of the group and to control the learning experiences so that they remain relevant and that the objectives are achieved.

The role of facilitator is demanding and not all trainers may be able to adapt to it. Training departments that plan to use their trainers as facilitators could overcome potential problems by being more rigorous in the assessment of attitudes and skills of potential trainers. Rogers (1969) identified a range of qualities of facilitative trainers which can be used to build a profile of selection.

- Less Protective of their own constructs and beliefs than other trainers
- More able to listen to students especially to their feelings
- Able to accept the ideas of students even if they are seen to be troublesome provoking etc.
- Able to accept positive and negative feedback and use it in their own development.

Clarke (1986) describes the tutor's role in open learning programme as that of a facilitator and lists the following personal qualities which may need to be considered when selecting tutors:

- Patient, tolerant and able to cope with frustration.
- Perceptive (ability to put themselves in student's shoes), understanding, sympathetic.

- Friendly approachable and trustworthy.
- Prepared to tolerate disruption in private life.
- Able to change quickly from one task or subject to another.
- Prepared to accept interruptions to non-open tutor activity e.g. lecturing.

It is not likely that all of the qualities presented by Rogers and by Clarke will be required of all facilitators in every learning situation. However, an assessment of the demands of the programme will help to identify which qualities are relevant.

In addition to the selection and development of trainers as facilitators some consideration must be given to the logistics of training programme, which includes facilitative methods. More time may be required to allow for a number of the tactics e.g. role-playing and discussions to be exploited fully and for individual counselling. The size of the group may have to be reduced or more than one tutor may be needed so that syndicates can be formed. Experience has shown that when numbers are larger than eight, smaller syndicate groups are needed. More space is likely to be needed to cater for group and individual activity and possibly a resource bank of information and equipment.

A considerable emphasis has been placed on the skills needed by trainers operating in different modes, however, there is not the only contribution which influences effective learning. Murray (1987) described how 'supporters' helped trainees in the glass industry to overcome problems with study techniques, the feeling of being abandoned and the difficulty of approaching tutors when they had problems. Supporters do not necessarily have to be subject experts; they make their contribution by taking an interest, checking progress, acting as a sounding board and giving encouragement. Murray indicated that those who gained most from open learning were those who received formal and informal follow-up from senior managers in their parent organizations.

The responsibility to line managers must not be neglected when consideration is given to trainer skills. Apart from the fact that they have a managerial responsibility to ensure that their staff are trained and involved in developmental programmes, they may be involved in coaching activities and they should ensure that trainees are properly briefed before embarking on training programmes and that they are debriefed on its conclusion. Trainers who ensure that line managers appreciate the value of thorough briefing and who provide briefing guides for their use are often rewarded with better prepared and better motivated trainees entering the training programme.

### **The Trainer's Overall Responsibilities - Aside From Training Evaluation**

Over the years the trainer's roles have changed, but the basic *raison-d'être* for the trainer is to provide efficient and effective training programmes. The following suggests the elements of the basic role of the trainer, but it must be borne in mind that different circumstances will require modifications of these activities.

1. The basic role of a trainer (or however they may be designated) is to offer and provide efficient and effective

training programmes aimed at enabling the participants to learn the knowledge, skills and attitudes required of them.

2. A trainer plans and designs the training programmes, or otherwise obtains them (for example, distance learning or e-technology programmes on the Internet or on CD/DVD), in accordance with the requirements identified from the results of a TNIA (Training Needs Identification and Analysis) for the relevant staff of an organizations or organizations.
3. The training programmes cited at (1) and (2) must be completely based on the TNIA which has been: (a) completed by the trainer on behalf of and at the request of the relevant organization (b) determined in some other way by the organization.
4. Following discussion with or direction by the organization management who will have taken into account costs and values (e.g ROI - Return on Investment in the training), the trainer will agree with the organization management the most appropriate form and methods for the training.
5. If the appropriate form for satisfying the training need is a direct training course or workshop, or an Intranet provided programme, the trainer will design this programme using the most effective approaches, techniques and methods, integrating face-to-face practices with various forms of e-technology wherever this is possible or desirable.
6. If the appropriate form for satisfying the training need is some form of open learning programme or e-technology programme, the trainer, with the support of the organization management obtain, plan the utilization and be prepared to support the learner in the use of the relevant materials.
7. The trainer, following contact with the potential learners, preferably through their line managers, to seek some pre-programme activity and/or initial evaluation activities, should provide the appropriate training programme(s) to the learners provided by their organization(s). During and at the end of the programme, the trainer should ensure that: (a) an effective form of training/learning validation is followed (b) the learners complete an action plan for implementation of their learning when they return to work.
8. Provide, as necessary, having reviewed the validation results, an analysis of the changes in the knowledge, skills and attitudes of the learners to the organization management with any recommendations deemed necessary. The review would include consideration of the effectiveness of the content of the programme and the effectiveness of the methods used to enable learning, that is whether the programme satisfied the objectives of the programme and those of the learners.
9. Continue to provide effective learning opportunities as required by the organization.
10. Enable their own CPD (Continuing Professional Development) by all possible developmental means - training programmes and self-development methods.
11. Arrange and run educative workshops for line managers on the subject of their fulfillment of their training and evaluation responsibilities.

Dependant on the circumstances and the decisions of the organization management, trainers do not, under normal circumstances:

1. Make organizational training decisions without the full agreement of the organizational management.
2. Take part in the post-programme learning implementation or evaluation unless the learners' line managers cannot or will not fulfil their training and evaluation responsibilities.

