# Instructor Development Training Program

This packet has been developed to help you, the student instructor, prepare for the Idaho Instructor Development 40-hour certification course. Successful completion of this course is the first step in becoming a POST certified instructor.

**Student Information:**

**1:** This is a five (5) day (40 hour) course. Your attendance is *REQUIRED for the entire 40 hours* to receive credit for this course. There will be a POST roster to sign.

**2:** The hours for all five days will be about the same. Refer to the class agenda for scheduling.

**3:** This course will be graded by the following methods:
**110 % Class Participation**
Student Activities consist of:
Successful completion of the pre-course workbook
Various in-class group activities
Various in-class individual activities
A 20-minute presentation using skills learned in Instructor Development, to be given on Friday
A written lesson plan, using the POST lesson plan format for the 20-minute presentation given on Friday

**4:** **Student Material REQUIRED to bring for the course:**
One set of washable white board markers
Color markers/pens
One three ring (full size 8" x 11") notebook
Any other items or visual aids that are relevant to the subject you will be teaching, (i.e. video programs, handout material, slides presentation, stencils, rulers, hi-light markers, flip Chart, and any other materials needed to create visual aids). **Three visual aids will be required for your 20-minute presentation, so be sure to bring these to class with you.**
A thumb drive (not required, but recommended)

**\*** *Since you will be required to write a full sentence lesson plan for the 20-minute presentation that you will give on Friday, you should consider bringing a lap top computer and printer in order to complete this project and to use for taking notes during the week of the class.  A rough draft of your lesson plan will be due on Friday.  A final draft of your lesson plan will be due 30-days following class.*

**5:** **Research materials/notes/books/etc-pertaining to the subject you will instructing on. (Also any props you may need for presentations.)**

**6:** **Subjects: You will be teaching a 20 minute course that can be on ANY subject.**

> The subject can be law enforcement related, such as 'patrol procedures', 'traffic stops', 'crime prevention', etc.
> The subject can also be a non-law enforcement topic, such as fishing, kit flying, or any s such hobbies/interest you might have.

**(Note: A rule of this class is to have fun, so we suggest you choose a non-law enforcement topic.  When choosing your topic, you are limited by your own imagination and what is Legal, Ethical, and Moral.  Regardless of whether you choose a law-enforcement or non-law enforcement topic, you will be expected to teach using the skills learned in class, so do not try to prepare the lesson plan before class starts!  Also, you will not be allowed to lecture during your 20 minute presentation.)**

**7:** **Homework: You *will have homework*, so be prepared.**

**8:** **Note taking: You *will be required* to take notes during the class.**

**9:** **Dress standards:  For the majority of the class, casual business wear is all that is needed. This is a very fun class, not one of those boring classes, where you sit and an instructor reads off information to you. There is a lot of hands-on, speaking, moving about, very informal.**

**10:** **The attached Idaho Instructor Development Pre-course Workbook has been developed to give you a preview of some of the important topics covered throughout the week. Make sure you take the time to complete the entire workbook, as failure to do so will put you at a disadvantage in the class as well as those in your group.**

**This class will be difficult and introduce you to some novel teaching techniques.  Come with an open mind, come to have fun, and above all *COME TO LEARN!***

**See ya' there!**

# Instructor Development Training Program
## Pre-course Student Workbook

The following workbook is to be completed by each student prior to the first day of class. The purpose of each reading assignment is to give students a preview of some of the important topics covered throughout the week.  Make sure you take the time to complete the entire workbook, as failure to do so will put you at a disadvantage in the class as well as those in your group.

The following topics are covered in the pre-course workbook:

1- Understanding Adult Students and the Learning Process (Knowles)
2- Bloom's Taxonomy
3- Non-verbal Communication and Paralanguage
4- Kirkpatrick's Four Levels of Evaluation (how to evaluate training effectiveness)
5- Tests, Exams, and Quizzes

Each of the topics above will begin with a reading assignment and will be followed by a questions sheet that must be completed.

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**Adult-Based Learning – Level One**
Pre-Read Article – Malcolm Knowles

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# Understanding Adult Students and the Learning Process:

### *Introduction:*

Most of us remember sitting in a lecture listening to an instructor telling us about some subject for an hour or so, taking a short break, and then continuing the lecture for another hour or so. How well did we learn the material covered during this lecture? How much of this material do we remember today? The most likely answer to both questions is "little".

The situation just described did not take into consideration "how adults learn". The purpose of this article is to describe adult learning concepts, relate these concepts to practical adult training, and discuss how lessons can be structured to make good use of adult learning concepts.

Part of being an effective instructor involves understanding how adults learn best. Compared to children and teens, adults have special needs and requirements as learners. There are a number of theories about the learning process and styles of learning. Knowledge of a few basic concepts of learning theory will assist instructors in helping their students to learn. Adult learning theory, recognizes that adult learners bring a wealth of experience to the training environment. In addition, adult learners have a complex set of needs and presentation requirements that must be fulfilled for learning to occur. One of the most respected names in the theory and practice of adult learning—is Malcolm Knowles.

During this training program, we will be looking a Malcolm Knowles and his theories. They play a very important role in the Adult-Based Learning Principle.

### *Who is Malcolm Knowles?*
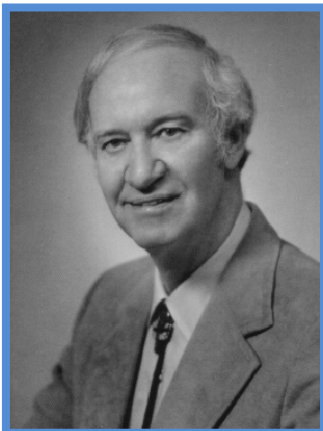
Malcolm Shepherd Knowles (1913 - 1997) was a, perhaps 'the', central figure in US adult education in the second half of the twentieth century. In the 1950s he was the Executive Director of the Adult Education Association of the United States of America. He wrote the first major accounts of informal adult education and the history of adult education in the United States. Furthermore, Malcolm Knowles' attempts to develop a distinctive conceptual basis for adult education and learning via the notion of using specific methods or techniques to teach adults (andragogy) became very widely discussed and used. He also wrote popular works on self-direction and on groupwork (with his wife Hulda). *His work was a significant factor in reorienting adult educators from 'educating people' to 'helping them learn'.*

### *Malcolm Knowles 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.

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Specifically, they must get participants' perspectives 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 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 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 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.

### *Application in the Adult-Based Learning Process*:

How can these adult learning principles be applied to training sessions? Let's examine each one separately.

**Adults need to know why they should learn something and must be ready to learn**. This principle tells us that we need to provide a practical reason why the trainee should pay attention to the lesson. This reason must be stated at the beginning of the lesson, as part of the introduction, and relate the lesson content to their job. As will be mentioned in the section on lesson structure, the introduction to lesson is the most important part of a lesson. As an instructor you need to set the stage for the entire lesson in the

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first five minutes. Similarly, adults need to recognize that there is a gap between what they know and what they need to know. With recognition comes a readiness to fill that gap through a learning activity.

**An adult learner's experience is a valuable resource for additional learning**. If trainees have some experience with the lesson topic, it is good to have them share these experiences with the rest of the group. Because these experiences may be different from your experience, both you and the other students learn something new. Rejecting an adult learner's experience is equivalent to rejecting the adult as a person. This sharing process also helps to establish a good learning environment and enhances the "readiness to learn" mentioned in the first principle.

**Adult learners tend to focus on life-centered, task-centered, or problem-centered learning activities.** This principle tells us that adults want get something practical from their training sessions. That is, they want to be able to take what they learn back to their job or their personal life and use it as soon as possible. This statement tells us that if concepts and principles are discussed, they should be followed by practical exercises or case studies that illustrate the concept or principle.

**Adult learners learn best when they practice, perform and work with new knowledge, skills and attitudes.** Retention and understanding of new knowledge, skills and attitudes is best accomplished by using them over and over. There is a limit to the number of times something can be repeated during a lesson, but if a new ideas can be used and repeated through practical exercises or case studies, the probability of retention and understanding goes up.

**Adult learners learn easiest what they have some familiarity with.** This principle tells us that we should start with something familiar to the student and expand into new areas as the lesson progresses, eventually arriving at the objective of the lesson. The idea of building on established knowledge and skills is important. Lesson material must be sequenced properly to make this happen.

**Adult learners favor different senses for learning.** Studies have shown that some adults are visual learners, some are auditory learners, some are kinesthetic (or hands-on) learners, while others learn best through some combination of these. This fact means that an instructor should use a variety of delivery methods to ensure that all learners' optimum learning medium is used at some point during the lesson.

**Adult learners like to be self-directing and see their own progress during a learning experience.** It would be nice to allow students to select the topics they would like to have in a course. This approach, however, is not practical in most cases. Nevertheless, instructors need to recognize and respect the learners' need for self-direction. In many cases, instructors become facilitators rather than teachers. They must also avoid "talking down" to students. Similarly, adult learners like to feel that they are learning something during a training session. This feeling can be achieved through exercises and short oral reviews intermingled throughout the lesson. These exercises and short quizzes challenge students and allow them to check their ability to understand the material. These types of activities also allow the instructor to see if students have gained some understanding of the topic.

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## Malcolm S. Knowles on informal adult education

The major problems of our age deal with human relations; the solutions can be found only in education. Skill in human relations is a skill that must be learned; it is learned in the home, in the school, in the church, on the job, and wherever people gather together in small groups.

This fact makes the task of every leader of adult groups real, specific, and clear: Every adult group, of whatever nature, must become a laboratory of democracy, a place where people may have the experience of learning to live co-operatively. Attitudes and opinions are formed primarily in the study groups, work groups, and play groups with which adults affiliate voluntarily. These groups are the foundation stones of our democracy. Their goals largely determine the goals of our society. Adult learning should produce at least these outcomes:

**Adults should acquire a mature understanding of themselves.** They should understand their needs, motivations, interests, capacities, and goals. They should be able to look at themselves objectively and maturely. They should accept themselves and respect themselves for what they are, while striving earnestly to become better.

**Adults should develop an attitude of acceptance, love, and respect toward others.** This is the attitude on which all human relations depend. Adults must learn to distinguish between people and ideas, and to challenge ideas without threatening people. Ideally, this attitude will go beyond acceptance, love, and respect, to empathy and the sincere desire to help others.

**Adults should develop a dynamic attitude toward life.** They should accept the fact of change and should think of themselves as always changing. They should acquire the habit of looking at every experience as an opportunity to learn and should become skillful in learning from it.

**Adults should learn to react to the causes, not the symptoms, of behavior.** Solutions to problems lie in their causes, not in their symptoms. We have learned to apply this lesson in the physical world, but have yet to learn to apply it in human relations.

**Adults should acquire the skills necessary to achieve the potentials of their personalities**. Every person has capacities that, if realized, will contribute to the well-being of himself and of society. To achieve these potentials requires skills of many kinds—vocational, social, recreational, civic, artistic, and the like. It should be a goal of education to give each individual those skills necessary for him to make full use of his capacities.

**Adults should understand the essential values in the capital of human experience**. They should be familiar with the heritage of knowledge, the great ideas, the great traditions, of the world in which they live. They should understand and respect the values that bind men together.

**Adults should understand their society and should be skillful in directing social change**. In a democracy the people participate in making decisions that affect the entire social order. It is imperative, therefore, that every factory worker, every salesman, every politician, every housewife, know enough

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about government, economics, international affairs, and other aspects of the social order to be able to take part in them intelligently.

The society of our age, as Robert Maynard Hutchins warns us, cannot wait for the next generation to solve its problems. Time is running out too fast. Our fate rests with the intelligence, skill, and good will of those who are now the citizen-rulers. The instrument by which their abilities as citizen-rulers can be improved is adult education. This is our problem. This is our challenge.

Malcolm S. Knowles (1950) *Informal Adult Education*, Chicago: Association Press, pages 9-10.


**Conclusion**

Malcolm S. Knowles was responsible for a number of important 'firsts'.. He was the first to chart the rise of the adult education movement in the United States; the first to develop a statement of informal adult education practice; and the first to attempt a comprehensive theory of adult education (via the notion of andragogy). Jarvis (1987: 185) comments:

As a teacher, writer and leader in the field, Knowles has been an innovator, responding to the needs of the field as he perceived them and, as such, he has been a key figure in the growth and practice of adult education throughout the Western world this century. Yet above all, it would be perhaps fair to say that both his theory and practice have embodied his own value system and that is contained within his formulations of andragogy.

