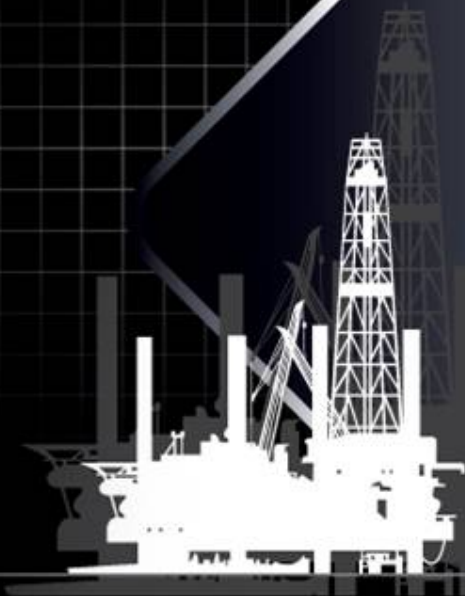




PRINCIPLES OF ADULT LEARNERS



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 INTO THEIR EXPERIENCE 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 CLASSROOM 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 BE 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 THE PARTICIPANT'S 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.**



ADULTS HAVE PRIDE

- ❖ **SUPPORT THE STUDENTS AS INDIVIDUALS.**
- ❖ **SELF ESTEEM AND EGO ARE AT RISK IN A CLASSROOM ENVIRONMENT THAT IS NOT PERCIEVED 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 OR 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 PARTICIPARY ACTIVITIES TO ENHANCE LEARNING.**
- ❖ **ADULTS GENERALLY WANT TO IMMEDIATELY APPLY NEW INFORMATION OR SKILLS TO CURRENT PROBLEMS OR SITUATIONS.**



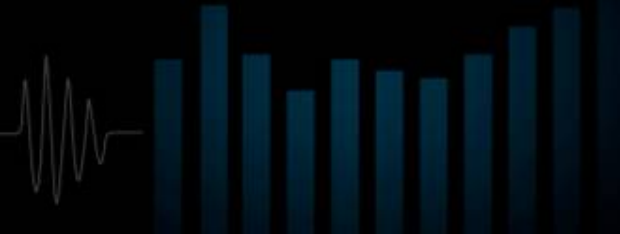
ADULTS ARE GOAL-ORIENTED

- ❖ UPON ENROLLING IN A COURSE THEY USUALLY KNOW WHAT GOAL THEY WANT TO ATTAIN.**
- ❖ THEREFORE, THEY APPRECIATE AN EDUCATIONAL 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 MUST BE 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.**



THERE ARE FOUR CRITICAL ELEMENTS OF LEARNING THAT MUST BE ADDRESSED TO ENSURE THAT PARTICIPANTS LEARN:

- ✓ **MOTIVATION**
- ✓ **REINFORCEMENT**
- ✓ **RETENTION**
- ✓ **TRANSFERENCE**



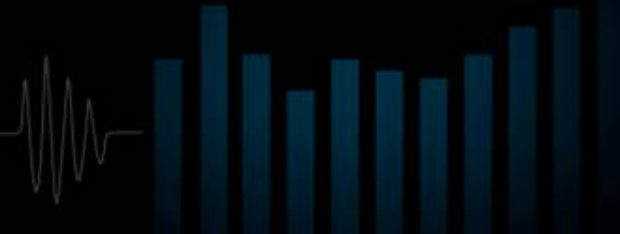
MOTIVATION

- ❖ **IF THE PARTICIPANT DOES NOT RECOGNIZE THE NEED FOR THE INFORMATION (OR HAS BEEN OFFENDED OR INTIMIDATED), ALL OF THE INSTRUCTOR'S EFFORT TO ASSIST THE PARTICIPANT TO LEARN WILL BE IN VAIN.**
- ❖ **THE INSTRUCTOR MUST ESTABLISH RAPPORT WITH PARTICIPANTS AND PREPARE THEM FOR LEARNING; THIS PROVIDES MOTIVATION.**
- ❖ **INSTRUCTORS CAN MOTIVATE STUDENTS VIA SEVERAL MEANS**



SET A FEELING OR TONE FOR THE LESSON

- ❖ INSTRUCTORS SHOULD TRY TO ESTABLISH A FRIENDLY, OPEN ATMOSPHERE THAT SHOWS THE PARTICIPANTS THEY WILL HELP THEM LEARN.**