As a final reminder, unless circumstances force them to behave otherwise, the trainer's role is to provide effective training programmes and the role of the learners' line managers is to continue the evaluation process after the training programme, counsel and support the learner in the implementation of their learning, and assess the cost-value effectiveness or (where feasible) the ROI of the training. Naturally, if action will help the trainers to become more effective in their training, they can take part in but not run any pre- and post-programme actions as described, always remembering that these are the responsibilities of the line manager

### **Tip to Write Business Plan/Training Proposal**

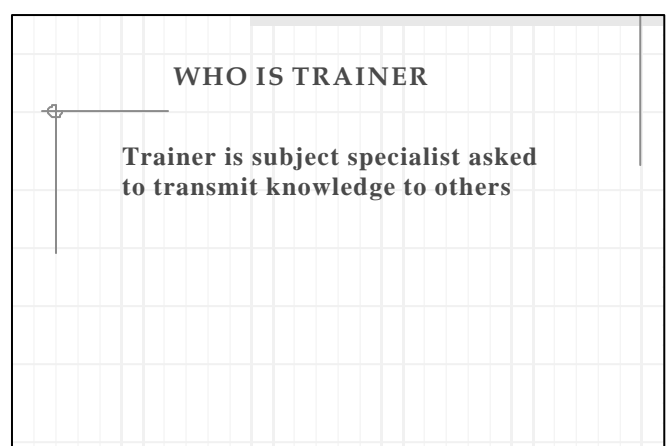
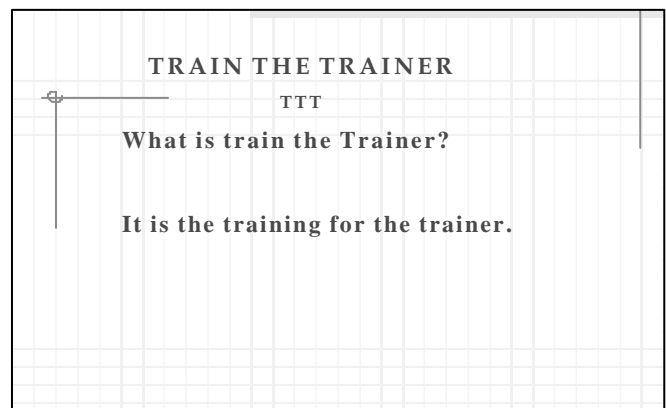
1. Title Page - Creative, logo, name of course, your company name, date, addresses, names of people in group, email addresses. Copyright and trademark your ideas.
2. Table of Contents - Serves as quick overview of your proposal plus give the reader a quick reference to various sections.
3. Executive Summary - Since time is critical, use a tightly written executive summary. Should be about two paragraphs, well written, active voice, powerful, punch line your solution strongly.
4. Background of the Problem - Show how the proposal was initiated, who performed the needs assessment, and what procedures were involved in the process. This section puts the proposal into the context of the business problem to be solved. One way to make this connection is to list the names of stakeholders who initially raised the issues or who participated in the needs assessment process. Tie it to the performance improvement model. Show and explain the 5 steps and how your solution ties into these 5 steps.
5. Analysis of the Problem — What is the problem to be addressed? Why is the training solution needed — how will the training bridge the gap between an identified problem and the learning required. Show how the training solution solves a specific business problem.  
Identify the  
WHO,  
SOLUTIONS,  
OPTIONALS,  
CAUSES,  
FEELINGS,  
CURRENT CONDITIONS.  
Use charts, graphs, etc. to make it easier to read.
6. Target Population (Stakeholders) - Who are to be served by the training, those who will benefit, described as accurately as possible. Include management's involvement.

7. Rationale and Goals of Proposal Training - Tied back to the analysis of the problem; show why training is needed and anticipated outcomes. It should answer: "What is the purpose of the proposed training and what are the anticipated benefits?" Use charts, graphs, etc. whenever possible. Have a strong defense for your solution.
8. Competencies (Learning Objectives / Topics) - List terminal objectives for major KSAs. (At the end of module 2, your employees will be able to... ). This tells them exactly what you plan to teach their employees.
9. Evaluation Strategies (Kirkpatrick's 4 Levels) - How you will evaluate project: formative and summative, using Kirkpatrick's four levels. Include sample of evaluation forms in the appendix.
10. Transfer of Training - Your strategies for assuring that training is transferred back to the workplace).
11. Overview of the Intervention — This overview broadly describes the training solution to the identified problem. This description should include the types of learning activities proposed, where they will take place, and who will be involved. Describing the nature and type of training that will occur over a designated period of time provides the decision-makers with a picture of the training experience. Show sample programs, homepage, etc.
12. Curriculum Outline - This consists of the each topic — in logical order — that details the content, organization, and sequence of the proposed training program. It must be as complete as possible.
13. Training Sources required — Instructional materials, hardware and software, and personnel. Any pre-work to be completed by participants before the training event should also be described here as well as a list of handouts and other related materials.
14. Capabilities of the Training Providers — describe the individual trainers or your corporation's capacity to produce an effective training solution and to deliver it in a timely fashion. It includes individual qualifications of each trainer, references to other successful projects, and a list of satisfied clients.
15. Development Schedule — Sequence of planning events in a step-by-step process covering blocks of time, that describes what needs to be done, when it will be done, how long it will take, and in what sequence. The schedule outlines the stages necessary to complete specific and separate phases of the needs analysis and design of the training project and provides an overview of the specific tasks to be done. It shows which tasks will be done sequentially and which will be done at the same time as another activity. The development schedule charts the most expeditious path to design the training program. Use graphs, models, charts, etc.
16. Delivery Schedule - Delivery outlines which the pilot testing will be done, when any needed revisions will be done, and when the product should be available for rollout to the entire organization. The schedule may cover a period as

short as a few days or it may cover a year or more depending on the nature and strategic importance of the project.