Much of his writing was descriptive and lacked a sharp critical edge. He was ready to change his position - but the basic trajectory of his thought remained fairly constant throughout his career. His focus was increasingly on the delineation of a field of activity rather than on social change - and there was a significantly individualistic focus in his work. *'I am just not good',* he wrote, *'at political action. My strength lies in creating opportunities for helping individuals become more proficient practitioners'* (Knowles 1989)

**References**

Knowles, Malcom, 1990: The Adult Learner, The Neglected Species. Gulf Publishing Co., Houston, 292 pp.

Mitchell, Garry. 1993: The Trainer's Handbook, The AMA Guide to Effective Training, 2nd Edition. AMACOM, New York, 423 pp.

Pike, Robert W., 1994: Creative Training Techniques Handbook, Tips, Tactics, and How-To's for Delivering Effective Training. Lakewood Books, 197 pp.

Knowles, M. S. (1950) *Informal Adult Education*, New York: Association Press. Guide for educators based on the writer's experience as a programme organizer in the YMCA.

Knowles, M. S. (1962) *A History of the Adult Education Movement in the USA*, New York: Krieger. A revised edition was published in 1977.

# Pre-Read Work Sheet:  Knowles – Adult Learning

**Use the following "3 – 2 – 1 Review Strategy":**

**3:** **List three points that captured your attention:**

γ  _____
_____
_____

γ  _____
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γ  _____
_____
_____

**2:** **List two questions you have as a result of reading the article.**

γ _____
_____
_____

γ _____
_____
_____

**1:** **Describe one "big idea" or the "Most Important Point" (MIP) you learned, realized or can use.**

γ _____
_____
_____
_____
_____
_____
_____
_____

## BLOOM'S TAXONOMY

In 1956, Benjamin Bloom headed a group of educational psychologists who developed a classification of levels of intellectual behavior important in learning. Bloom found that over 95 % of the test questions students encounter require them to think only at the lowest possible level...the recall of information.

Bloom identified six levels within the cognitive domain, from the simple recall or recognition of facts, as the lowest level, through increasingly more complex and abstract mental levels, to the highest order which is classified as evaluation. Verb examples that represent intellectual activity on each level are listed here.



Bloom's Taxonomy
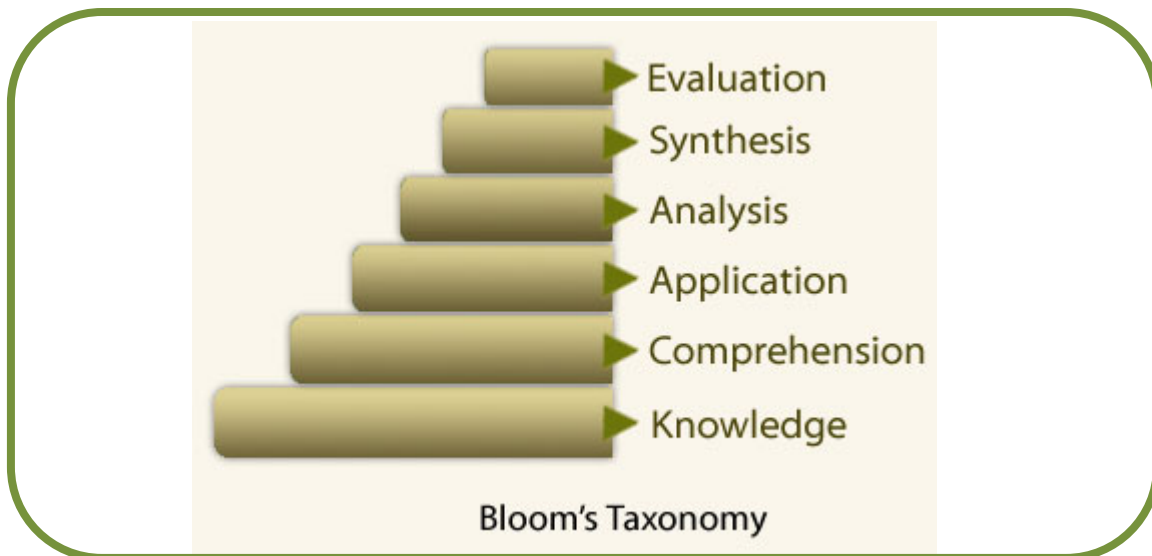
1. **Knowledge**: arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state.
2. **Comprehension**: classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select, translate,
3. **Application**: apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.
4. **Analysis**: analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
5. **Synthesis**: arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.
6. **Evaluation**: appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, core, select, support, value, evaluate.

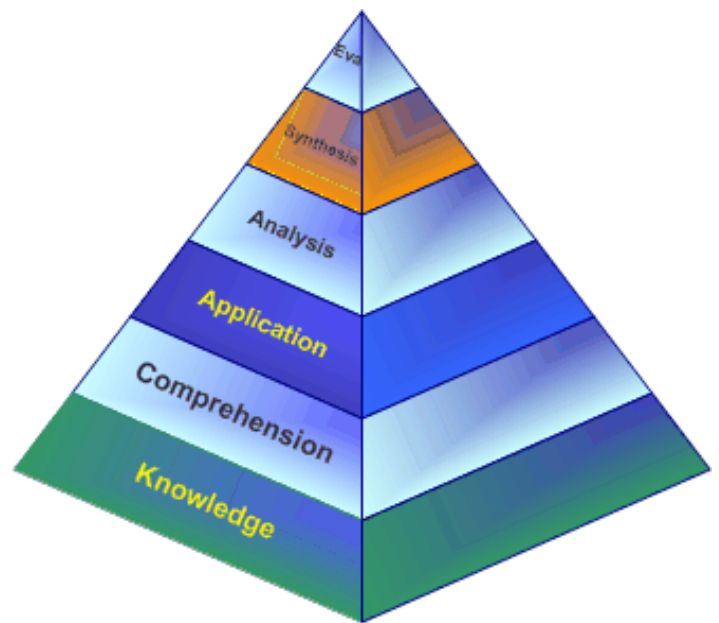**P.O.S.T. Instructor Development Training Program**
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**Pre-Read Article – Bloom's**

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As teachers we tend to ask questions in the "knowledge" catagory 80% to 90% of the time. These questions are not bad, but using them all the time is. Try to utilize higher order level of questions. These questions require much more "brain power" and a more extensive and elaborate answer. Below are the six question categories as defined by Bloom.

- **KNOWLEDGE**
    - remembering;
    - memorizing;
    - recognizing;
    - recalling identification and
    - recall of information
        - Who, what, when, where, how ...?
        - Describe
- **COMPREHENSION**
    - interpreting;
    - translating from one medium to another;
    - describing in one's own words;
    - organization and selection of facts and ideas
        - Retell...
- **APPLICATION**
    - problem solving;
    - applying information to produce some result;
    - use of facts, rules and principles
        - How is...an example of...?
        - How is...related to...?
        - Why is...significant?
- **ANALYSIS**
    - subdividing something to show how it is put together;
    - finding the underlying structure of a communication;
    - identifying motives;
    - separation of a whole into component parts
        - What are the parts or features of...?
        - Classify...according to...
        - Outline/diagram...
        - How does...compare/contrast with...?
        - What evidence can you list for...?



**Bloom's Taxonomy**

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- **SYNTHESIS**
    - creating a unique, original product that may be in verbal form or may be a physical object;
    - combination of ideas to form a new whole
        - What would you predict/infer from...?
        - What ideas can you add to...?
        - How would you create/design a new...?
        - What might happen if you combined...?
        - What solutions would you suggest for...?
- **EVALUATION**
    - making value decisions about issues;
    - resolving controversies or differences of opinion;
    - development of opinions, judgements or decisions
        - Do you agree...?
        - What do you think about...?
        - What is the most important...?
        - Place the following in order of priority...
        - How would you decide about...?
        - What criteria would you use to assess...?

# 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:

- **Cognitive**: mental skills (*Knowledge*)
- **Affective**: growth in feelings or emotional areas (*Attitude*)
- **Psychomotor**: manual or physical skills (*Skills*)

# Cognitive

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.

| Category | Example and Key Words |
|---|---|
| **Knowledge**: Recall data or information. | **Examples**: Recite a policy. Quote prices from memory to a customer. Knows the safety rules.<br><br>**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.<br><br>**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 work place. | **Examples**: Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test.<br><br>**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.<br><br>**Key Words**: 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.<br><br>**Key Words**: 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.<br><br>**Key Words**: 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 the simplest behavior to the most complex:

| Category | Example and Key Words |
|---|---|
| **Receiving Phenomena**: Awareness, willingness to hear, selected attention. | **Examples**: Listen to others with respect. Listen for and remember the name of newly introduced people.<br><br>**Key Words**: 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.<br><br>**Key Words**: 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 | **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. |

| | |
|---|---|
| internalization of a set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable. | **Key Words**: 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.<br><br>**Key Words**: 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.<br><br>**Key Words**: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, verifies. |

# Psychomotor

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 the simplest behavior to the most complex:

| Category | Example and Key Words |
|---|---|
| **Perception**: The ability to use sensory cues to guide motor activity.  This ranges from sensory stimulation, | **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 |

| | |
|---|---|
| through cue selection, to translation. | 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. <br><br> **Key Words**: 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 personís 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. <br><br> **Key Words**: 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. <br><br> **Key Words**: 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. <br><br> **Key Words**: 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 | **Examples**:  Maneuvers a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano. <br><br> **Key Words**: assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. <br><br> 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. |

| | |
|---|---|
| can tell by the feel of the act what the result will produce. | |
| **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).<br><br>**Key Words**: 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.<br><br>**Key Words**: arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates. |
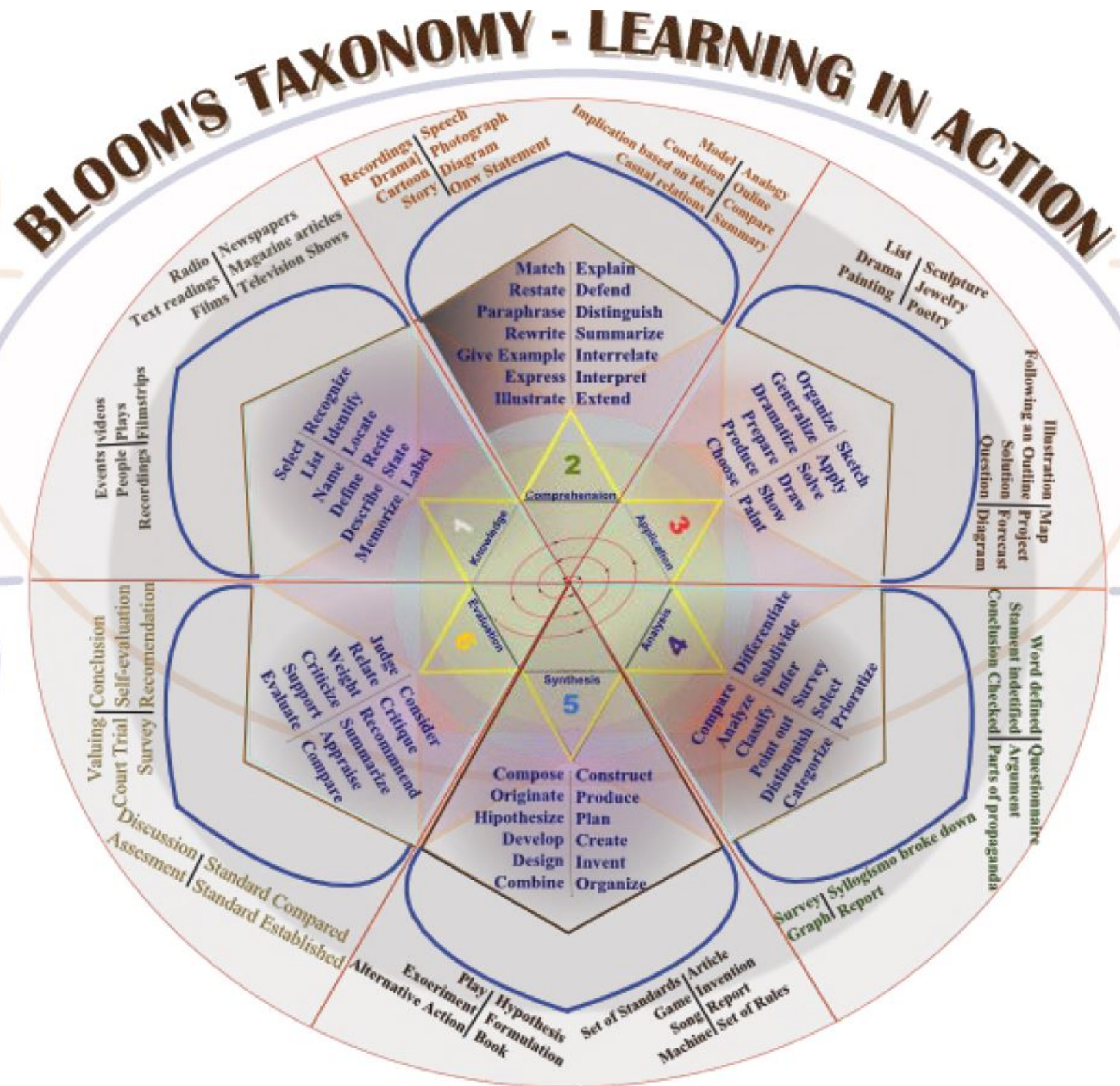
BLOOM'S TAXONOMY - LEARNING IN ACTION

# Pre-Read Worksheet:  Bloom's Taxonomy

**Use the following "3 – 2 – 1 Review Strategy":**

**3:** **List three points that captured your attention:**

γ  _____
_____
_____

γ  _____
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γ  _____
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**2:** **List two questions you have as a result of reading the article.**

γ _____
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γ _____
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**1:** **Describe one "big idea" or the "Most Important Point" (MIP) you learned, realized or can use.**

γ _____
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**P.O.S.T. Instructor Development Training Program**
**Adult-Based Learning – Level One**
Pre-Read Article - Paralanguage

**2008 Edition**

# Non-verbal Communication and Paralanguage

Vicki Ritts, St. Louis Community College at Florissant Valley and James R. Stein, Southern Illinois University, Edwardsville.