SET AN APPROPRIATE LEVEL OF CONCERN

- ❖ **THE LEVEL OF TENSION MUST BE ADJUSTED TO MEET THE LEVEL OF IMPORTANCE OF THE OBJECTIVE.**
- ❖ **IF THE MATERIAL HAS A HIGH LEVEL OF IMPORTANCE, A HIGHER LEVEL OF TENSION/STRESS SHOULD BE ESTABLISHED IN THE CLASS.**
- ❖ **HOWEVER, PEOPLE LEARN BEST UNDER LOW TO MODERATE STRESS;**
 - ❖ **IF THE STRESS IS TOO HIGH, IT BECOMES A BARRIER TO LEARNING.**



SET AN APPROPRIATE LEVEL OF DIFFICULTY

- ❖ THE DEGREE OF DIFFICULTY SHOULD BE SET HIGH ENOUGH TO CHALLENGE PARTICIPANTS BUT NOT SO HIGH THAT THEY BECOME FRUSTRATED BY INFORMATION OVERLOAD.**
- ❖ THE INSTRUCTION SHOULD PREDICT AND REWARD PARTICIPATION, CULMINATING IN SUCCESS.**



REINFORCEMENT

- ❖ **REINFORCEMENT IS A VERY NECESSARY PART OF THE TEACHING/LEARNING PROCESS;**
- ❖ **THROUGH IT, INSTRUCTORS ENCOURAGE CORRECT MODES OF BEHAVIOR AND PERFORMANCE.**



POSITIVE REINFORCEMENT

❖ IS NORMALLY USED BY INSTRUCTORS WHO ARE TEACHING PARTICIPANTS NEW SKILLS.

❖ AS THE NAME IMPLIES, POSITIVE REINFORCEMENT IS "GOOD" AND REINFORCES "GOOD" (OR POSITIVE) BEHAVIOR.



NEGATIVE REINFORCEMENT

- ❖ IS NORMALLY USED BY INSTRUCTORS TEACHING A NEW SKILL OR NEW INFORMATION.**
- ❖ IT IS USEFULL IN TRYING TO CHANGE MODES OF BEHAVIOR.**
- ❖ THE RESULT OF NEGATIVE REINFORCEMENT IS EXTINCTION –**
 - ❖ THAT IS, THE INSTRUCTOR USES NEGATIVE REINFORCEMENT UNTIL THE “BAD” BEHAVIOR DISAPPEARS, OR IT BECOMES EXTINCT.**



NEGATIVE REINFORCEMENT

- ❖ **WHEN INSTRUCTORS ARE TRYING TO CHANGE BEHAVIORS (OLD PRACTICES) THEY SHOULD APPLY BOTH POSITIVE AND NEGATIVE REINFORCEMENT.**
- ❖ **REINFORCEMENT SHOULD BE PART OF THE TEACHING-LEARNING PROCESS TO ENSURE CORRECT BEHAVIOR.**
- ❖ **INSTRUCTORS NEED TO USE IT ON A FREQUENT AND REGULAR BASIS EARLY IN THE PROCESS TO HELP THE STUDENTS RETAIN WHAT THEY HAVE LEARNED.**
- ❖ **THEN, THEY SHOULD USE REINFORCEMENT ONLY TO MAINTAIN CONSISTENT, POSITIVE BEHAVIOR.**



RETENTION

- ❖ **STUDENTS MUST RETAIN INFORMATION FROM CLASSES IN ORDER TO BENEFIT FROM THE LEARNING.**
- ❖ **THE INSTRUCTOR'S JOB IS NOT FINISHED UNTIL THEY HAVE ASSISTED THE LEARNER IN RETAINING THE INFORMATION.**
- ❖ **IN ORDER FOR PARTICIPANTS TO RETAIN THE INFORMATION TAUGHT, THEY MUST SEE A MEANING OR PURPOSE FOR THAT INFORMATION.**
- ❖ **THEY MUST ALSO UNDERSTAND AND BE ABLE TO INTERPRET AND APPLY THE INFORMATION.**
- ❖ **THIS UNDERSTANDING INCLUDES THEIR ABILITY TO ASSIGN THE CORRECT DEGREE OF IMPORTANCE TO THE MATERIAL.**