17. Costs - List the expenses involved in doing what is proposed. Because proposals are written to sell decision-makers on a proposed solution to an identified problem, it is extremely important that costs be fully explained and well documented. Training competes for the organization's scarce resources —they must provide sound estimates of costs. Give options for training so they can choose. Break down into cost per session and per participant.
18. Projected Benefits - Productivity improvements, quality improvements, workplace improvements, ROI
19. Appendix — Statistical data, trainer resumes, reference lists, supporting materials

## Points to Ponder



## WHAT ROLE TRAINER PLAYS

### Role of Trainer:

- Counselor
- Communicator
- Informer
- Guide/ Coach
- Motivator

## ROLE OF TRAINER

In following three conditions

### *FIRST*

➤ The Trainer's Behavior when the task is not clear in participants – guidance, motivation to handle fear and give confidence, active participation

## WHAT ROLE TRAINER PLAYS

### Role of Trainer:

- Supervisor
- Problem Solver
- Interpreter and Translator
- Mediator
- Evaluator

## ROLE OF TRAINER

In following three conditions

### *SECOND*

➤ The Trainer's Behavior when the task is clear and attractive giving information, direction, criticism, help

## ROLE OF TRAINER

In following three conditions

### **THIRD**

- The Trainer's Behavior when the task is clear but unattractive rewards and punishment, share faults in work, asking opinions and questions.

## OBJECTIVES OF TRAINER

- Develop skills and use of training methods materials and visual aids.
- Prepare training manual, Instruction plans, session plans, reading materials and visual aids for various training courses/ modules

## OBJECTIVES OF TRAINER

- Identify their role as trainers through a systematic approach to training
- Identify and describe the elements of training management system (training process planning, organising, leaning, controlling)

## FUNCTIONS OF TRAINER

- **MENTORING** – greater exploration and learning.
- **DESIGNING** – Plan, organise and run effective training program.
- Helping to implememnt organisational change strategy



### **FUNCTIONS OF TRAINER**

- **Intervening participants work organisation to ensure newly gained competencies will be effectively used**

### **SKILLS REQUIRED BY THE TRAINER**

- **Human Relations, Fair treatment**
- **Knowledge about subject as well as students**
- **Knowledge of Human Behaviour and Motivation**
- **Active**

### **SKILLS REQUIRED BY THE TRAINER**

- **Humble**
- **Enthusiastic**
- **Try to answer the question**
- **Team player**
- **Leadership**
- **Positive Attitude**

### **WHY TTT**

- **To improve performance**
- **Effective training is significant**
- **Development of trainer**
- **Upgrading skills**

## Activities and Assignments:

1. Who can be Trainer?

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2. What are skills required by trainer

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3. What is Train the Trainer program about.

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4. What role trainer plays in diversity training program.

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## Training on Leadership

### Leadership and Management Training and Development

Here's a simple process for training and developing management and leadership skills, and any other skills and abilities besides. Use your own tools and processes where they exist and are effective. Various tools are available on the free resources section to help with this process, or from the links below. If you want working files instead of the pdf's on the site please ask.

Refer also to the coaching and development process diagram.

1. Obtain commitment from trainees for development process. Commitment is essential for the development. If possible link this with appraisals and career development systems.
2. Involve trainees in identifying leadership qualities and create 'skill/behaviour-set' that you seek to develop. Training and development workshops are ideal for this activity.
3. Assess, prioritise and agree trainee capabilities, gaps, needs against the skill/behaviour-set; individually and as a group, so as to be able to plan group training and individual training according to needs and efficiency of provision. Use the skill/behaviour-set tool for this activity. Use the training needs analysis tool for assessing training needs priorities for a group or whole organization.
4. Design and/or source and agree with trainees the activities, exercises, learning, experiences to achieve required training and development in digestible achievable elements - ie break it down. Use the training planner to plan the development and training activities and programmes. Record training objectives and link to appraisals.
5. Establish and agree measures, outputs, tasks, standards, milestones, etc. Use the SMART task model and tool.

Training and development can be achieved through very many different methods - use as many as you need to and which suit the individuals and the group. Refer to the Kolb learning styles ideas - different people are suited to different forms of training and learning.

Exercises that involve managing project teams towards agreed specific outcomes are ideal for developing management and leadership ability. Start with small projects, then increase project size, complexity and timescales as the trainee's abilities grow. Here are examples of other types of training and development. Training need not be expensive, although some obviously is; much of this training and development is free; the only requirements are imagination, commitment and a solid process to manage and acknowledge the development. The list is not exhaustive; the trainer and trainees will have lots more ideas:

- on the job coaching
- mentoring
- delegated tasks and projects
- reading assignments
- presentation assignments
- job deputisation or secondment
- external training courses and seminars

- distance learning
- evening classes
- hobbies - eg voluntary club/committee positions, sports, outdoor activities, and virtually anything outside work that provides a useful personal development challenge
- internal training courses
- attending internal briefings and presentations, eg 'lunch and learn' format
- special responsibilities which require obtaining new skills or knowledge or exposure
- video
- internet and e-learning
- customer and supplier visits
- attachment to project or other teams
- job-swap
- accredited outside courses based on new qualifications, eg NVQ's, MBA's, etc.

Simply put, leadership development is an effort (hopefully, planned in nature) that enhances the learner's capacity to lead people. Very simply put, leading is setting direction and guiding others to follow that direction. A critical skill for leaders is the ability to manage their own learning. The highly motivated, self-directed reader can gain a great deal of learning and other results from using the guidelines and materials in this library topic.

(Some of the following information was extracted from the Field Guide to Leadership and Supervision.)

(Note that there are separate topics about Management Development Planning and Supervisory Development Planning.)

Categories of information include:

### **Preparation for Learning**

Before Leadership Development, .

Get an Impression of What "Leadership" Is What Does Leadership Development Look Like?

Strong Value of Self-Directed Learning

Informal Activities to Learn About Leadership in Organizations

Attempt to Go Beyond Reading Books ...

Ideas for Activities to Learn About Leadership

Customizing Your Own Leadership Development Program

Preparation for Designing Your Leadership Training Plan

Determining Your Overall Goals in Leadership Training

Determining Your Learning Objectives and Activities

Developing Any Materials You May Need

Planning Implementation of Your Leadership Training Plan

Evaluating Your Leadership Training Plan and Experiences

Follow-Up After Completion of Your Plan

### **Preparation for Learning**

To gain broad perspective on leadership development, the reader would benefit most from first reading the following information.