It is not only what you say in the classroom that is important, but it's how you say it that can make the difference to students. Nonverbal messages are an essential component of communication in the teaching process.

Instructors should be aware of nonverbal behavior in the classroom for three major reasons:

- An awareness of nonverbal behavior will allow you to become better receivers of students' messages.
- You will become a better sender of signals that reinforce learning.
- This mode of communication increases the degree of the perceived psychological closeness between teacher and student.

**Eye contact:**

Eye contact, an important channel of interpersonal communication, helps regulate the flow of communication. And it signals interest in others. Furthermore, eye contact with audiences increases the speaker's credibility. Teachers who make eye contact open the flow of communication and convey interest, concern, warmth and credibility.

**Facial expressions:**

Smiling is a powerful cue that transmits:

- Happiness
- Friendliness
- Warmth
- Liking
- Affiliation

**Trust me! Would I lie to you?**

Thus, if you smile frequently you will be perceived as more likable, friendly, warm and approachable. Smiling is often contagious and students will react favorably and learn more.

**Gestures:**

If you fail to gesture while speaking, you may be perceived as boring, stiff and unanimated. A lively and animated teaching style captures students' attention, makes the material more interesting, facilitates learning and provides a bit of entertainment. Head nods, a form of gestures, communicate positive reinforcement to students and indicate that you are listening.

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**Posture and body orientation:**

You communicate numerous messages by the way you walk, talk, stand and sit. Standing erect, but not rigid, and leaning slightly forward communicates to students that you are approachable, receptive and friendly. Furthermore, interpersonal closeness results when you and your students face each other. Speaking with your back turned or looking at the floor or ceiling should be avoided; it communicates disinterest to your class.

**Proximity:**

Cultural norms dictate a comfortable distance for interaction with students. You should look for signals of discomfort caused by invading students' space. Some of these are:

- Rocking
- Leg swinging
- Tapping
- Gaze aversion

Typically, in large classes space invasion is not a problem. In fact, there is usually too much distance. To counteract this, move around the classroom to increase interaction with your students. Increasing proximity enables you to make better eye contact and increases the opportunities for students to speak.

**Humor:**

*Now, that's funny!*

Humor is often overlooked as a teaching tool, and it is too often not encouraged in the classrooms. Laughter releases stress and tension for both instructor and student. You should develop the ability to laugh at yourself and encourage students to do the same. It fosters a friendly classroom environment that facilitates learning. (Lou Holtz wrote that when his players felt successful he always observed the presence of good humor in the locker room.)

Obviously, adequate knowledge of the subject matter is crucial to your success; however, it's not the only crucial element. Creating a climate that facilitates learning and retention demands good nonverbal and verbal skills. To improve your nonverbal skills, record your speaking on video tape. Then ask a colleague in communications to suggest refinements.

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Pre-Read Article - Paralanguage

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**Paralinguistics:** (Paralanguage)

**Definitions:**

- Features that accompany speech and contribute to communication but are not considered part of the language system

- The nonverbal voice qualities, modifiers, and sounds which we use consciously or unconsciously supporting or contradicting the linguistic, kinesic, or proxemic messages either simultaneously or alternating with them

- How something is said rather than what is said

- Vocal Cues

**General Information:**

Paralanguage is part of nonverbal communication. Paralinguistics are what accompany your words to make up its true meaning. Research on the tone of voice emerged in 1951 by George Trager and Henry Lee Smith and was followed with research of other aspects of paralanguage.

We all know that what you say can have several different meanings depending on how you say it. Take the notion of sarcasm, for instance. If someone says something with a sarcastic tone, it makes the meaning of what has been said be the complete opposite of what the words actually mean.

Paralanguage can be a confusing factor in intercultural communication. For example, Europeans interpret the loudness of Americans to aggressive behavior, while Americans might think the British are secretive because they talk quietly. Talking speed and the amount of silence in conversations also differ among cultures. For instance, the Japanese are comfortable having several pauses in their conversations, while Americans and many Arabic people are uncomfortable with any silence.

**Ingredients of Paralanguage:**

This facet of nonverbal communication includes such vocal elements as:

- Tone
- Pitch Range
- Rhythm Control
- Timbre (Tempo)
- Loudness
- Inflection

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- Vocal lip control
- Articulation control
- Resonance

For maximum teaching effectiveness, learn to vary these nine elements of your voice. Instructors who speak in a monotone voice are often criticized. Listeners perceive these instructors as boring and dull. Students report that they learn less and lose interest more quickly when listening to teachers who have not learned to modulate their voices.

**Voice Qualities:**

**Vocal Characteristics:**

- laughing, crying, whispering, snoring, yelling, moaning, groaning, yawning, whining, sucking, sneezing, sighing, belches, hiccups
- Remember that these characteristics are the vocal aspects of these actions, so imagine that these pictures are making noises.
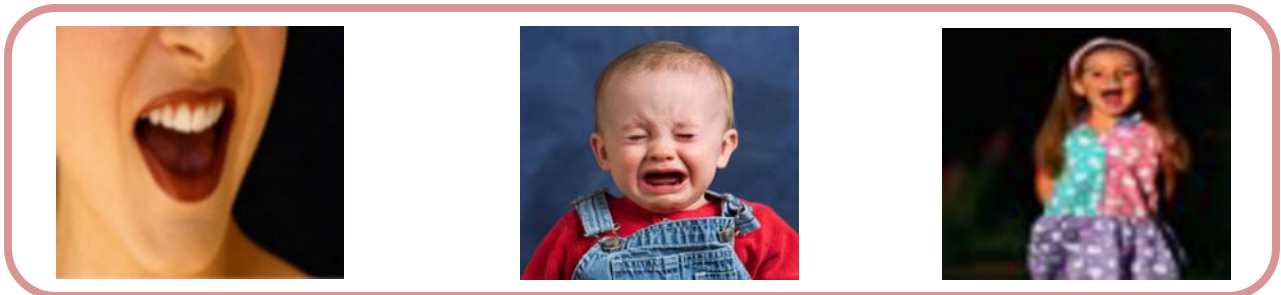


**Voice Qualifiers:**

- intensity (overloud, over-soft)
- pitch height
- extent

**Vocal Segregates: (Social Utterances)**

| **examples:** | Sounds: | "ah"  "um"   "uh-huh" |
| | Words: | "okay"  "you know"  "by the way" |
| | No Words or Sounds: | the silent pauses |

**Messages in the Voice:**

Phrases have different messages depending on what parts we emphasize. For instance, take the sentence, "She's giving this money to me."

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- ***She's*** giving this money to me.
  SHE is the one giving the money, nobody else.
- She's ***giving*** this money to me.
  She is GIVING, not lending.
- She's giving this ***money*** to me.
  MONEY is being exchanged, not anything else.
- She's giving this money to ***me***.
  I am getting the money, nobody else.

**The voice is used to infer personality traits.**

- An increased rate of speaking generally infers that the individual is more animated and extroverted.
- A flatness in the tone of voice generally indicates more withdrawn and masculine characteristics.
- A nasal sound in one's voice is generally thought of to be undesirable.

**The voice is also used to infer emotional states.**

| Feeling | Loudness | Pitch | Timbre | Rate | Enunciation |
|---------|----------|-------|--------|------|-------------|
| **Anger** | Loud | High | Blaring | Fast | clipped |
| **Joy** | Loud | High | Moderately Blaring | Fast | Somewhat Clipped |
| **Sadness** | Soft | Low | Resonant | Slow | Slurred |

- Paralanguage contains much of the meaning in our communication
- All of us are aware that the meaning of what we say is contained, in part, in the words, or what we say, but that HOW we say things also contains powerful messages. The word, "Yes", for example, can mean completely different things (even in the exact same sentence), depending on HOW it is said.
- "How" something is said is referred to as paralanguage, which includes intonation, emphasis, word and syllable stress, and so on. Specifically, paralanguage can be broken down as follows:

  1- Vocal Qualifiers

- The non-technical term, tone of voice, means the same thing as vocal qualifiers. There are various things that can vary, and that affect our perception of tone of voice; increasing loudness or softness (of a syllable, word phrase or sentence) is one obvious one.
- A second set of vocal qualifiers involves raised or lowered pitch, which can convey things like fear, anxiety or tenseness, or designate a question.
- Third, there's spread register and squeezed register which refers to the spreading or compressing of the time interval between the pitches when one speaks.

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- Another is rasp, or openness, which has to due to with the muscular tensions in the larynx when someone speaks. A tenseness will result in a more raspy type of utterance for example, a kind of choked sound, while openness is the opposite.
- Then there's drawling or clipping which is associated somewhat with accent, and whether the speaker is drawing out individual syllables or clipping them. This is most noticeable if you compare a native English speaker to someone who has learned French, or German first.
- Finally, tempo can be increased or decreased. Speaking quickly tends to communicate urgency or a high emotional state. Slow tempos give the impression of uncertainty. It's worth nothing that interpreting all of these vocal qualifiers requires knowing the speaker's baseline communication.

2- Vocal Differentiators

- This category of paralanguage refers to another way that how one says something can be influence by how it is said. Examples of vocal differentiators are crying, laughing and breaking, where breaking refers to speaking in a broken or halting manner. Clearly a phrase uttered by a crying person will mean something different than once said by a laughing person.

3- Vocal Identifiers:

- These refer to the small sounds we make that are not necessarily words per se, but have meaning. For example, ah-hah, un-huh, and huh-uh.

- All of these non-verbal (but tied to the voice) characteristics strongly affect how something is extracted by the other person, and how we interpret the words. They provide an additional context, and a very important one. The key here is that we need to understand that how we say things can be more important than what we say. When looking to diagnose conflict, always look at these to determine if the how is the cause, rather than the what.