- ❖ **THE AMOUNT OF RETENTION WILL BE DIRECTLY AFFECTED BY THE DEGREE OF ORIGINAL LEARNING.**
 - ❖ **SIMPLY STATED, IF THE PARTICIPANTS DID NOT LEARN THE MATERIAL WELL INITIALLY, THEY WILL NOT RETAIN IT WELL EITHER.**
- ❖ **RETENTION BY THE PARTICIPANTS IS DIRECTLY AFFECTED BY THEIR AMOUNT OF PRACTICE DURING THE LEARNING.**
- ❖ **INSTRUCTORS SHOULD EMPHASIZE RETENTION AND APPLICATION.**
- ❖ **AFTER THE STUDENTS DEMONSTRATE CORRECT (DESIRED) PERFORMANCE, THEY SHOULD BE URGED TO PRACTICE TO MAINTAIN THE DESIRED PERFORMANCE.**
- ❖ **DISTRIBUTED PRACTICE IS SIMILAR IN EFFECT TO INTERMITTENT REINFORCEMENT.**



TRANSFERENCE

- ❖ **TRANSFER OF LEARNING IS THE RESULT OF TRAINING – IT IS THE ABILITY TO USE THE INFORMATION TAUGHT IN THE COURSE BUT IN A NEW SETTING.**
- ❖ **AS WITH REINFORCEMENT, THERE ARE TWO TYPES OF TRANSFER: POSITIVE AND NEGATIVE.**



POSITIVE TRANSFERENCE

- ❖ **LIKE POSITIVE REINFORCEMENT, OCCURS WHEN THE PARTICIPANTS USES THE BEHAVIOR TAUGHT IN THE COURSE.**

NEGATIVE TRANSFERENCE

- ❖ **LIKE NEGATIVE REINFORCEMENT, OCCURS WHEN THE PARTICIPANTS DO NOT DO WHAT THEY ARE TOLD TO DO. THIS RESULTS IN A POSITIVE (DESIRED) OUTCOME.**



**TRANSFERENCE IS MOST LIKELY TO OCCUR IN
THE FOLLOWING SITUATIONS:**



ASSOCIATION

- ❖ **PARTICIPANTS CAN ASSOCIATE THE NEW INFORMATION WITH SOMETHING THAT THEY ALREADY KNOW.**



SIMILARITY

- ❖ **THE INFORMATION IS SIMILAR TO MATERIAL THAT PARTICIPANTS ALREADY KNOW;**
- ❖ **THAT IS, IT REVISITS A LOGICAL FRAMEWORK OR PATTERN.**



DEGREE OF ORIGINAL LEARNING

❖ PARTICIPANT'S DEGREE OF ORIGINAL LEARNING WAS HIGH



CRITICAL ATTRIBUTE ELEMENT

- ❖ **THE INFORMATION LEARNED CONTAINS ELEMENTS THAT ARE EXTREMELY BENEFICIAL (CRITICAL) ON THE JOB.**



PIKE'S LAWS OF ADULT LEARNING



LAW 1: ADULTS ARE BABIES WITH BIG BODIES

- ❖ **IT IS ACCEPTED THAT BABIES ENJOY LEARNING THROUGH EXPERIENCE, BECAUSE EVERY EXPLORATION IS A NEW EXPERIENCE.**
- ❖ **AS CHILDREN GROW, EDUCATORS TRADITIONALLY REDUCE THE AMOUNT OF LEARNING THROUGH EXPERIENCE TO THE POINT THAT FEW COURSES IN SECONDARY AND HIGHER EDUCATION DEVOTE SIGNIFICANT TIME TO EXPERIENTIAL EDUCATION.**
- ❖ **IT IS NOW RECOGNIZED THAT ADULT LEARNING IS ENHANCED BY HANDS-ON EXPERIENCE THAT INVOLVES ADULTS IN THE LEARNING PROCESS.**
- ❖ **IN ADDITION, ADULTS BRING A WEALTH OF EXPERIENCE THAT MUST BE ACKNOWLEDGED AND RESPECTED IN THE TRAINING SETTING.**



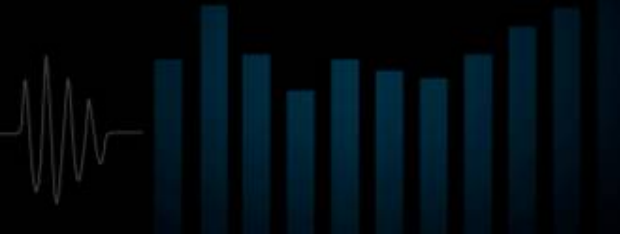
LAW 2: PEOPLE DO NOT ARGUE WITH THEIR OWN DATA

- ❖ PEOPLE ARE MORE LIKELY TO BELIEVE SOMETHING FERVENTLY IF THEY ARRIVE AT THE IDEA THEMSELVES.**
- ❖ THUS, WHEN TRAINING ADULTS, PRESENTING STRUCTURED ACTIVITIES THAT GENERATE THE STUDENT'S IDEAS, CONCEPTS, OR TECHNIQUES WILL FACILITATE LEARNING MORE EFFECTIVELY THEN SIMPLY GIVING ADULTS INFORMATION TO REMEMBER.**