Introduction to Organizations (read documents referenced from the section titled "Basics")

### **Basic Definitions and Roles in Management**

Training Basics — Ways to View Training and Development

Training Basics — Getting Most from Training and Development. Before Leadership Development, Get Sense of What "Leadership" Is. The first place to start learning about leadership is to get some sense of what leadership is — in particular, understand get an impression of the areas of knowledge and skills recommended for effective leadership in organizations.

### **Informal Activities to Learn About Leadership**

Informal Activities to Learn About Leadership Attempt to Go Beyond Reading Books ...

The activity of leading is a very human activity. Therefore, there are a wide range of everyday and on-the-job activities from which you can learn about leadership and even enhance your leadership skills. Informal methods can include, for example, reading books, having discussions with friends, on-the-job training, keeping a diary with thoughts about leadership, etc. Note that you're not likely to develop much for leadership skills merely by reading, talking or attending a course unless you actually apply new materials and methods, and continue to reflect on what you're learning along the way.

Ideas for Activities to Learn About Leadership

One of the most effective and reliable ways to learn is to do so consciously, in a planned fashion. Therefore, be sure to consider customizing your own leadership training plan. Complete guidelines are provided in the next section, Customizing Your Own Leadership Development Plan.

The following table includes numerous ideas for activities from which to learn about setting direction and influencing others to follow the direction.

(Get guidance and assistance:)

- Seek to find a mentor
- Hire a personal/professional coach (Readings to consider:)
- Read general advice (articles on leadership)
- Read leading yourself
- Read core competencies to lead others
- Read leading individuals
- Read leading groups
- Read leading organization-wide efforts
- Review the basics of organizational change
- Review the self-management for new managers and supervisors
- Read books on leadership
- Read self-assessments about leadership
- Read suggested competencies in leadership

(Skills to practice:)

- In your next assignment or in a personal plan, design and word goals to be SMARTER
  - Learn to be a mentor

- Learn to coach others
- Give a presentation
- Practice basic skills in delegation
- Practice basic skills in listening and sharing feedback
- Customize personal guidelines for some basics in leading, for example, problem solving, decision making, planning and managing your power and influence
- Plan a meeting and facilitate a meeting
- Clarify your personal values and how you live them out — develop your codes of ethics and codes of conduct (Some workplace activities for learning:)
- Start (and stick to) a new project at work or in your life, ideally a project that includes your setting direction and influencing others to follow the direction
- Ask your supervisor, peers and subordinates for ideas to develop your leadership skills
- Ask to be assigned to a leadership position
- Regularly solicit feedback from others about your leadership skills (Other sources for learning:)
- Identify traits and behaviors of your favorite leaders
- Design a personal development plan
- Take strong participation in a course, apprenticeship or internship that involves persistence, risk and initiative
- Take a leadership role in a management association
- Volunteer to lead a work or community project, or join a board of directors (Capturing your learning:)
- Schedule (and stick to) ongoing periods for private reflection; record them in a journal
- Consider designing a formal training plan

## Customizing Your Own Leadership Development Plan

You are much more likely to learn useful skills in leadership if you develop and implement a training plan. The following sections will guide you to develop your own complete, highly integrated (and performance-oriented) leadership development plan. Each section includes reference to particular sections in the Complete Guidelines to Design Your Training and Development Plan (hereafter called the “Guidelines”). That document includes guidelines for you to identify your overall training goals and the learning objectives and activities to achieve the goals. Guidelines are also provided for carrying out the learning activities and evaluating your entire learning experience.

### Preparation for Designing Your Leadership Training Plan

Read the following two initial sections of the Guidelines (up to “Determining Your Overall Goals in Training”) and then return to the next section below.

#### Directions to Use “Complete Guideline ...”

#### Preparation for Designing Your Training Plan

#### Identifying Your Overall Goals in Leadership Training

#### Purpose of this Section

This section helps you identify what you want to be able to do as a result of implementing your training plan, for example,

qualify for a certain job, overcome a performance problem, meet a goal in your career development plan, etc. Learners are often better off to work towards at most two to four goals at a time. There are a variety of ways to identify your training goals, depending on what you want to be able to accomplish as a result of implementing your

## Training Plan

**Begin Identifying Your Training Goals Consider Performance Gaps, Growth Gaps or Opportunities Gaps** Performance gaps are areas of knowledge and skills need to improve performance and are usually indicated during performance reviews with your supervisor.

Growth gaps are areas of knowledge and skills need to reach a career goal.

Opportunity gaps are areas of knowledge and skills needed to take advantage of an upcoming opportunity.

### Conduct Self-Assessments

The following on-line, self-assessments may help, as well, by helping you assess certain areas of your own leadership abilities.

### Various Needs Assessments to Help Identify Leadership Development Goals

#### Collect Input From Others

Ask others for ideas to improve your leadership skills. Try get their input in terms of behaviors you can show. Consider input from performance reviews.

#### Performance Reviews: 360-Degree

#### Reference Lists of Areas of Knowledge and Skills Needed in Variety of Roles and Function

Competencies are lists of the general abilities needed to perform a role.

Consider the following lists for leading yourself, other individuals, groups and organization-wide efforts.

#### Suggested Competencies for Effective Leadership in Organizations.

#### Reference Books and Other Materials About Leadership

There is a vast amount of information available regarding leadership and leadership skills. However, much of it is in regard to character traits that leadership should have. When determining your training goals, translate these character traits to behaviors that you and others can recognize.

**General Advice About Traits and Characteristics That Leaders Should Have** look at Goals and Objectives of Leadership Development Programs these programs can offer good ideas about traits and characteristics needed by leaders, and methods to achieve those traits and characteristics. Be careful not to simply adopt suggestions and methods without first considering if they’d really be useful to you.

#### Samples of Leadership Development Programs

#### Don’t Forget to Lead Yourself!

Developing skills in leadership involves changing yourself, stretching yourself.

Therefore, you may want to include developing skills in Self-Confidence Assertiveness

On to Refining and Writing Your Training Goals in Your Plan. The Guidelines provides additional advice for identifying your training goals.