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http://www.doleos.demon.co.uk/net.speak/chapter3.html
http://ic.intermundo.net/faq/paralinguistics.shtml
http://www.cultsock.ndirect.co.uk/MUHome/cshtml/nvc/nvc6.html

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## Pre-Read Work Sheet:  Non-Verbal Communication &  Paralanguage

**Use the following "3 – 2 – 1 Review Strategy":**

**3:**     **List three points that captured your attention:**

γ   _____
_____
_____

γ _____
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γ _____
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**2:**     **List two questions you have as a result of reading the article.**

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γ _____
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**1:**     **Describe one "big idea" or the "Most Important Point" (MIP) you learned,**
**realized or can use.**

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**P.O.S.T. Instructor Development Training Program**
**Adult-Based Learning – Level One**
Pre-Read Article - Kirkpatrick

**2008 Edition**

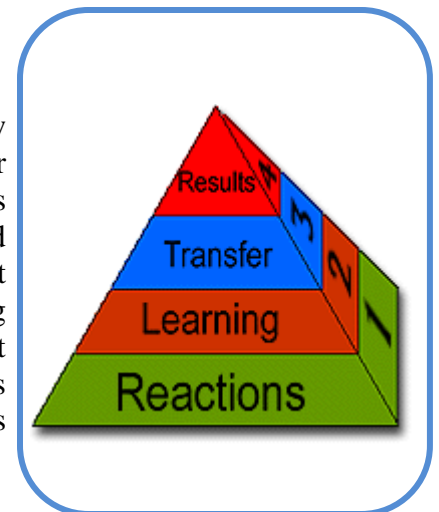# Kirkpatrick's Four Levels of Evaluation

In Kirkpatrick's four-level model, each successive evaluation level is built on information provided by the lower level.
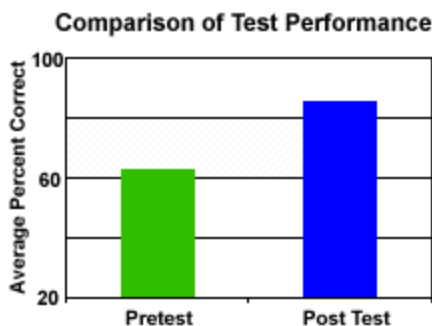
ASSESSING TRAINING EFFECTIVENESS often entails using the four-level model developed by Donald Kirkpatrick (1994). According to this model, evaluation should always begin with level one, and then, as time and budget allows, should move sequentially through levels two, three, and four. Information from 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.

## 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

**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).

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.

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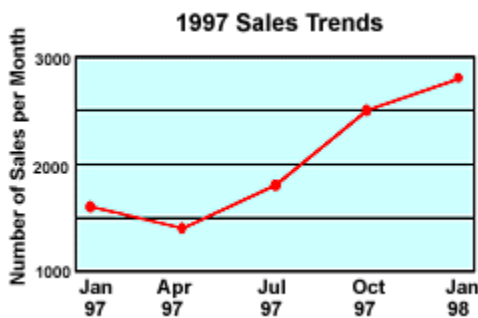Pre-Read Article - Kirkpatrick

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## 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



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.

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.

**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)

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# The Kirkpatrick Training Model for Training Assessment

The classic training model used widely in industry and government today is based on the work of Professor Donald L. Kirkpatrick of the University of Wisconsin.
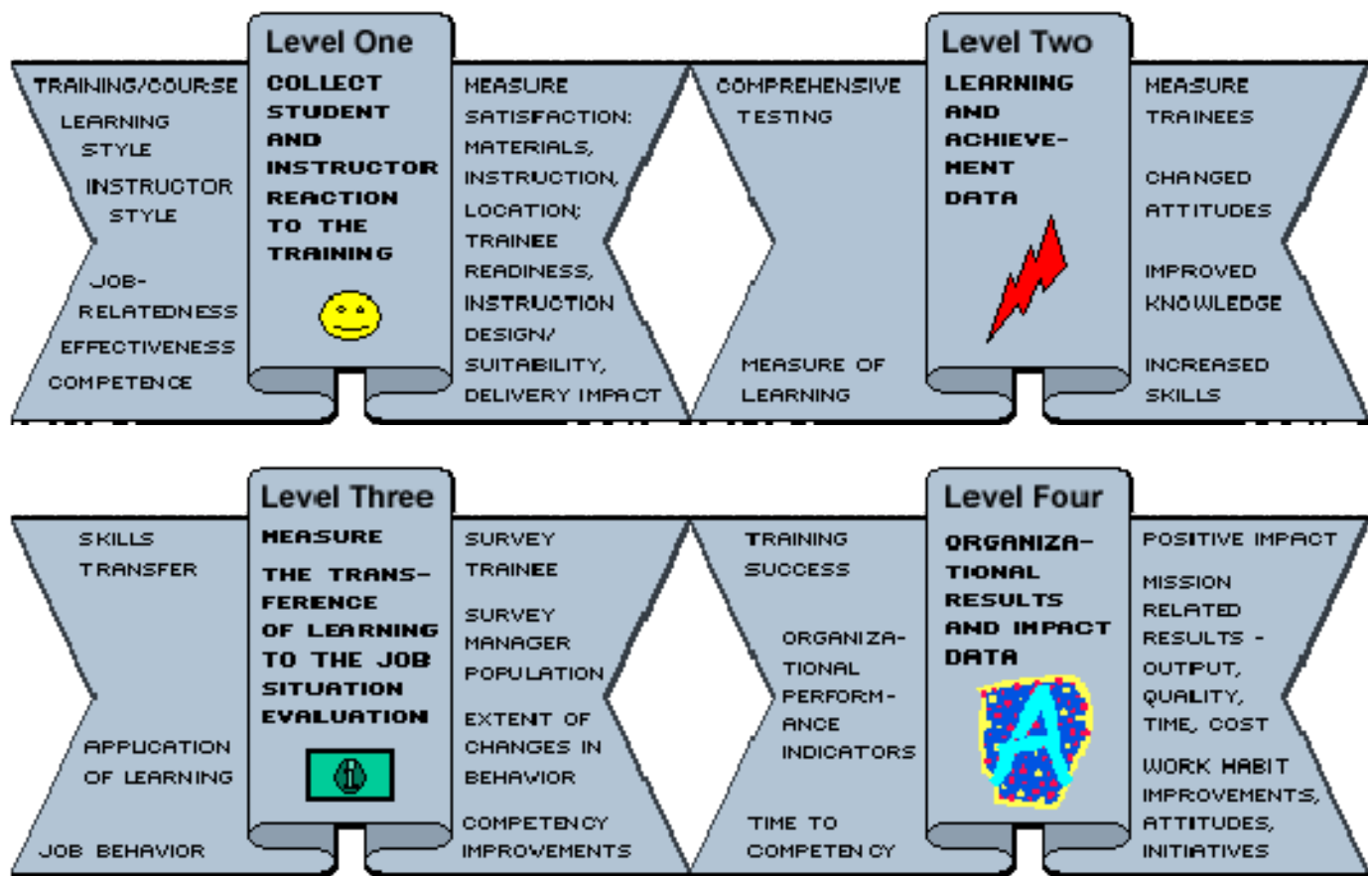


**Kirkpatrick Level 1** or Reaction data typically includes "learn-ability" data collected from trainees (e.g., learning preferences, instructional delivery, job-relatedness, training efficacy, instructor competence) and "teach-ability" data collected from instructors (e.g., trainee readiness, job-relatedness, instructional design, materials accuracy and suitability, training facility adequacy, as well as other reactions to the training event and its delivery).

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**Kirkpatrick Level 2,** or Learning and Achievement data, is usually assessed through a comprehensive testing program, measures the extent to which trainees changed attitudes, improved knowledge and/or increased skills as a result of participating in the training.

**Kirkpatrick Level 3** or Behavior and Performance data, determines the extent to which changes in behavior and job performance have occurred as a result of the training event. Level 3 data is usually collected between 3 and 6 months after the training event and involves both students' and managers' evaluation of changes in job related activities.

**Kirkpatrick Level 4** or Organizational Results and Impact data, measures the mission-related outcomes considered indicative of training success that occurred as a result of participants having participated in the training event.

A Level 5 model is also proposed for use in some quarters. Although not the work of Dr. Kirkpatrick, this model attempts to measure the return on investment (ROI) achieved through improved performance resulting from the training. This would be accomplished by defining the value of the improved performance relative to the cost of obtaining that

# Donald L. Kirkpatrick's training evaluation model - the four levels of learning evaluation

The four levels of Kirkpatrick's evaluation model essentially measure:

- reaction of student - what they thought and felt about the training
- learning - the resulting increase in knowledge or capability
- behavior - extent of behavior and capability improvement and implementation/application
- results - the effects on the business or environment resulting from the trainee's performance

## Kirkpatrick's four levels of training evaluation

This grid illustrates the basic Kirkpatrick structure at a glance.

| level | evaluation type (what is measured) | evaluation description and characteristics | examples of evaluation tools and methods | relevance and practicability |
|---|---|---|---|---|
| 1 | reaction | • reaction evaluation | • e.g., 'happy sheets', | • quick and very easy |

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| | | | | |
|---|---|---|---|---|
| | | is how the delegates felt about the training or learning experience | • feedback forms<br>• also verbal reaction, post-training surveys or questionnaires | to obtain<br>• not expensive to gather or to analyze |
| 2 | learning | • learning evaluation is the measurement of the increase in knowledge - before and after | • typically assessments or tests before and after the training<br>• interview or observation can also be used | • relatively simple to set up; clear-cut for quantifiable skills<br>• less easy for complex learning |
| 3 | behavior | • behavior evaluation is the extent of applied learning back on the job - implementation | • observation and interview over time are required to assess change, relevance of change, and sustainability of change | • measurement of behavior change typically requires cooperation and skill of line-managers |
| 4 | results | • results evaluation is the effect on the business or environment by the trainee | • measures are already in place via normal management systems and reporting - the challenge is to relate to the trainee | • individually not difficult; unlike whole organization<br>• process must attribute clear accountabilities |

# Pre-Read Work Sheet:  Kirkpatrick's Four Levels of Evaluation

**Use the following "3 – 2 – 1 Review Strategy":**

**3:** **List three points that captured your attention:**

γ  _____
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γ _____
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**2:** **List two questions you have as a result of reading the article.**

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**1:** **Describe one "big idea" or the "Most Important Point" (MIP) you learned, realized or can use.**

γ _____
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# Test, Exams, and Quizzes:

**(DIRECTIONS:** As you read this article, you are to use a technique that is referred to as *"Focused Reading"*. As you read, in the margin; Place a (✓) check mark by the area to indicated that what you just read, you already know; Place an (**!**) exclamation point by the area that is new to you, or one of those "a-ha!" or "wow!" this is new insights of understanding; Finally, place a (**?**) question mark for those sections or areas you do not understand or that you might have further questions or need further understanding. When done reading and marking the article, turn to the worksheet and do as it directs.)

No matter what course is taught, at some point, there has to be a test of some sort, to check to see if the students have grasped an understanding of the material taught. This is done by testing and evaluating. *The goal* of this article is to help the instructors in knowing the reasons for testing, and how to write or design a test or evaluation.

*Performance Objectives*: At the end of this article the reader will be able to:
1: Effectively recognize what is meant by 'Norm Reference' and 'Criterion Reference'.
2: Properly identify why testing is important.
3: Accurately explain what makes a test question 'valid'.
4: Properly explain that when giving tests and exams, the testing process should measure students in other areas than just 'recall'.
5: Successfully identify how to formulate test questions and evaluations.
6: Successfully demonstrate writing three of the different types of test questions, (i.e. multiple choice, fill in the blank, true or false, matching, diagramming, performance based testing, hands-on, simulations, role-playing, etc.), to be turned in with the final lesson plan.

*Introduction*: This article is designed to help instructors write better tests; better in that they more closely assess instructional objectives and assess them more accurately. A number of problems keep classroom tests from being accurate measures of students' achievement. Some of these problems are:

☐ Tests include too many questions measuring only knowledge of facts. One of the most common complaints from students is that the test content did not reflect the material discussed in class or what the professor seemed to indicate was most important. This may happen because knowledge questions are the easiest to write.

☐ Too little feedback is provided. If a test is to be a learning experience, students must be provided with prompt feedback about which of their answers were correct and which were incorrect.

☐ The questions are often ambiguous and unclear. According to Milton (1978), ambiguous questions constitute the major weakness in college tests. Ambiguous questions often result when instructors put off writing test questions until the last minute. Careful editing and an independent review of the test items can help to minimize this problem. ☐

The tests are too short to provide an adequate sample of the body of content to be covered. Short tests introduce undue error and are not fair to students. ☐

The number of exams is insufficient to provide a good sample to students' attainment of the knowledge and skills the course is trying to develop. The more samples of student achievement obtained, the more confidence instructors have in the accuracy of their course grades.

*Citerion-referenced*  **vs/ N***orm-referenced*:   Many educators and members of the public fail to grasp the distinctions between *criterion-referenced* and *norm-referenced* testing. It is common to hear the two types of testing referred to as if they serve the same purposes, or shared the same characteristics.  Much confusion can be eliminated if the basic differences are understood.

*Norm-Referenced Tests:*   This refers to the **'assessment of student's achievements in relation to other students'**.  Basically it refers to the comparing of one student against that of another student. Nor-Referencing is the measuring of what 'one knows' in comparison of what 'the other knows'.   The grading system is what is called, *NORMING SAMPLES*:.  This is also known as 'grading on the curve'. or "Bell curving".

