# **Training**

- When selecting individuals, organizations can focus on both indirect and direct causes of performance
- On the other hand, training can be only used to develop knowledge and skills
  - cannot train person to have a higher GmA or a different personality
- For jobs require undergraduate, graduate, and other specialized training
  - knowledge and skills are difficult to acquire, and the knowledge and skills are needed immediately upon starting the job
  - likely to use selection
- Three overall aspects of developing an effective training program
  - Needs Assessment
  - Training Design
  - Evaluation

# Relative utility of selection vs training

• compute the economic utility associated with a training program.

### Need Assessment

- Needs assessment can be focused at different targets
  - Organization analysis
  - Task analysis
  - Person analysis

### Organization Analysis

- Organization analysis involves assessing the organization's goals, as well as the organizational environment
- it is important to first determine what the organization seeks to accomplish in order to determine the most effective approach.
- Training is unlikely to be effective if the organization has a weak "climate for transfer"
  - Climate refers to shared perceptions among employees about a given aspect of an organization

- climate for transfer refers to beliefs about the effectiveness of training
- Before initiating training, it is important to first ensure that management and employees will be open to learning and applying new procedures

### Task analysis

- before training can be designed a thorough task analysis must be completed.
- Task analysis is essentially the same as a job analysis
  - Identify the specific tasks employees need to perform
  - Identify the knowledge and skills needed to perform the tasks
- The process of conducting a task analysis are the same as for conducting a job analysis

### Person analysis

- Person analysis involves identifying the individual employees who are most in need and/or who are most likely to benefit from training
- Needs may be identified through performance appraisals
- to benefit from training employees must display readiness for training
  - Having the requisite background (e.g., knowledge) and motivation
- Readiness for training leads to aptitude x treatment interactions (ATI)
- Common sources of readiness include:
  - GMA
    - \* training has a stronger effect for individuals with high GMA relative to individuals with low GMA
  - Confidence
    - \* training has a stronger effect for individuals with high Confidence relative to individuals with low Confidence
  - Mastery oriented
    - \* training has a stronger effect for individuals with high Mastery oriented relative to individuals with low Mastery oriented

# Training Design

• effective training must take into account numerous principles of learning.

# Active learning

- Active learning occurs when the learner is engaged in learning activities
  - includes taking notes, practicing skills, problem solving, and writing
- Active learning can be contrasted with passive learning

### Size of learning unit

- Training that allows for active learning results in greater knowledge retention
- Unit size refers to whether training focuses on an entire task, or if the task is broken down into small units. This is sometimes called part vs. whole learning
  - Part learning results in better outcomes for complex tasks that have meaningful sub-units
  - tasks that are coherent with interdependent steps, whole learning results in better outcomes

# how learning is spaced

- more information tends to be retained (and retained longer) when practice is distributed
- practical constraints often lead organizations to rely on massed practice techniques

### Meaningful of the material

- Providing an overview of the material
- Emphasizing the reasons the material needs to be learned
- Presenting information in a logical order
- Using familiar and job-relevant terms and examples

### Practive/overlearning

- it is imperative that the skill be practiced the correct way, or else employees may develop bad habits
- it is important to continue practicing/it is important to allow for overlearning, which refers to practicing beyond the point of mastery
- Doing so will ensure that the employee can perform the skill automatically

#### Feedback

- Feedback is information about a person's behavior whether or not it is effective for the task at hand
- Providing feedback helps a person to make adjustments and improve their performance
- Feedback is a critical aspect of F.O.R. training.

# **Types**

- lecture
  - Lectures are most useful for delivering knowledge
  - lectures are less useful for skill development, as trainees likely do not have the opportunity to for hands-on learning
  - lectures are economical and effective for many training needs
- On-the-job training
  - OTJ training is that trainees can learn from watching more experienced employees perform the job
  - downside of the OTJ method is that it relies heavily on the skill and motivation of the trainer
  - OTJ training is often not well-planned
  - trainers should be picked based on their teaching skill and motivation
- Self-directed training
  - the use of computer programs to deliver training materials
  - downside of this approach is that learners are often poor judges of their own learning, and thus move on too quickly
  - ATIs are also common with self-directed training

# Training evaluation

• Organizations have a strong interest in understanding whether the costs of training are outweighed by the benefits

#### Postive transfer

- situations in which the knowledge and skills acquired during training are applied on the job, and the result is a positive outcome.
- employees applied their new skills on the job, and performance outcomes improved
- occurs when learning principles are included in training, thus employees develop the appropriate knowledge and skills
- positive transfer occurs when there is a strong climate for transfer

# Negative transfer

- refers to situations in which the knowledge and skills acquired during training are applied on the job, yet the result is a negative outcome
- occur when there is a mismatch between training and actual job conditions
- if training did not provide opportunities to practice under realistic conditions, employees may struggle to apply the new skills once they return to the job, resulting in worse outcomes relative to before training

# Adaptive transfer

- refers to situations in which employees are able apply the knowledge and skills acquired during training to new situations (i.e., ones not practiced in training)
- employees must be able to adapt their knowledge and skills to new problems and demands
- employees must be able to adapt their knowledge and skills to new problems and demands.
- Metacognition
  - thinking about thinking
  - making judgements of learning challenging oneself to ensure new material is encoded and understood
  - Often done via self-questioning
- Knowledge structure cohesion
  - Efficient organization of knowledge
  - Knowing how different concepts are connected to each other
  - Often accomplished by reviewing training sessions (i.e., self-feedback) to identify correct and incorrect behaviors

# Kirkpatrick's four criteria

#### • Reactions

- criteria include things like affect and attitudes
- reactions are the most commonly collected training criteria
- reactions criteria are essentially uncorrelated with learning

# • Learning

- the ability to demonstrate knowledge and skills immediately following training
- demonstrate that the training was effective for instilling the intended knowledge/skills.
- learning criteria do not speak to whether or not the knowledge and skills were actually applied on the job

#### Behaviour

- did training actually result in changes to behaviors on the job?
- This is the "d" parameter in the utility equation

### • Results

- Campbell Model i.e., behaviors (performance) are causes of outcomes (results)
- it is important to differentiate behaviors and results, as results can be contaminated by factors outside the employee's control
- Empirical data are used to evaluate training effectiveness