Follow the steps in the following section of the Guidelines until you come to its section titled “Determining Your Learning Objectives and Activities “ and then return to the next section below.

Determining Your Overall Goals in Training

Determining Your Learning Objectives and Activities

Purpose of this Section

The purpose of this section is to identify the various learning objectives you should achieve and learning activities you should undertake in order to achieve the overall training goals in your plan.

Identifying Your Learning Objectives

Carefully consider each of your training goals. What specifically must be accomplished (that is, what objectives must be reached) in order for you to reach those goals? Which of these objectives require learning new areas of knowledge or skills? These objectives are likely to become learning objectives in your training plan. To get a stronger sense for learning objectives, see Basic Guidelines and Examples for Writing Learning Objectives.

Identifying Your Learning Activities

Learning activities are the activities you will conduct in order to reach the learning objectives. The activities should help you work toward your training goal, accommodate your particular learning styles, be accessible to you and be enjoyable as well. The following link might help you.

Ideas for Activities to Learn About Leadership

On to Refining and Writing Your Learning Objectives and Activities in Your Plan

The Guidelines provide additional advice for identifying your learning objectives and activities. Follow the steps in the following section of the guidelines until you come to its section titled “Developing Any Materials You

May Need” and then return to the next section below.

Determining Your Learning Objectives and Activities

Developing Any Materials You May Need

Developing materials might include, for example, getting books, signing up for courses, reserving rooms, getting coaches, etc. The Guidelines provides additional guidance to develop any materials you may need. Follow the steps in the following section of the Guidelines until you come to its section titled “Planning Implementation of Your Training Plan” and then return to the next section below.

Developing Any Materials You May Need

Planning Implementation of Your Leadership Training Plan

During implementation, you should think about whether you’re really understanding the materials or not, need additional support, etc. The Guidelines provides additional guidance to you during implementation of your plan. Follow the steps in the following section of the Guidelines until you come to its section titled “Planning Quality Control and

Evaluation of Your Training Plan and Experiences” and then return to the next section below.

Planning Implementation of Your Training Plan

Evaluating Your Leadership Training Plan and Experiences

Evaluation includes assessing and making value judgments on whether you achieved your training goals or not, and on the quality of the process to reach those goals. Follow the steps in the following section of the Guidelines until you come to its section titled “Follow-Up After Completion of Your Plan” and then return to the next section below.

Planning Quality Control and Evaluation of Your Training Plan and Experiences

Follow-Up After Completion of Your Plan

Follow the steps in the following section of the Guidelines until you come to its section titled “Related Library Links”.

Follow-Up After Completion of Your Plan

### Leadership Styles

Which leadership strategies will give you the results you want? The answer has become a lot clearer following new research recently published in the Harvard Business Review [HBR]. From a random sample of 3,871 executives, it was found that the most effective leaders choose from six distinctive leadership styles.

The research investigated how each of the six leadership styles correlated with the specific components of the organization’s culture. These cultural components are: flexibility – employees’ ability to innovate without excessive rules and regulations; responsibility - how responsible employees feel towards the organization; standards - the level of standards expected in the organization; rewards - the accuracy of performance feedback and rewards; clarity - how clear employees are about the mission, vision and core values; and commitment – employees’ commitment to a common purpose.

The six leadership styles identified by the HBR, in order of their impact on an organisational culture, are as follows:

**1. Coercive.** This is a leader who demands immediate compliance. The phrase most descriptive of this leader is: “Do what I tell you!” This style can destroy your organisational culture. Because the downside is far greater than the upside, it should only be used with extreme caution. It is useful in an emergency, and may work in a crisis, a “turnaround” situation or as a last resort with a problem employee. This leadership style has the most negative impact (-.26) on the overall organisational culture.

**2. Pacesetter.** This is a leader who sets extremely high standards for performance. The phrase most descriptive of this leader is: “Do as I do, now!” This style can destroy a good culture. It only works with a highly motivated and competent team who are able to “read the leader’s mind.” Others will feel overwhelmed and give up, because they cannot see themselves reach unrealistic standards. This style has virtually the same negative impact (-.25) on the overall organisational culture, especially on rewards and commitment.

**3. Coaching.** This is a leader who is focused on developing people for the future. The phrase most descriptive of this leader

is: "Try this." Coaching leaders are great delegators, and are willing to put up with short-term failures, provided they lead to long-term development. This style works best when you want to help employees improve their performance or develop their long-term strengths. This style has a positive impact (.42) on the overall organisational culture.

**4. Democratic.** This is a leader who achieves consensus thorough participation. The phrase most descriptive of this leader is: "What do you think?" This style builds trust, respect and commitment, and works best when you want to receive input or get employees to "buy-in" or achieve consensus. It doesn't work under severe time constraints or if employees are confused or uninformed. If handled correctly, this style has a positive impact (.43) on the overall organisational culture.

**5. Affiliative.** This is a leader who is interested in creating harmony and building emotional bonds with employees. The phrase most descriptive of this leader is: "People come first." This style works best when you want to motivate employees, especially when they face stressful situations, when you want build team harmony, improve communication, increase morale or repair broken trust. This style has a positive impact (.46) on the overall organisational culture. Because this style has virtually no downside, it is often described as the best overall approach.

**6. Authoritative.** This is a leader who mobilises people with enthusiasm and a clear vision. This is a visionary leader, who gives people lots of leeway to innovate and take calculated risks, provided that they move in the direction of the stated vision. The phrase most descriptive of this leader is: "Come with me." This style works best when change requires a new vision or when employees are looking for a new direction. This style fails when employees are more knowledgeable or experienced than the leader, or if the authoritative style becomes overbearing. Provided that it is used with finesse, this style has the most positive impact (.54) on the overall organisational culture.

Most importantly, the HBR research shows that leaders who have mastered four or more styles, especially the authoritative, affiliative, democratic and coaching styles, and who can move seamlessly from one to the other, depending on the situation, produce the most positive organisational cultures and enjoy the greatest business successes.