If you have twelve students, and they are given a test, and of all twelve of the students the highest test score is that of 59%.  This means that all twelve students in all reality - failed the test.  But by 'grading on a curve', the person with the 59% will receive the A grade.
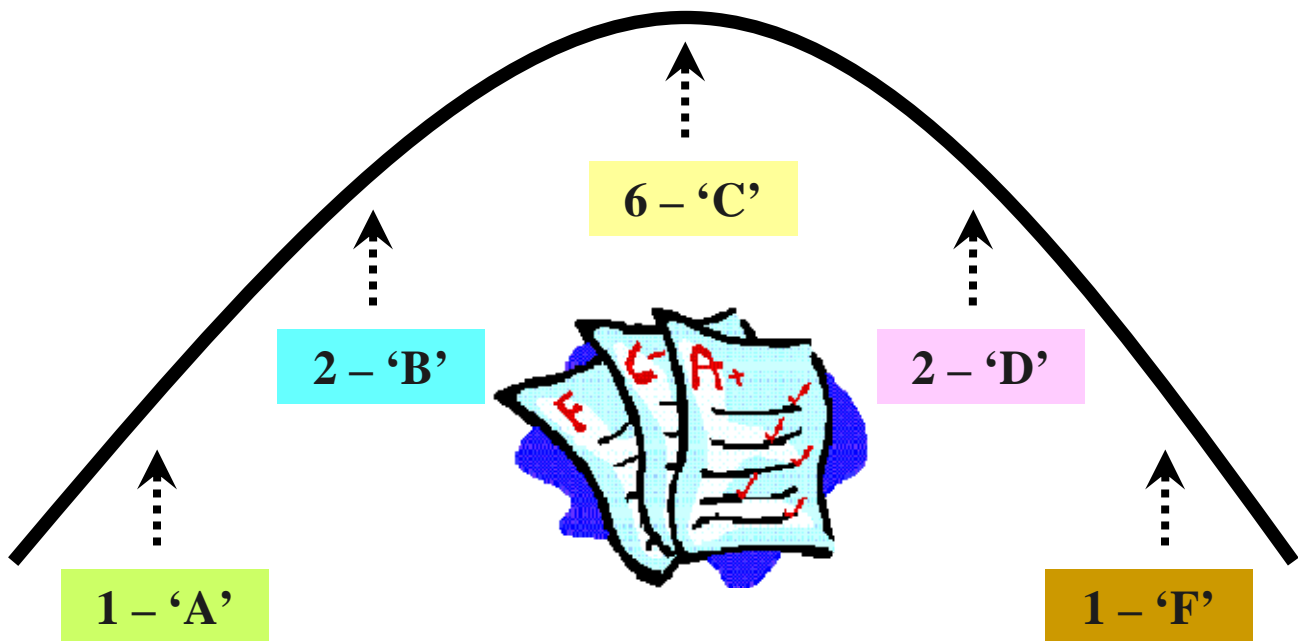


1 Student -    59% = A Grade
2 Students -   56% = B Grade
6 Students -   54% = C Grade
2 Students -   51% = D Grade
1 Student -    48% = F Grade

On the other hand take the same twelve students, and on another test, the lowest score was a 94%. Everyone passed, but by 'grading on a curve', the 94% score is an F grade.

> 1 Student -    100% = A Grade
> 2 Students -    99% = B Grade
> 6 Students -    97% = C Grade
> 2 Students -    95% = D Grade
> 1 Student -     94% = F Grade.

Is this a fair way to grade?  I would hope you would say "NO!"

***Criterion Reference***:  This **measures each student's mastery of the course against the 'performance objectives'**.  In another words, the criteria are established in the performance objectives. If the student can complete the tasks given to him or her, then they 'PASS', if they cannot satisfactory complete the task, then they 'FAIL'.  In this way, each student is graded in accordance to what they can do, based off the performance objectives, and not by being compared to what the other students do.  PASS/FAIL grades measure what the student has learned, based upon mastery of the topic.

When grading your future students use the PASS/FAIL grading system.  Of course you will have to establish what level is 'passing' and what level is 'failing'.  In a vehicle reconstruction class, the instructor had a six hour testing/drawing final.  He established the level at 75%.  75 or above was passing, and 74 down was failing.  In a firearms class, the max score is 120 points, the established level is 85%.

## *Six reasons for testing*:  There are six basic reasons as to why we test students.

☐       Testing aids the instructor in making certain classroom decisions.  When teaching and considering testing, the instructors should ask themselves;
>        "Is the material too difficult?"
>        "Is the material being presented too rapidly?"
>        "Which students are in need of additional training?"
>        "Are the students ready to proceed to a more difficult task?"

Depending on the response, the instructor may have to make decisions as to what is being taught.

☐       Testing can motivate the students.  When students are made aware that there is going to be a test or quiz at the end of the block of instruction or a final at the end of the training course, they tend to get motivated, and pay attention.

☐       Testing aids in 'retention'.  An added bonus to motivating the students is the student's  retention rate is increased. Knowing that there a test or quiz, students that pay attention and take notes to pass the test, which increases the amount of information they retain.

☐       Testing increases 'self-understanding'.  Test taking provides instant 'feed back' necessary to self

evaluate. From the test results a student can determine their strengths, or their weaknesses. Students then can pursue whatever means are necessary for change.

☐ Testing provides 'feed back' on the instructor's effectiveness, and/or the material being taught. Test results provides three possibilities

> The test questions may not be valid.
> The material may not be taught well.
> The students are not motivated to learn.

Test results provide the quickest 'feed back' for the instructor to see if the students understand.

Two quotes come to mind that I saw in a school administration office.

The first one *"If the student has not learned...then the instructor has failed to teach"*

The second one *If a student has failed the test...then both the student and the instructor have failed the class."*

This is to say, that if a test was given and everyone fails the test, then there is a problem. Either all the students are 'dumb' or the instructor presented in such a way that the material was not passed on or the material was way over the heads of the students. There is a 99% chance the cause is the latter two. Now the instructor needs to revert back to the first reason for testing – 'classroom changes need to be made.



**herman**

To illustrate feed back – lets take at our friend – Herman: He just took a test, and he failed the test.

**"I think my test results are a pretty good indication of your ability as a teacher."**

☐ The sixth reason for testing is: Test results may provide legal documentation of achievement, performance, and understanding. Tests are used to avoid; law suits'. Document a "pass/fail" test scores, and not a numeric score or grade. Remember – *"If it is not written...it did not occur."*

# *Testing for "Validity"*: How do you test for 'validity'? The rule is simple: **"That which is in the test has to be covered in the topic material in order to be valid!"** Or in another words *"Test what you teach... Teach what you test!"*

Can you test on reading assignments outside the classroom? YES. If the assignment was made, and was or was not discussed in class, the reading assignment can be used in a test. Can you test on handout that have been passed out to the students? YES. If the students were told to read and study the handout(s) and told that part of the testing will come from the handouts.

***Planning the Test***:  A taxonomy of teaching objectives (Bloom, 1956) lists several cognitive outcomes typically sought in instruction. These outcomes are listed hierarchically in 'table 1' below; they include: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation.  If these are desired outcomes of instruction, then classroom tests must include assessment of these objectives.

Write questions that test skills other than recall:  Research shows that most tests administered by instructors rely too heavily on students' recall of information.  The following table represents areas that go beyond just the 'recall' skills, and measure students in other areas:

**Table 1. Examples of Bloom's Cognitive Levels**

| Bloom's Cognitive Level | Student Activity | Words to Use in Item Stems |
|---|---|---|
| Knowledge | Remembering facts, terms, concepts, definitions, principles | Define, list, state, identify, label, name, who? when? where? what? |
| Comprehension | Explaining/interpreting the meaning of material | Explain, predict, interpret, infer, summarize, convert, translate, give example, account for, paraphrase |
| Application | Using a concept or principle to solve a problem | Apply, solve, show, make use of, modify, demonstrate, compute |
| Analysis | Breaking material down into its component parts to see inter relationships/hierarchy of ideas | Differentiate, compare/contrast, distinguish ____ from ____, now does ____, relate ____?, why does ___ work? |
| Synthesis | Producing something new or original from component parts | Design, construct, develop, formulate, imagine, create, change, write a poem or short story |
| Evaluation | Making a judgment based on a pre-established set of criteria | Appraise, evaluate, justify, judge, critique, recommend, which would be better? |

***The Test Format***:  After planning the content and cognitive objectives for the test, instructors must decide on the best way to measure them; that is, they decide on the test format. The format refers to whether the test will be objective (multiple choice, true-false, matching, etc.) or essay. What factors do faculty consider when deciding on the format of the test?

☐ ***What is to be Measured?***  We should choose the format that is most appropriate for measuring the cognitive objectives on the test. If instructors want students to contrast A and B, take a position on an issue and defend it, create a plan, and perform other similar tasks, then they would most likely use an essay format. For example, if an instructor wants students to explain the role of the press in the coming of the Civil War, he/she would probably choose an essay item. But if the objective is to identify the

authors of selected writings about the coming of the war, then the instructor could use an objective type format.

Many times instructors have a choice. Objective-type items can be used quite effectively to measure high level cognitive objectives. A common myth depicts objective items as measuring simple factual recall and essays as evaluating higher-order thinking. But multiple choice items, for example, can be written to measure reasoning, comprehension, application, analysis, and other complex thinking processes. What other factors might influence the decision about format?                    □

 *The Size of the Class*:  Class size is often an important factor influencing the decision about test formal. It is very difficult to give essay tests when there are 400 students in the class because the scoring time is prohibitive. A survey of 1100 professors from across the country (Cross, 1990) showed that class size is the factor that professors consider most important when they decide what test format to use. Two-thirds of the faculty surveyed said they preferred the essay format but could not use it because of the size of their classes. They used essay tests only in small classes.                    □

 *Time Available to Prepare and Score Test*:  It takes a long time to score an essay test. By contrast, it takes a long time to construct a multiple-choice test. Instructors must consider whether they will have more time available when preparing or when scoring the test. If instructors are short of time when a test must be prepared, then they might choose an essay test, if class size permits. We are not implying that good essay questions are easy to write; essay tests are easier to prepare only because fewer questions have to be written.

# *How to write or formulate test questions*:

*Multiple Choice Test Questions:*

Multiple Choice questions are the "work horse" of testing.  They are the most commonly used.  They are referred to as the "highest standard" of test questions.  Multiple-choice items can be used to measure both simple knowledge and complex concepts.  Since multiple-choice questions can be answered quickly, you can assess students' mastery of many topics on an hour exam.   In addition, the items can be easily and reliably scored.

□    *Multiple-choice questions consist of two parts*.
   η    The STEM:  The part, which presents a problem.
   η    The ALTERNATIVES:  The part that follows the stem, which provides possible solutions to the problem.  (Also referred to as "distractors")
□    *Rules for the Stem:*
   η    The stem generally is phrased as a STATEMENT and not as a question, depending on what level of Blooms you are working with.  (See examples below.)
   η    The stem should present single, clearly formulated problems.
   η    The stem should be in simple, understood language.
   η    A way to judge a good stem:  The student's who know the content should be able  to answer before reading the alternatives.

□    *The Alternatives:*

η        There are usually no less than four alternatives.

η        If a person does not know the correct response, then they have a 25% chance of questing correctly.

η        There can be more than four. Like - E) All the above; F) Only A & C; G) Only B & D

η        However many alternatives, there can only be ONE Correct response.

η        Distractors should be incorrect, but plausible. The student should not be able to eliminate a distracter simply because it is clearly wrong.

η        The longest option among possible answers is usually the correct one. To avoid this situation, make at least one distracter the same length as the correct choice.

η        Avoid "always" and "never" in distractors. Choose terms like "usually," "likely" and "rarely" to keep students from easily eliminating distractors

η        Use "all of the above" and "none of the above" sparingly. "All of the above" allows students to select the correct response by identifying just two of the options as correct. "None of the above" does not establish that the student knows the correct answer. ☐

*Advantages:* Multiple-choice questions are the most versatile of the closed-ended question types. This versatility stems from the fact that the questions can contain more elaborate scenarios that require careful consideration on the part of the student. The probability of student guessing is also relatively low. ☐

*Disadvantages:* When compared to true/false and matching, multiple-choice items can be more challenging to write. They also require the creation of plausible "distractors," or incorrect answer options. As with other closed-ended questions, multiple-choice assesses recognition over recall.

☐ ***The following are examples of multiple-choice questions.*** The examples in this section will focus on demonstrating how you might write an effective multiple-choice item for each of the first four levels of Bloom's Taxonomy.

η        *Knowledge Level*
        The value that occurs most frequently in a data set is the:
        a. Mean
        b. Standard deviation
        c. Mode
        d. Median

        The answer is "c." This is a knowledge-level question because it requires only that the student remember the definition of mode.