LAW 3: LEARNING IS DIRECTLY PROPORTIONAL TO THE AMOUNT OF FUN YOU ARE HAVING

- ❖ HUMOR IS AN IMPORTANT TOOL FOR COPING WITH STRESS AND ANXIETY, AND CAN BE EFFECTIVE IN PROMOTING A COMFORTABLE LEARNING ENVIRONMENT.**
- ❖ IF YOU ARE INVOLVED IN THE LEARNING PROCESS AND UNDERSTAND HOW IT WILL ENABLE YOU TO DO YOUR JOB OR OTHER CHOSEN TASK BETTER, YOU CAN EXPERIENCE THE SHEER JOY OF LEARNING.**



LAW 4: LEARNING HAS NOT TAKEN PLACE UNTIL BEHAVIOR HAS CHANGED

- ❖ IT IS NOT WHAT YOU KNOW, BUT WHAT YOU DO THAT COUNTS.**
- ❖ THE ABILITY TO APPLY NEW MATERIAL IS A GOOD MEASURE OF WHETHER LEARNING HAS TAKEN PLACE.**
- ❖ EXPERIENCES THAT PROVIDE AN OPPORTUNITY FOR SUCCESSFULLY PRACTICING A NEW SKILL WILL INCREASE THE LIKELIHOOD OF RETENTION AND ON-THE-JOB APPLICATION.**



STUDIES SHOW THAT OVER A PERIOD OF THREE DAYS, LEARNING RETENTION IS AS FOLLOWS:

- ❖ 10% OF WHAT YOU READ.**
- ❖ 20% OF WHAT YOU HEAR.**
- ❖ 30% OF WHAT YOU SEE.**
- ❖ 50% OF WHAT YOU SEE AND HEAR.**
- ❖ 70% OF WHAT YOU SAY.**
- ❖ 90% OF WHAT YOU SAY AS YOU DO**
- ❖ (e.g.. ORALLY WORK OUT A PROBLEM)**



APPEAL

❖ **APPEAL IS THE POWER OF ATTRACTING OR AROUSING INTEREST. ADULT LEARNERS ARE MOTIVATED TO LEARN WHEN THEY HAVE A NEED TO KNOW. THEY WANT TO KNOW HOW THE INSTRUCTION WILL HELP THEM AND ASK THEMSELVES THE FOLLOWING QUESTIONS:**



- ❖ **WHAT'S IN IT FOR ME?**
- ❖ **WHY DO I NEED THIS INFORMATION?**
- ❖ **HOW WILL I BENEFIT FROM IT?**
- ❖ **HOW CAN I MAKE USE OF IT IN A PRACTICAL, REAL WAY?**
- ❖ **HOW WILL IT HELP ME BE A BETTER PERSON OR PROFESSIONAL?**



ADULT LEARNING STYLES

- ❖ **IN ADULT LEARNING THEORY, SEVERAL APPROACHES TO LEARNING STYLE HAVE BEEN DEVELOPED AND ARE PROMINENTLY USED IN TRAINING AND EDUCATIONAL PROGRAMS.**
- ❖ **THESE INCLUDE LEARNING STYLES BASED ON THE SENSES THAT ARE INVOLVED IN PROCESSING INFORMATION: THEORIES OF INTELLIGENCE, INCLUDING EMOTIONAL INTELLIGENCE AND “MULTIPLE INTELLIGENCES”;**



- ❖ **AND PREFERENCES FOR LEARNING CONDITIONS, i.e., THE ENVIRONMENT IN WHICH LEARNING TAKES PLACE. IN ORDER TO PROVIDE A FRAMEWORK FOR A DISCUSSION ON ADULT LEARNING STYLE DIFFERENCES,**
- ❖ **EACH OF THESE APPROACHES IS BRIEFLY DISCUSSED.**