**Forget your images of paintballs at dawn or of getting lost but finding each other in a forest in Wicklow. Teambuilding can be anything that helps employees work together, in a caring, sharing Seventh Heaven type of way.**

So why is team building important? Isn't it better to leave Grumpy Nigel to his own devices and won't you be encouraging the very fun and frivolity will lead to decreased productivity? The answer is no, you scary autocrat, you. Teambuilding improves support and trust levels in the workplace, increases efficiency and reduces employee stress

**Team building devices - if you teach them, they will get on.**

Teams produce results when everyone knows what goal they are aiming towards. Winning teams win from the ground up - everyone should know about details such as deadlines but they

should also hear any praise or new information received. The team should also have a strong leader to go with this frank flow of information. He or she should make sure that everyone is aware of the role that they play in the team and what is expected of them. Communication between team members should be open, informal and ongoing and everyone should have a genuine interest in their own and others' performances.

So how can you produce this utopia? First off all, you should assess your existing teams to identify existing problems and potential. You can do this in a number of ways. One of the most effective is known as the 360-degree analysis. This sees each team member being assessed individually and by his or her peers, superiors and subordinates. This enables members to review their own strengths and weaknesses as well as those of their fellow team members.

You can ensure that weaknesses are improved upon by organising workshops on key skills such as decision-making, problem solving and time management. You should also capitalise on the information you have amassed on employee strengths. For example, you could consider picking up on John's aptitude for programming, even if this is not an area that he currently works in. HR surveys have demonstrated that employee satisfaction increases significantly if they have a chance to branch out into other areas.

It is important that team members like and respect each other. If your analysis has revealed serious conflicts between existing team members, then perhaps you should consider separating them. However, make sure that each team has a good mix of personalities - if everyone in the team is deferential and timid, then nothing will get done.

Your company's general communication structures can also have an effect on team dynamics. You should have in place systems that reinforce collaboration and communication, such as suggestion boxes with feedback, and ensure that conflict management procedures are clearly laid down and accessible to all. By doing this, you create a generally more productive environment and avoid destructive 'in-team' fighting.

If all else fails and your teams are still the corporate equivalent of Sheffield Wednesday, then it's time for a survival course. You may be pleasantly surprised. Many a HR manager has been delighted at the sight of former sworn enemies, working together to trap the managing director in a cave with just two goats to rub together for warmth. When you are called into her office on Monday, just be sure to tell her what a good sport she was. Before you clear your desk, look around at the little Borussia Dortmunds that you have created and smile.

## **Leadership Development**

Developing leaders is much like building muscles. It takes a varied series of activities, spread over time, to create any noticeable improvement in strength. And, once muscles are developed, they need to be continuously exercised or they quickly atrophy.

Developing leaders is not just about training programs. It is putting in place a series of activities and learning events that, over time, build capability. These should be varied in method and time. A few can be short and serve as a catalyst for future

action. Others may be longer and provide a more intensive mental workout. But the key to a successful leadership development program is to stage events over time and never go for the single event approach. Events that last for a day or two and then are not supplemented or connected to future activities are as useful as a single day of working out.

Here are some examples of activities that Global Learning Resources can provide or facilitate:

- Bringing key people together to constructively analyze a new strategy.
- Hosting a day of scenario planning.
- Providing a manager with performance feedback and putting together a development plan.
- Supplying a coach to either help employees overcome a skill gap or to provide some expert advice and assistance on a new project.
- Developing and delivering a formal training sequence or curriculum.
- Helping to design and implement a learning project or action learning program.
- Developing a rotation program within your organization.
- Designing an academic partnership.
- Facilitating a brainstorming or strategic planning offsite.

### **Is Leading Different than Managing? (Pros and Cons)**

Traditional views of management associate it with four major functions:

planning, organizing, leading and controlling/coordinating. However, many educators, practitioners and writers disagree with this traditional view.

### **Views that Leading is Different Than Managing**

The following articles offer views different from the traditional view that leading is a major function of management. Management Styles (says they're different and compares different traits) Leadership (includes good overview of styles, and differences of manager and leader) Leading vs Managing — Two Different Animals (claims they have different personalities)

### **View That Separating "Leading" from "Managing" Can Be Destructive**

Another view is that to be a very effective member of an organization (whether executive, middle manager, or entry-level worker), you need skills in the functions of planning, organizing, leading and coordinating activities — the key is you need to be able to emphasize different skills at different times.

Yes, leading is different than planning, organizing and coordinating because leading is focused on influencing people, while the other functions are focused on "resources" in addition to people. But that difference is not enough to claim that "leading is different than managing" any more than one can claim that "planning is different than managing" or "organizing is different than managing".

The assertion that "leading is different than managing" — and the ways that these assertions are made — can cultivate the view

that the activities of planning, organizing and coordinating are somehow less important than leading. The assertion can also convince others that they are grand and gifted leaders who can ignore the mere activities of planning, organizing and coordinating — they can leave these lesser activities to others with less important things to do in the organization. This view can leave carnage in organizations. Read: Founder's Syndrome (when leading is separated from planning, organizing and coordinating)

Backlash Against the "New Paradigm"? (we have unrealistic expectations on today's organizations?)

## **How Do Leaders Lead?**

### **Is a Challenge to Suggest Which Methods to Use**

The particular competencies (knowledge, skills and abilities) that a person needs in order to lead at a particular time in an organization depend on a variety of factors, including:

1. Whether that person is leading one other individual, a group or a large organization;
2. The extent of leadership skills that person already has;
3. That person's basic nature and values (competencies should be chosen that are in accordance with that nature and those values)
4. Whether the group or organization is for-profit or nonprofit, new or long-established, and large or small;
5. The particular culture (or values and associated behaviors) of whomever is being led.

The above considerations can make it very challenging when trying to determine what competencies someone should have in order to be a better leader. Perhaps that's why leadership training programs in institutions typically assert a set of standard competencies, for example, decision making, problem solving, managing power and influence, and building trust. The following lists of competencies was derived by examining a variety of leadership development programs.