η        *Comprehension Level*
        Which of the following measures involves ordinal data?
        a. The score of a football game
        b. Football player's jersey number
        c. A team's rank in league standings
        d. Number of fans in attendance

The answer is "c." This is an example of a comprehension-level question, in that it requires the student to recognize a previously unseen example of ordinal data.

η *Application Level*
The standard deviation of the sample data 6, 9, 10, 12, 13 is closest to:
a. 3
b. 5
c. 8
d. 10

The answer is "a." This question assesses application-level mastery, or the ability to apply a rule or formula in a new context.

η *Analysis Level*
Susan, a student in Mr. Smith's statistics class, asks Mr. Smith what her average score is for the three exams he has given the class. He replies that her average is +1.7. Which of the following assumptions about the students' scores on these tests is most plausible?*
a. The standard deviations of scores on all three tests were similar.
b. None of the tests produced extremely skewed distributions.
c. All of the students did poorly on at least one of the tests.
d. The correlations between the three sets of test scores were low.

Answer is "d." This item requires the test-taker to recognize unstated assumptions and relationships. The test-taker has to recognize the steps Mr. Smith has taken (converted scores into Z-scores) and why he would do so (the tests probably have very unlike distributions or lack of variation in one or more tests).

*True or False Test Questions*:

☐ *Good for*:
  η Knowledge level content
  η Evaluating student understanding of popular misconceptions
  η Concepts with two logical responses

☐ *Advantages*:
  η Can test large amounts of content
  η Students can answer 3-4 questions per minute

☐ *Disadvantages*:
  η They are easy
  η It is difficult to differentiate between students that know the material and students who don't
  η Students have a 50-50 chance of getting the right answer by guessing

η       Need a large number of items for high reliability

η       Because random guessing will produce the correct answer half the time, true-false tests are less reliable than other types of exams. However, these items are appropriate for occasional use. Some Instructors who use true-false questions add an "explain" column in which students write one or two sentences justifying their response.

☐       There are *five rules* that are a must when preparing true and false test questions:

η       Include ONLY ONE central idea in each statement.

η       Construct the question so precisely that it can not be misunderstood.

η       Keep the question short, precise and simple. Avoid long, complex sentences.

η       Avoid double negatives, and use negative statements sparingly.

η       Never use an OPINION!  If an OPINION is used in a true and false question, attribute it to some source, since opinions are neither true nor false.

☐       The following are 'suggestions' (not rules) which should be considered when writing true and false questions.

η       Where possible avoid the use of the words:

> *always    nothing    nobody    never    everyone*
> *none    any    everybody    only    all*

These are referred to as *'absolute words'*, meaning they are generally too broad and difficult to defend.  These words tend to be indicative to being - **false.**

η       Avoid the use of the words:

> *may    generally    usually    sometimes    few*
> *occasionally    some    many    often*

These are referred to as *'limiting words'*.  These words tend to be - **true**.

η       Do not emphasize the trivial.

η       Do not lift items straight from the book.

η       Make more false than true (60/40). (Students are more likely to answer true.)

### *Fill in the Blanks*:

The completion format requires the student to answer a question or to finish an incomplete statement by filling in a blank with the correct word or phrase.

☐       The advantages of  completion items or fill in the blank questions are

η       they provide a wide sampling of content; and

η       they minimize guessing compared with multiple-choice and true-false.

☐       The limitations are they

η       rarely can be written to measure more than simple recall of information;

η       are more time-consuming to score than other objective types;

η       are difficult to write so there is only one correct answer and no irrelevant clues.

### *Guidelines for Writing (Completion Items)  Fill in the Blank:*

☐       Omit only significant words from the statement, but do not omit so many words that the statement becomes ambiguous.

η      Poor: The Constitutional Convention met in _____ in _____.

η      Better: The Constitutional Convention met in the city of _____ in 1787.

☐      Write completion items that have a single correct answer, if possible.        η
         Poor: Abraham Lincoln was born in _____.
         (There are several legitimate   answers: Kentucky, 1809, February, a log cabin, etc.)

η      Better: Abraham Lincoln was born in the state of _____.

☐      Use blanks of the same length throughout the test so that the length is not a clue

☐      Avoid grammatical clues to the correct response. For example, if the indefinite article is required before a blank, use a(n) so that the student doesn't know if the correct answer begins with a vowel or a consonant.        η
         Poor: A subatomic particle with a negative electric charge is called an _____
         (The student could eliminate proton, neutron, and meson as possible responses.)

η      Better: A subatomic particle with a negative electric charge is called a(n) _____.

☐      If possible, put the blank at the end of a statement rather than at the beginning. Asking for a response before the student understands the intent of the statement can be confusing and may require more reading time.        η
         Poor: _____ is the measure of central tendency that is most affected by  extremely high or low scores.

η      Better: The measure of central tendency that is most affected by extremely high or low scores is the _____.

☐      Avoid taking statements directly from the text.

*Short Answer Questions:*

☐      Short answer questions ask the student a direct question that can be answered with a single word, phrase, sentence, or paragraph.  Completion items require the student to fill-in the blank of a statement.  Essentially, short answer and completion items are multiple-choice questions without the supplied responses.  This demands more processing on the student to recall the correct response rather than recognize it from a list.  Spelling errors or sloppy handwriting can also bias accurate assessment of student knowledge.  Because the student must understand the question well enough to supply a correct response, the questions must be written even more clearly than with multiple-choice questions.

☐      In general, short answer and completion items require more subjective grading than multiple-choice items. Short-answer questions may also offer a range of correct solutions that will need to be addressed in an answer key. In a similar fashion, partial credit maybe awarded for partial answers. Short answer and completion items can provide diagnostic information when looking at the type of error that students made, but because of the difficulty in grading, they do not lend themselves to the item analysis available with multiple-choice items.

☐ Short Answer – means, answering the question. Short-answer questions can call for one or two sentences or a long paragraph. Short-answer tests are easier to write, though they take longer to score, than multiple-choice tests. They also give you some opportunity to see how well students can express their thoughts, though they are not as useful as longer essay responses for this purpose.

    ☐ Advantages: Easy to make. No guessing – Students have to come up with answers rather the just recognize it. They are faster to answer than multiple choice questions, because they have no alternatives to read through.

☐ Example of a short answer question:
    What is the name of the test item that consists of a single stem and several options?
    *(Multiple-choice and multiple answer would be acceptable.)*

☐ Example of a completion item:
    The type of test item where the student must select between one of two options is known as a(n) _____ test item.
    *(In addition to true-false, binary-choice, or alternate-response would be acceptable.)*

### *Essay:*

☐ Essays allow students... "Freedom of expression". This freedom of expression can have both positive and negative consequences.
    η    Positive side: It allows a knowledge-able student to express facts, concepts, and ideas.
    η    Negative side: Very time consuming for the instructor - takes time to read and review them all.

☐ Essay tests are appropriate when:
    η    The group to be tested is small and the test is not to be reused.
    η    You wish to encourage and reward the development of student skill in writing.
    η    You are more interested in exploring the student's attitudes than in measuring his/her achievement.
    η    You are more confident of your ability as a critical and fair reader than as an imaginative writer of good objective test items.

☐ Essay tests can be used to:
    η    Measure almost any important educational achievement a written test can measure.
    η    Test understanding and ability to apply principles.
    η    Test ability to think critically.
    η    Test ability to solve problems.
    η    Test ability to select relevant facts and principles and to integrate them toward the solution of complex problems.

☐ Writing Essay Items at Different Levels of Bloom's Taxonomy    η
    The goal is to write essay items that measure higher cognitive processes. The question should represent a problem situation that tests the student's ability to use knowledge in order to analyze, justify, explain, contrast, evaluate, and so on. Try to use verbs that elicit

the kind of thinking you want them to demonstrate. Instructors often have to use their best judgment about what cognitive skill each question is measuring. You might ask a colleague to read your questions and classify them according to Bloom's taxonomy.

η   Another point that should be emphasized when writing items that measure higher cognitive processes is that these processes build on and thus include the lower levels of knowledge and comprehension. Before a student can write an essay requiring analysis, for example, he/she must have knowledge and a basic understanding of the problem. If the lower level processes are deficient, then the higher-level ones won't operate at the maximum level.

## *Practical Practice Testing - Role Playing - Simulation Scenarios:*

☐   They must be real and realistic.
☐   Information should have been taught;
  η     verbally/lecture                                    *(tell)*
  η     demonstrated by the instructor          *(show)*
  η     practiced/hands-on by the students        *(do)*
☐   They must fit within the scope of job.
☐   They must well scripted, and the actors must not deviate from the script.
☐   The script must be standardized for each person being tested.
☐   The script can have alternatives.
  η     If the officer being tested does one thing, the actor may do one thing, if the officer does another thing the actor will counter accordingly.
  η     The variables must be written down.
☐   The evaluation needs to be pre-written.
  η     The areas that were taught and need to be tested, must be written down.
  η     The areas that are to be tested must be based off the performance objectives.
☐   The evaluators need to be instructed as to what they are evaluating.
☐   Safety Officer – there is an important need to provide safety in role playing and in scenarios.   η   Safety is maintained by having personnel watch and control, and to say "time out".
  η     This person can be a separate person or the person doing the evaluations can double as the safety officer.

## *Matching:*
☐   Good for:
  η     Knowledge level – of students; Some comprehension level,
  η     if appropriate constructed
☐   Types: There are several "types" of matching that can be used, for example:
  η     Terms with definitions
  η     Phrases with other phrases
  η     Cause with effects
  η     Parts with larger units

    η       Problems with solutions
- Advantages:
    η       Maximum coverage at knowledge level in a minimum amount of space/prep-time
    η       Valuable in content areas that have a lot of facts
- Disadvantages:
    η       Time consuming for students
    η       Not good for higher levels of learning
- Tips for Writing Good Matching items:
    η       Need 15 items or less.
    η       Give good directions on basis for matching.
    η       Use items in response column more than once (reduces the effects of guessing).
    η       Use homogenous material in each exercise.
    η       Make all responses plausible.
    η       Put all items on a single page.
- Put response in some logical order (chronological, alphabetical, etc.).
    η       Responses should be short.

*Diagramming:*



1: _____
2: _____
3: _____
4: _____
5: _____
6: _____
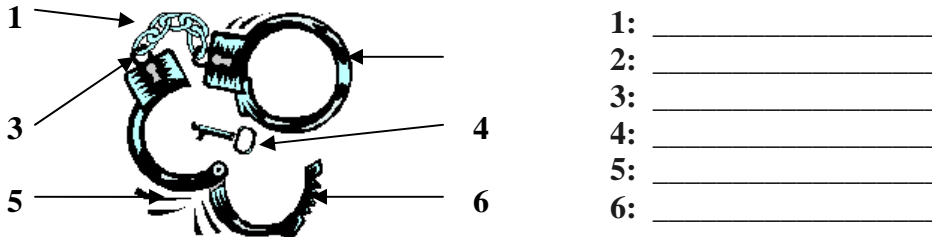
*Take-home tests:*

- Take-home tests allow students to work at their own pace with access to books and materials.
- Take-home tests also permit longer and more involved questions, without sacrificing valuable class time for exams.
- Problem sets, short answers, and essays are the most appropriate kinds of take-home exams.
- Be wary, though, of designing a take-home exam that is too difficult or an exam that does not include limits on the number of words or time spent.
- Also, be sure to give students explicit instructions on what they can and cannot do: for example, are they allowed to talk to other students about their answers?
- A variation of a take-home test is to give the topics in advance but ask the students to write their answers in class.

*Crossword Puzzles:* Games, Board Games, Puzzles.

***Be creative!***

☐      In a recent class on C.P.R., following the instruction and hand-on of using the mannequins, the instructor checked to see if the students understood by playing 'Jeopardy'. The instructor broke the class into four teams, and the students played a game. It served as a review, and as a means of testing.

| C | A | A | F | B | S | C | N | L | L |
|---|---|---|---|---|---|---|---|---|---|
| U | H | E | R | M | A | N | O | A | I |

☐      In a class by one of the Instructor Development Students, the young lady prepared as a test a 'crossword puzzle'.

☐      On the next page is an example of a quiz that is given in a Law Enforcement Spanish class. A word search (word hunt) where the student has to translate English words into the correct Spanish word, then search for the word in the word hunt, and circle the word.