AUDITORY, VISUAL, AND KINESTHETIC LEARNERS

- ❖ **DIFFERING APTITUDES, ABILITIES, AND EXPERIENCES HAVE CAUSED INDIVIDUALS TO DEVELOP A PREFERENCE FOR SENDING AND RECEIVING INFORMATION THROUGH ONE SENSE OVER ANOTHER.**
- ❖ **MOST OFTEN PEOPLE PREFER AUDITORY OR VISUAL INPUT; HOWEVER, SOME PEOPLE HAVE A PREFERENCE FOR KINESTHETIC LEARNING, i.e. LEARNING THAT INVOLVES MOVEMENT.**
- ❖ **A PREFERENCE FOR ONE TYPE OF LEARNING OVER ANOTHER MAY BE SEEN IN THE FOLLOWING WAYS:**



VISUAL LEARNERS PREFER, ENJOY, OR REQUIRE,

- ❖ **GRAPHIC ILLUSTRATIONS SUCH AS BAR GRAPHS OR CROSSTABLES TO EXPLAIN DATA;**
- ❖ **COLOR CODES TO HIGHLIGHT SALIENT INFORMATION; MAPS TO FIND THEIR WAY ON THE SUBWAY OR WHILE DRIVING IN A NEW CITY;**
- ❖ **WRITTEN MATERIAL TO STUDY NEW CONCEPTS;**
- ❖ **WALL CHARTS THAT DISPLAY POINTS TO BE REMEMBERED;**
- ❖ **WRITTEN OUTLINES;**
- ❖ **DRAWINGS OR DESIGNS TO ILLUSTRATE OVERHEAD PRESENTATIONS;**
- ❖ **SITTING "UP CLOSE" IN A PRESENTATION IN ORDER TO SEE THE PRESENTER'S FACE, GESTURES, OR VISUALS;**
- ❖ **TAKING NOTES DURING A LECTURE;**
- ❖ **INSTRUCTORS TO REPEAT VERBAL DIRECTIONS.**



AUDITORY LEARNERS PREFER, ENJOY, OR REQUIRE:

❖ A VERBAL PRESENTATION OF NEW INFORMATION, SUCH AS:

- ❖ A LECTURE;**
- ❖ GROUP DISCUSSIONS TO HEAR OTHER POINTS OF VIEW OR PRACTICES;**
- ❖ FAST PACED VERBAL EXCHANGES OF IDEAS;**
- ❖ A GOOD JOKE OR STORY THAT THEY CAN REPEAT FOR OTHERS;**
- ❖ VERBAL CUES OR PNEUMONIC DEVICES TO HELP THEM REMEMBER INFORMATION;**
- ❖ MUSIC AT THE BEGINNING OR DURING TRANSITIONS IN A TRAINING SETTING;**
- ❖ WORDS TO ACCOMPANY A CARTOON;**
- ❖ ORAL REPORTS OF WORKING GROUPS.**



KINESTHETIC LEARNERS PREFER, ENJOY, OR REQUIRE:

- ❖ **MOVEMENT, SUCH AS ROCKING OR SHAKING A LEG DURING A LECTURE;**
- ❖ **HANDS-ON EXPERIENCE TO LEARN A TASK;**
- ❖ **GESTURES WHILE MAKING A POINT;**
- ❖ **ROLE PLAY EXERCISES OVER DISCUSSION GROUPS;**
- ❖ **SHAKING HANDS WHEN MEETING OR GREETING PEOPLE;**
- ❖ **TRYING NEW THINGS WITHOUT A LENGTHY EXPLANATION OF THE ACTIVITY;**
- ❖ **FREQUENT BREAKS;**
- ❖ **REGULAR OPPORTUNITIES TO CHANGE SEATING OR ROOM ARRANGEMENT;**
- ❖ **“JUST DOING IT” RATHER THAN TALKING ABOUT IT.**



- ❖ **WHILE IT IS THOUGHT THAT PEOPLE HAVE DEVELOPED A PREFERENCE FOR OR HAVE GREATER SKILL IN PROCESSING ONE TYPE OF INPUT OVER OTHERS, MOST PEOPLE SIMULTANEOUSLY PROCESS INFORMATION THROUGH MULTIPLE SENSES.**
- ❖ **IN FACT, THE RETENTION OF LEARNED MATERIAL IS ENHANCED IF THE LEARNER IS ASKED TO PROCESS INFORMATION USING MORE THAN ONE SENSE. PRESENTATIONS THAT ARE MULTISENSORY (USING VISUAL AND AUDITORY COMPONENTS) IN COMBINATION WITH INTERACTIVE ACTIVITIES WILL INCREASE LEARNING AND RETENTION FOR MOST ADULTS.**