Suggested Competencies for Effective Leadership in Organizations

--- How to Use the Following List

--- Leading Yourself

--- Core Competencies to Lead Others

--- Leading People — Other Individuals

--- Leading People — In Groups

--- Leading People — Organization-Wide

### **General Advice (Tips, Etc.)**

Leading is Human Activity — Everyone's Human — Everyone's Got Advice About Leading

There are numerous — often contradictory — views on the traits and characteristics that leaders should have. The concept of leadership is like a big "elephant" and each person standing around the elephant has their own unique view — and each person feels very strongly about their own view. Descriptions of leadership include concepts such as the "New Paradigm", "New Millennium". Descriptions can sound very passionate, even evangelical! It can be difficult to grasp consistent messages from

[illegible][illegible]



## LESSON 41

### TRAINING FOR DIVERSITY

Dear Friends,

In this lesson you will be exposed towards various perspective of training.

After reading this lesson you will be able to understand diversity issue, Handle multicultural environment.

#### Introduction

An effective organisation is one which recognises and maximises the differences that exist within individuals whether they be age, sexual orientation, gender, race or disability. One needs to explore the issues surrounding diversity in the workplace, the legislation that exists and the benefits that a diverse workforce can bring to your organisation.

#### Diversity Issues

Diversity issues related to race, gender, age, disabilities, religion, job title, physical appearance, sexual orientation, nationality, multiculturalism, competency, training, experience, and personal habits are explored in these links. The bias is toward valuing diversity.

#### Managing Diversity Training Course Objectives

Such training course helps delegates to:

- Achieve a clear understanding of diversity and the different forms it can take.
- Understand the differences between diversity and equal opportunities.
- Recognise the benefits that diversity can bring to your organisation.
- Build a business case for introducing a culture positively embracing diversity into your organisation.
- Understand the key employment legislation and the impact on your business.

#### Managing Diversity Training Course Content

<ul style="list-style-type: none"><li>• Defining Diversity in the Workplace</li><li>• Understanding the concept of diversity</li><li>• Exploring the difference between diversity &amp; equal opportunities</li><li>• Identifying the impact of diversity on your business</li><li>• Best practice for a diverse working environment</li><li>• The Organisation Benefits Diversity</li><li>• Identifying the direct benefits of diversity on the organisation</li><li>• Uncovering the indirect benefits</li><li>• The effect of diversity on organisational behaviour</li></ul>	<ul style="list-style-type: none"><li>• Understand the impact of demographic and market changes</li><li>• Managing Diversity at Work</li><li>• legislations and developments</li><li>• Preparing for the introduction of the 'Age discrimination'</li><li>• Identify diversity issues in your organisation that need to be addressed</li><li>• Action Planning</li><li>• Implementing diversity in your work place</li><li>• Planning your key next steps</li></ul>
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#### Attitudes

Attitudes are usually defined as a disposition or tendency to respond positively or negatively towards a certain thing (idea, object, person, situation). They encompass, or are closely related to, our opinions and beliefs and are based upon our experiences. Since attitudes often relate in some way to interaction with others, they represent an important link between cognitive and social psychology. As far as instruction is concerned, a great deal of learning involves acquiring or changing attitudes.

Attitude change is especially relevant to management and sales training .

Hovland, Janis, & Kelly (1953) provided one of the first major theories of attitude change, developed in the framework of Hull's learning theory , and oriented towards the effects of persuasive communication. According to the Hovland all theory, changes in opinions can result in attitude change depending upon the presence or absence of rewards. The learning of new attitudes is no different in nature than any other verbal or motor skill, except that opinions relate to a single proposition whereas other skills involve a series of propositions. The acceptance of a new opinion (and hence attitude formation) is dependent upon the incentives that are offered in the communication.

Heider (1958) developed a balance theory of attitude change that was influenced by Gestalt principles . In Heider's theory, when beliefs are unbalanced, stress is created and there is pressure to change attitudes. The two main factors affecting balance are the sentiment (e.g., liking, approving, admiring) and unity (e.g., similarity, proximity, membership) qualities of beliefs. Balance exists if the sentiment or unity between beliefs about events or people are equally positive or negative; imbalance occurs when they are dissimilar in nature.

Abelson (1968) and others developed theories of cognitive consistency. Cognitive consistency suggests that people will try and maintain consistency among their beliefs and make changes (i.e., accept or reject ideas) when this doesn't occur. For example, if a college student who wants to live in a coed dormitory and also wants to get good grades is presented with the fact that students who live in coed dorms get poor grades, the student will either reject this proposition or change his attitudes about coed dorms or good grades.

Festinger's theory of cognitive dissonance is one of the best known and most researched frameworks pertaining to attitude change. According to this theory, attitude change is caused by conflict

among beliefs. A number of factors determine the strength of the dissonance and hence how much effort is required to change attitudes. By manipulating these factors, attitude change can be facilitated or inhibited.

## Article

**Communication Theory and Training Approaches for Multiculturally Diverse Organizations: Have Academics and Practitioners Missed the Connection** by Marguerite Arai , Maryanne Wanca-Thibault , Pamela Shockley-Zalabak

While a number of articles have looked at the importance of multicultural training in the workplace over the past 30 years, there is little concrete agreement that documents the common fundamental elements of a “successful” diversity initiative. A review of the training literature suggests the importance of human communication theory and practice without including important research, methodologies, and practice from the communication discipline. This article examines formal diversity approaches, provides examples from the literature of several successful diversity initiatives in larger organizations, identifies the limited use of communication-based approaches in diversity training, and discusses the importance of integrating communication theory and practice in future training efforts.