---

*Word Hunt Directions:  Using a Spanish/English dictionary, translate the English words to Spanish.*
*Then find the Spanish words in the Word Hunt and circle the word.*

| U | H | E | R | M | A | N | O | A | I |
|---|---|---|---|---|---|---|---|---|---|
| A | O | H | A | Y | L | E | C | P | B |
| D | R | E | S | D | A | I | H | I | R |
| E | A | L | E | E | F | B | E | Z | O |
| R | G | H | I | J | K | M | I | R | A |
| N | L | M | N | O | F | A | C | I | L |
| O | R | T | S | E | S | T | A | P | Q |

1)      Pencil            __Lápiz__            9)      Easy            _____

| | | | | | |
|---|---|---|---|---|---|
| 2) | Living Room | _____ | 10) | Now | _____ |
| 3) | Book | _____ | 11) | There is | _____ |
| 4) | Notebook | _____ | 12) | He looks at | _____ |
| 5) | Sentence | _____ | 13) | Night | _____ |
| 6) | Brother | _____ | 14) | He reads | _____ |
| 7) | Also | _____ | 15) | This (f.) | _____ |
| 8) | With | _____ | | | |

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*Ordering Items:* A list of items, that need to be placed into the correct order;

☐  An ordering consists of a single list of items that can be ordered in a logical fashion such as importance or chronology. Ordering items typically assess knowledge or comprehension outcomes, but they can be used for higher level outcomes as well.  For example, a student could be given a case or scenario and asked to order a series of events in the question in order of impact on the final outcome. Ordering items should contain no more than 7-9 components in a list. Some suggestions for writing ordering items include:



η  Keep item short (a word, phrase, or single sentence).
η  All stems should be similar in content and structure.
η  Include clear directions on what the basis for ordering is.
η  Use a non-related ordering method to list the items such as alphabetic order or order of appearance.

.

☐  Example of an ordering item:

Rank-order the following items in terms of importance in assessing the quality of a test.  Rate importance based on whether an item could be skipped if time or resources limited what assessment could be done. The first item would be the most essential type of assessment to do, and the last item would be the first item to skip.



_____ Non-expert assessment
_____ Peer assessment
_____ Post-application assessment
_____ Self-assessment by author
_____ Student assessment prior to application

*Group Exams*:

☐        This is where the class is broke down into a group of students who work as a group, on a test.

*Paired Testing:*

☐        For paired exams, pairs of students work on a single essay exam, and the two students turn in one paper.

*CLOSING:*   Effective testing and evaluation techniques are critical to the success of your training program, and should be designed attentively. They help you to determine the success level of your program, and they also assist in identifying areas which require improvement. In an age when training budgets are subject to reductions, the results of these techniques can also help you to justify your budget.

Evaluation of training should consist of data on the following four subjects: *reaction, learning, behavior, and results*.

**Reaction** refers to the way the participants viewed the training. Did they like it? Did they find it helpful? Will they be able to use the information? Did they understand everything? The best way to measure reaction is to use a questionnaire, and also to record any verbal comments to be analyzed along with the data from the questionnaire. Many trainers prefer to have a short questionnaire at the end of each day, and then a longer, more general one at the end of the program. This provides very specific information on every aspect of the course. Data should be quantifiable, but be careful not to discourage comments and suggestions for improvement in addition to quantifiable data. As with the other evaluation techniques, statistical analysis can be applied to the quantifiable data to enhance its usefulness.

**Learning** is most commonly measured by some type of test. Test methods can vary, and should be selected for their appropriateness. Tests are either objective or subjective. Objective tests are recommended because they minimize the opportunity for bias in grading. However, subjective tests can be used if the objectives stress integration and synthesis of the material. Further, objective and subjective tests can be broken down into written, oral, and performance type tests. Oral tests are the least desirable, again because it is difficult to ensure objectivity. If you do use an oral test, be sure to ask the same question in the same way to each participant. Answers should be graded by comparing them with predetermined written criteria. In a work situation, performance tests are often the most appropriate, as it requires the participant to integrate the knowledge learned into the task required. When using performance tests, be sure that you are clear about the standards which are required, to provide all the materials needed, and to

minimize other distractions. However, written tests can also be useful.

Regardless of the method for testing that you select, all testing must be evaluated for reliability and validity. Reliability ensures that test results are consistent over time assuming that no learning has occurred between testings. To increase reliability, make sure that all test items are clear, concise, and complete, make sure that it is easy to administer, and possible to grade fairly and accurately. Validity requires that the test actually measures what it is that you want to measure. Therefore, design tests that relate directly to the learning objectives (in this case that often means the on the job behavior desired.)

**Behavior** must be evaluated to confirm whether or not the skills taught in training have been successfully integrated into the employee's performance. Unlike learning tests, which are normally conducted immediately following training, behavior must be measured after a period of time has elapsed since the training. This is to ensure that the skill has not only been learned, but also retained and used. Behavior can be measured with performance appraisals and other company reports as long as they are task related and are performed systematically and reliably.

**Results** must be measured. Results tell you if the organizational goal of your training was achieved. These goals usually pertain to cost, quality, productivity, etc. Official reports and records concerning issues such as production, quality, waste, maintenance cost, and absences are good source material for measuring results. If such data is not already being collected, you may need to initiate its collection.

Many agencies require that data collected from these four areas be analyzed using statistical analysis. Proper use of statistical analysis helps to provide assurance that the conclusions drawn are accurate. These conclusions are essential to continuous improvement, and should be taken seriously. By using good evaluation and testing techniques, you will contribute significantly to the quality of operations at your plant.

Source:

☐ *How To Be An Effective Trainer*, 2nd edition, Barry J. Smith and Brian L. Delahaye, John Wiley and Sons, ©1983.

☐ State of Idaho – Peace Officer Standards & Training – *Instructor Development Training Program* – 2007 Instructor's Manual - *"Test Questions and Evaluations"*

☐ *K*-TEC **Law Enforcement Training for the 21st Century** ©

☐ Law and Order Magazine - Training Officer's Notes *"To Test or Not To Test"* by Jack B. Molden, Sept 1987 issue

☐ Law and Order Magazine - Training Officer's Notes *"Developing Written Tests"* by Jack B. Molden, Nov. 1987 issue

## Pre-Read Work Sheet:  Test, Exams, and Quizzes

**You were instructed to use the technique "Focused Reading" while reading the article, if you did this – great; if not then go back and re-read the article following the directions.**

Y     **List four areas or ideas that you already knew.**

γ   _____

     _____

γ   _____

     _____

γ   _____

     _____

γ   _____

     _____

!     **List out four areas that were new to you.**

γ   _____

     _____

γ   _____

     _____

γ   _____

     _____

γ   _____

     _____

?     **List out for areas that you did not understand, or areas that you want more understanding.**

γ   _____

     _____

γ   _____

     _____

γ   _____
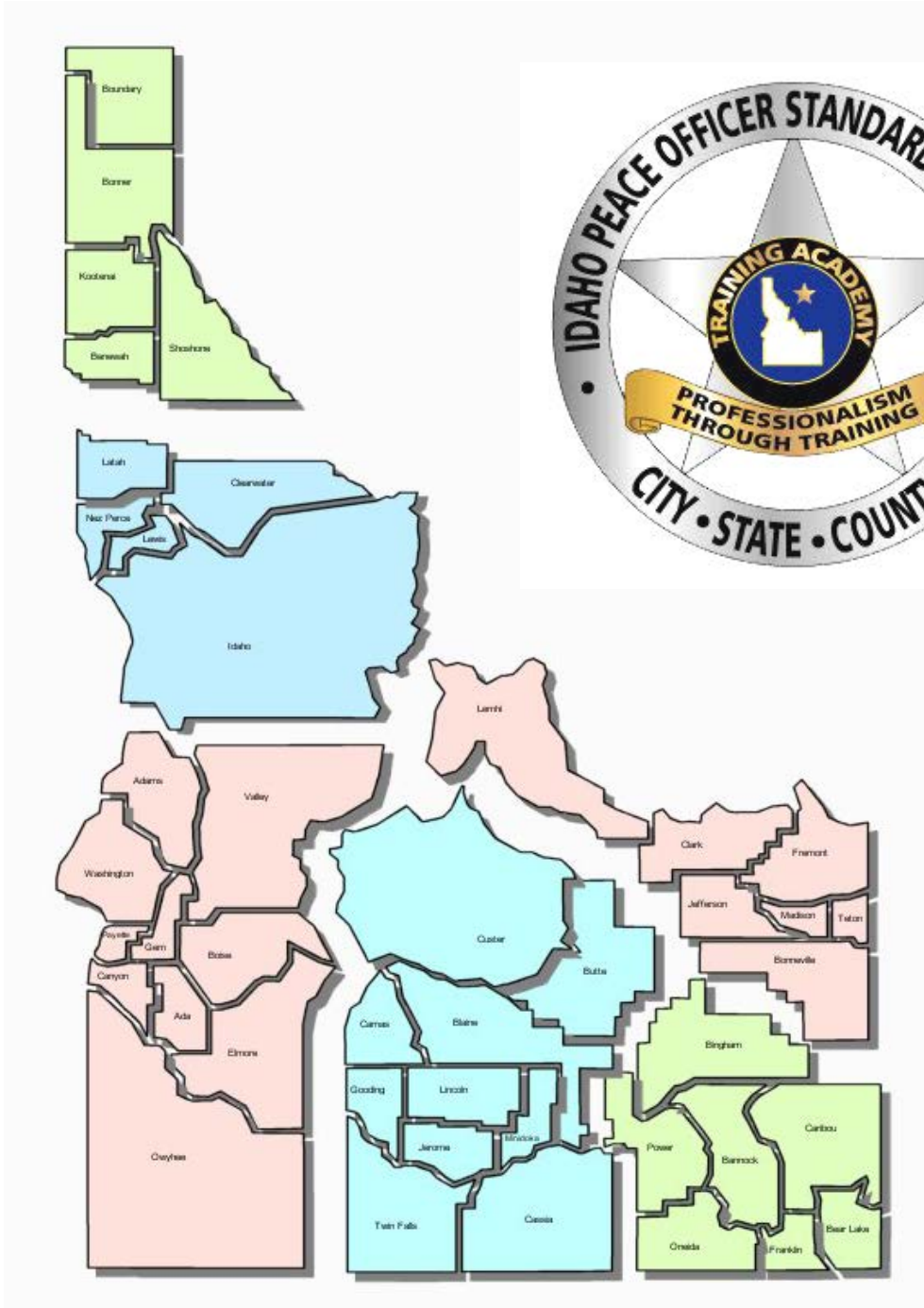
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# Instructor Development

## Idaho Peace Officer Standards and Training



## Instructor Certification Course

# Table of Contents

# Course Overview

Things are changing, and not just a little bit.

The way in which we teach our recruits is transitioning from traditional lecture, test and memorization to a learner-centered, active learning environment. In the learner-centered classroom recruits will be expected to demonstrate their ability to perform tasks and apply knowledge in a manner consistent with what our communities expect from those charged with their safety. To achieve this goal, academy training is moving to active learning in a classroom that will emphasize problem solving skills and conflict resolution competence.

The overarching goal of the academy experience is to develop an officer or deputy who has three core abilities. First is their ability to communicate effectively. Second is for them to have a grasp of policing in the community. Third is their ability to apply principles of ethics and integrity when faced with the myriad of issues presented in their duties as peace officers. Your role, as their instructor, is to mentor them, coach them and facilitate their learning. Effective facilitation will support the transfer of knowledge and skills necessary in perhaps the most important educational experience of their careers.

The purpose of this course is to provide specific tools and strategies for you to use as you introduce recruits to important concepts, and then transfer that content to them in a way that encourages them to think critically and apply the skills you have taught. The strategies you will learn in this course will connect the skills and concepts learned in the academy with the context of policing once beyond the classroom. Your role as a trainer and instructor is expanding to that of facilitator, mentor, coach and advisor.

In this course, you will see concepts and practices modeled by the instructors. To support the transfer of these concepts and skills to you, you will also practice them in small groups and with the entire class. You will learn the importance of "context" and solve the mystery of the "dead cat." Each person will also have a chance to assess their own learning styles, and how those learning styles might enhance or inhibit the transfer of knowledge to your students. To further develop your learning, there is time for frequent reflection through paired discussions and writings to encourage you to retain and utilize the concepts presented.

As an active participant you will experience this course from two perspectives. First is the development of your content knowledge about effective teaching. Second is the increased awareness of how the teaching processes used will support the learner-focused classroom environment.