THEORIES OF INTELLIGENCE

- ❖ **INTELLIGENCE HAS LONG BEEN CONSIDERED A KEY FACTOR IN PREDICTING AND EVALUATING LEARNING.**
- ❖ **EDUCATORS HAVE DEVELOPED A VARIETY OF TEACHING STRATEGIES TO ACCOMMODATE VARYING LEVELS OF INTELLIGENCE, MOST OF WHICH HAVE BEEN BASED ON A TRADITIONAL WESTERN APPROACH TO INTELLIGENCE.**



- ❖ **THEORIES OF ADULT INTELLIGENCE HAVE EVOLVED CONSIDERABLY IN RECENT DECADES.**
- ❖ **THE TRADITIONAL CONSTRUCTS OF IQ (INTELLIGENCE QUOTIENT, SUGGESTING THAT EMOTIONAL MATURITY AND ABILITY CONTRIBUTE SIGNIFICANTLY TO ACHIEVEMENT), AS WELL AS THEORIES OF "MULTIPLE INTELLIGENCES."**
- ❖ **HOWARD GARDNER, A PROPONENT OF "MULTIPLE INTELLIGENCES" THEORY, SUGGESTS THAT EDUCATORS SHOW PEOPLE A DISSERVICE BY THINKING OF INTELLIGENCE LEVELS IN TRADITIONALLY NARROW DIMENSIONS THAT RELATE MOST SIGNIFICANTLY TO ACADEMIC ACHIEVEMENT.**
- ❖ **GARDNER PROPOSES SEVEN BROADER DIMENSIONS OF INTELLIGENCES:**



- 1. VERBAL AND LINGUISTIC. ABILITY TO DEAL WITH WORDS AND LANGUAGE, BOTH WRITTEN AND SPOKEN.**
- 2. LOGICAL AND MATHEMATICAL, ABILITY TO DO INDUCTIVE AND DEDUCTIVE THINKING, NUMBERS, ABSTRACT PATTERNS, AND REASONING ABILITY.**
- 3. MUSICAL. ABILITY TO RECOGNIZE TONAL PATTERNS, PITCH, MELODY, RHYTHMS, AND TONE.**
- 4. KINESTHETIC. ABILITY TO SEE THE BODY SKILLFULLY.**
- 5. VISUAL AND SPATIAL. ABILITY TO OBSERVE AND PROCESS VISUAL STIMULI AND VISUALIZE OR CREATE VISUAL IMAGES.**
- 6. INTERPERSONAL. ABILITY TO MAINTAIN RELATIONSHIPS AND UNDERSTAND, COMMUNICATE AND WORK WITH OTHER PEOPLE.**
- 7. INTRAPERSONAL. UNDERSTANDING OF SELF AND ONE'S OWN FEELINGS, VALUES, AND PURPOSE.**



- ❖ **MANY INSTRUCTORS HAVE FOUND APPLICATIONS FOR THIS NEW WAY OF DEFINING INTELLIGENCE OR APTITUDE.**
- ❖ **IN GENERAL, THE INSTRUCTORS HAVE UTILIZED THIS THEORY TO SUPPORT THE NOTION THAT INSTRUCTION SHOULD ENTAIL FAR MORE THAN A VERBAL/LINGUISTIC PRESENTATION OF IDEAS, AND INCLUDE EXPERIENTIAL OPPORTUNITIES THAT ENABLE PEOPLE WITH VARYING TYPES OF "INTELLIGENCE" TO BE SUCCESSFUL.**



LEARNING ENVIRONMENT CONDITIONS AFFECT LEARNING

- ❖ **THE PHYSICAL ENVIRONMENT IN WHICH INSTRUCTION TAKES PLACE AND THE STRUCTURE OF THE ACTIVITIES IN THE COURSE CAN ALSO AFFECT LEARNING POSITIVELY OR NEGATIVELY.**
- ❖ **PEOPLE REACT DIFFERENTLY TO SUCH FACTORS AS:**
 - ❖ **ROOM TEMPERATURE,**
 - ❖ **ARRANGEMENT OF THE ROOM (e.g., CLOSENESS OF THE SEATS),**
 - ❖ **TIME OF THE DAY (EARLY MORNING VS. LATE IN THE DAY),**
 - ❖ **BRIGHTNESS AND LIGHTING, AND SOUND.**
- ❖ **IN ADDITION, ADULTS DIFFER WITH REGARD TO WHETHER THEY PREFER TO WORK ALONE OR IN GROUPS.**