Since the early 1970s diversity in the workplace has increased creating new situations for which many organizations have not been prepared. Broadly defined, cultural diversity can be understood as differences in age, ethnic heritage, gender, physical ability and qualities, religious belief, and sexual/affectional orientation.[1] For example, of the 2.9 million women in the workforce who hold management or administrative positions in the private sector, 86 percent are white.[2] Expectations for the next decade predict women and people of color will fill 75 percent of the 20+ million new jobs created in the United States. By the year 2010 white men are expected to account for less than 40 percent of the total American workforce. Managing this diversity involves the “systematic and planned commitment by organizations to recruit, retain, reward, and promote a heterogeneous mix of employees.”[3]

The influx of women and people of color in the workplace has frequently led to confusion, discomfort, and irritation. Indeed, workplace...

**Prejudice and behavioral archetypes: a new model for cultural-diversity training.**

by Lyle Sussman

“You can be sincere and still be stupid.”

- Charles Kettering

Although the content of cultural-diversity training will vary depending on the unique requirements of the organization and the creativity of the trainer, certain strategies and topics are likely to be common across most, if not all, training programs. One of these strategies is to discuss the conditions under which a given comment or behavior is seen as racist, sexist, or discriminatory.

Having conducted these discussions many times in many organizations, I am always struck by the heated and wide-

ranging interpretations employees (both minority and nonminority) will attach to a given verbal or behavioral cue that is inherently ambiguous. For example, consider the statement “Your hairstyle is not appropriate,” uttered by a white female supervisor to an African-American female with beaded corn rows. Some (both black and white) interpret this comment as racist and others (again both black and white) interpret it as totally acceptable.

As trainers we have the responsibility to help participants understand why this...

“SYNERGY FROM OTHERS”:

## Cultural Diversity On Campus

“Synergy from Others” defines some key dimensions of diversity and the effects of assimilation in the past, examines obstacles such as stereotyping, garbled communication, and collusion, and suggests how to institutionalize the changes that move valuing diversity from rhetoric to reality.

## Scenes Included in the Program:

WE HAVE BECOME THE SAME

Life would be easy if we were all alike, but it would be BORING! A montage alluding to a homogenous world illustrates why celebrating diversity is a far more attractive route.

COKE ADDS LIFE?

This humorous vignette provides an example of how we inadvertently prevent ourselves from experiencing all the flavors life has to offer. The character tells about his “Coke” drinking family, and how taking the Pepsi challenge reveals the satisfaction he could have had if he had given other brands a chance.

\*IMPOSTOR

A young woman recounts her family’s move from a large city to “small-town-USA”. She is socially successful until she begins to feel that her Jewish heritage must be kept a secret in order to maintain that acceptance. The resulting low self-esteem prevents her from celebrating accomplishments. Instead, she feels like an impostor.

TYPES

The absurdity of some commonly held stereotypes regarding race, age, and gender becomes obvious in this humorous diatribe. Some double standards between men and women are examined as well.

\*THE BASHER

Bias, hatred and violence born from anger backfires when a man participates in a violent act with his peers, only to discover later that his daughter was one of the victims. This no-holds-barred look at racism emphasizes that we must move beyond intolerance to insure our mutual survival.

**Personality types, recruiting professionals deal with**

**If an old warhorse professional retired and wrote his or her memoirs, it would definitely have some affectionate memories of the more interesting candidates dealt with during the long career. Below are a few major types recruiters will nod smilingly at. Chances are that people in recruiting positions become the same way when they are job hunting. Hiring is a people business, remember?**



The top management wore the same outlook in their distinctive **black and white** suits.

They believed that uniformity is the way to do things;  
Uniformity is Unity.



Birds who aspired to move up the corporate ladder were encouraged to adopt the **penguins'** code of conduct and wear the **penguin** suits.

They learn the **penguin** stride and follow the example of their leaders.



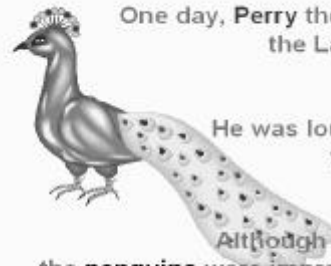
On the other hand, worker birds wore **colours** and outfits that reflected their work and lifestyles.



One day, **Perry** the peacock joined the Land of Penguins.

He was loud, **colou ful** and full of new ideas.

Although he was different, the **penguins** were impressed by his new ideas. They felt that he has real **Penguin** Potential.



Initially, everyone was happy.

The **penguins** were pleased with their new recruit.

Perry was creative and he brought in good results.

**Target = Results**



**Perry** was also unhappy.  
The penguins tried to turn him into a **penguin**.

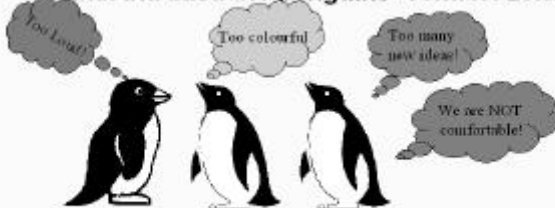
He was told to "try to be like the rest of us, wear a **penguin suit**".

Both parties were unhappy.



However, as time went by, the **penguins** began to murmur against **Perry**.

He was too loud, too colourful and had too many new ideas that intruded the **penguins'** comfort zone.



We see this story unfolds in many organisations today.

Creativity and innovation are seen to be "a breath of fresh air" in many organisations.

Many "Perrys" are recruited for their creativity. Yet, along the way, their creativity is stifled by the need to conform to the norm.

There will always be **Penguins** and **Peacocks** in any organisations.

Other than **penguins** and **peacocks**, there are also pigeons who are peacemakers in the office,

Sparrows who try to be neutral so as to keep a low profile or



**Ostriches** who choose to bury their heads in the sand.



When we learn to appreciate one another's differences, we become more willing to listen, more open to new ideas and more eager to grow.



Birds of different feathers can work together in harmony.



**Peacocks** bring in varieties and new ideas,  
But, the stability provided by the **penguins** must not be ignored.



**Penguins,**



being the backbone of the organisation, need to recognise that diversity can exist in an organisation if there is acceptance and trust.

“The lesson content has been compiled from various sources in public domain including but not limited to the internet for the convenience of the users. The university has no proprietary right on the same.”



# Rai Technology University

ENGINEERING MINDS

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