**Goals**
Teachers and trainers who attend this course will learn how to:

• Enhance learning processes while using POST lesson plans and material or while developing their own courses
• Use a variety of instructional and facilitation strategies to deepen the trainee's understanding, retention and application of concepts taught in any course
• Create a learner-focused classroom environment that promotes critical thinking and problem solving consistent with what trainees will use in the field
• Apply adult learning concepts to the planning and delivery of their training and instruction
• Strategically apply paralanguage strategies to promote a powerful learner-centered classroom
• Design "real world" training that supports critical thinking skills
• Implement and promote a "learning by doing" environment

**Why We're Here**

Over the years, some instructors viewed academy recruits as "blank slates" who would be fed code sections, case law and department policy. The recruits' role was to memorize facts, pass tests and prepare physically to meet the rigors of the world beyond the walls of the academy. Unfortunately, some who did quite well in the academy would fail miserably in the field. They knew things, but they never had to apply skills they would need as cops until they hit the field training process. The Basic Course changes are working to address the gap between knowing and applying, and as instructors you are a critical component in the success of that effort.

As we transition from focusing on mere memorization and receiving information from PowerPoint or other mediums to the learner-focused classroom, recruits will now be actively responsible for their learning. Recruits will now not only know concepts but they must now demonstrate competency in the application of skills necessary to succeed in the street. We will turn them into thinkers, problem-solvers and peace officers who have demonstrated the common sense and communications skills worthy of someone you would want as a patrol partner.
Academy instructors will facilitate learning and manage the learning process for recruits as they wrestle with the essential life-long concepts necessary for effective policing.

You are an instructor and professional dedicated to the concept that through the selection and training of others dedicated to the safety of our cities and towns will we be successful in our goals of protecting others. Your willingness to move your knowledge forward by enhancing your facilitation skills is commendable.

Thank you for your dedication to our next generation of learners, and for the success we will see as a result.

# Notes and Reflections on the Course Overview

Three Points That Captured Your Attention

1.

2.

3.

Two Questions You Have As a Result of This Reading

1.

2.

One "Big Idea" or Most Important Point (MIP) You Learned, Realized or Can Use
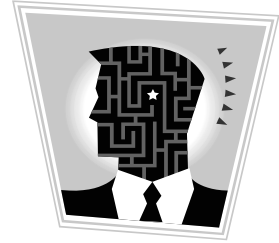
1.

# Your Facilitators

# Learning Focused Instruction

# Introduction

# Course Objectives

At the conclusion of this 40-hour course, participants will be able to:

1. Correctly explain what POST expects of Idaho Instructor Development instructors and curriculum

2. Effectively contrast instructor-centered and student-centered teaching styles

3. Describe how Bloom's Taxonomy and Knowle's ideas on adult learning impact student thinking and learning to the satisfaction of the instructor

4. Successfully apply Bloom's Taxonomy and Knowle's ideas on adult learning to instruction in their own content area

5. Successfully create a learner-focused classroom environment that promotes the development of critical thinking, decision making, and problem solving skills

6. Properly demonstrate nonverbal teaching tools

7. Effectively implement and promote a "learning by doing" environment

8. Successfully use a template for instructional conversations designed to teach critical thinking

9. Correctly design learning objectives, a lesson plan, and test questions intended to encourage students to use higher-order thinking skills

10. Properly deliver a 20 minute lesson plan to teach at the application, analysis, synthesis or evaluation levels on Bloom's taxonomy

11. Explain why surfacing student thinking is critical to effective teaching to the satisfaction of the instructor

12. Correctly describe how paraphrasing and thinking questions can be used to surface student thinking

13. Properly prepare a safe and effective scenario-based training activity

# Expectations and Concerns

**What?** An "expectations and concerns" activity helps adults learn more and faster in a workshop or course. It is especially useful when competent and confident adults are being asked to learn something new.

**Why?** It is normal for adults to have concerns about learning new ideas or skills in a group. An "expectations and concerns" exercise causes adults to reflect on hopes and fears they might have in learning new material. By making concerns public, adults usually discover their concerns are not unique. Finding common ground around common concerns no longer remains a potential source of resistance.

"Expectations and concerns" activities also cause adults to think about their positive expectations. This motivates learners and influences how they focus their attention and therefore, increases student learning.

**How?** At a signal from the instructor, take some personal time to think and then write. In the "expectations column" list what you expect to happen and hope to learn.
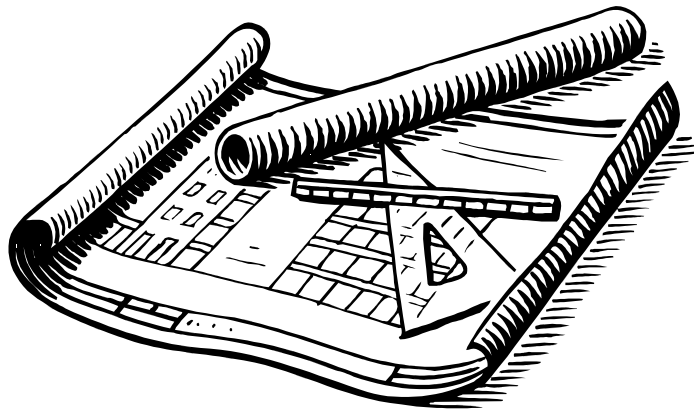
In the "concerns column" list some personal concerns about this training.
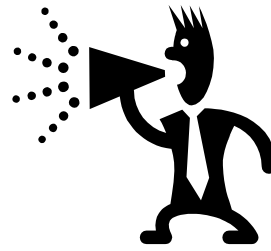
| Expectations: | Concerns: |
|---|---|
| | |

# Designing a Course: Opportunities and Challenges

# Protocols for Student Talk

Protocols are rules. For example, a protocol in diplomacy governs who greets whom first. In technology protocols are rules by which machines can talk to each other. A protocol in teaching defines what is to happen in classroom conversations.

In teaching adults, protocols have three functions:

1. They establish the topic, time, who speaks and in what sequence.
2. They provide challenge and limit discomfort.
3. They designate thinking skills to be used.

# 1.   Without a structure providing the function in #1, conversations can meander, go off course and take valuable class time away from important learning.

#2.   Groups tend to avoid hard-to-talk about topics without a structure that makes effective use of time and creates the psychological safety to engage. For adults, learning requires the risk of stating ideas when you are not sure, disclosing what you do not know, disagreeing or being able to talk and not be overridden by highly verbal participants. Overcoming this risk to participate is at the heart of problem based learning. Protocols are designed to minimize risk and maximize critical thinking. Comfort and classroom safety are not the same thing. It is OK for learners to be uncomfortable. Often this is a prerequisite to important learning. It is important for adults to feel safe enough to participate.

# 3.   Protocols determine the type of thinking required for learning. Some examples include separating data from inference, analyzing, evaluating, or developing theories. To increase the development of these critical thinking skills, protocols offer structures to practice critical thinking. The more students practice, the better they are able to execute critical thinking in diverse work situations.

# *Two Types of Protocols:*
# *Starters and Structures*

Skilled instructors develop an inventory for each type of protocol (Lipton and Wellman, 2004). Instructors decide when to choose a tight or loose protocol. By tight, we mean students have little choice about when and how to participate. Looser protocols leave more decisions in the hands of students. Use tight protocols when the topic is either complex or emotionally loaded. When the topic is easier to discuss, less restrictive protocols can be used. Two examples of protocols are provided below:

1. "Tell the person next to you one of your first experiences with a firearm." This is a very loose structure, in which the only directions are the topic and with whom to talk.

2. "In a round robin fashion, each person gives an example of a preventable problem with firearms. When each person has talked, the first to talk will make a summary statement of what has been said. No cross talk." This is an example of a fairly tightly structured protocol.

## Starters

Starters are activities that instructors use to start a class or introduce a topic. Because people are seated together does not mean they are a group capable of working together. At the beginning of a session each person is making several transitions: a physical transition into the room and a social transition connecting with others. Another transition is a psychological transition, letting go of other thoughts and focusing on the topic in the room. Starters help participants manage these transitions. Some examples are shown here.

## Starter Examples

1. *Paired Verbal Fluency*
   Direct each partner to take turns responding to a topic. Partner A will speak and B will listen. At a signal from the instructor B will speak. Repeat the pattern two or three times. The first cycle is 60 seconds each, second cycle is 45 seconds and the third cycle can be about 30 seconds. A prompt can be, "Tell your

partner everything you know about this topic. You may not repeat anything your partner says." This is good for activating prior knowledge and is a safe strategy, which can also be used to summarize learning.

2. *Best Worst*
   Direct each group to list the worst and best things that could happen in today's session. Rapidly record one of the worst from each group. Now engage them in an agreement – if any of the worst things happen the group should collectively groan. Practice the groan together. Groups will usually laugh and lighten up. This strategy can be used where the instructor anticipates resistance from the group.

3. *Like Me Ice Breaker*
   Advise class the instructors will announce a series of statements. After each statement, students will briefly stand (or raise hands) if that statement "like me" is consistent with who they are. Do this for at least 5 or 6 statements. Use humor. For instance, "I work like I am retired." The most important element of 'like me' is to ask at the end if anyone has a 'like me' they did not hear.

   Possible Statements:
   - I am currently an instructor in the academy.
   - I have taught for more than five years.
   - I have taught for less than two years.
   - I am a native Idahoan.
   - I have completed an instructor development course in the past year.
   - I have not yet taken a POST Instructor Development course.
   - I can explain the term "facilitation" in one or two sentences.

   Following the exercise, instructors may ask, "OK, why did we do this?"
   - Allows you to see others who share your experiences
   - Allows you to see who you might ask questions of as experienced teachers
   - Sets the norm of active listening and gets you used to following the teacher's direction, which allows us to more easily get you to do it for the next four days

4.  *Expectations and Concerns Exercise*

Hand out the expectations and concerns worksheet. Directions are printed on worksheet. Students complete the exercise individually for five minutes, and then locate a partner at a different table. Partners share their expectations and concerns with each other. The pair then locates another pair to form a group of 4. The group of 4 will work for ten minutes to craft a statement that summarizes the expectations of their group. The statement will be written on a piece of flipchart paper for posting when presented.

Complete the exercise by reports from each group to the class. Flipchart reports will be posted on the wall of the classroom.

**Structures**

Structures are activities that direct the way students think and talk about a topic. These protocols set time allotments, ensure student participation and determine the type of thinking required for exploring a topic and applying critical thinking. Critical thinking is essential in problem-based learning and in working effectively with complex work situations.  To think critically in a group requires generating ideas free from judgment.  Structures allow activities to be havens of safety in which students can be tentative or can be wrong so they can develop the critical knowledge and skills for the job.

*Examples*

1.  **Say Something:** A Paired Reading Strategy.
    • Choose a partner
    • Read silently to the designated stopping point.
    • When each partner is ready, stop and "Say Something"
    • The something might be a question, a key point, an interesting idea, or a personal connection.
    • Continue the process until you have completed the text.

2.  **Sentence Strips –** This provides a vehicle for members to organize and integrate session learning. Direct each small group to develop brief concept statements of the topic being studied. Stipulate 8 to 12 words placed on a sentence strip to be posted on the wall, organized logically.

3. **(3,2,1)** – This is a review strategy. Direct individuals to list three important ideas from yesterday's work (or the last unit, or the morning session). Also list two insights and one way they can apply their learning. Allow 5 minutes to write. Now members in the small group (ideal size is 3 but up to 5 will work) in round robin fashion share their information. Many categories can be used: questions, concerns, hypotheses, and predictions.

4. **5-3-1 exercise** – Instruct individuals to write five key words that capture (for them) important aspects of the presentation or training. They then would share those words with a neighbor or small group. The working cluster than selects three key words from amongst those present for further consideration. Ultimately, one key word will emerge and be selected by the group as most meaningful.

5. **The Matchbook Definition** – Each small group member will create a brief definition – one that could fit on a matchbook cover – of the topic or concept being studied. After a short period of time of individual work (5-6 minutes), small groups will share and compare responses, and then create one for the group to post for others.

6. **10-2** – For every ten minutes of content delivery, the instructor should consider at least two minutes for reflection and transfer of learning. The two minutes may be individual, small group or paired, including "buzz groups" where students merely discuss what they are learning and how it might be applied to their work.

7. **Five to Seven Concept Review** – persons of normal cognitive ability can generally remember 5 to 7 related concepts, numbers or words (think of how you recall your phone number, social security number, etc.). Strive to create opportunities for students to reinforce understanding, retention and application of concepts at regular intervals to ensure transfer is occurring.

# *Round Robin Teaching*

**What?** A Round Robin Teaching exercise helps participants add depth to their understanding of adult learning concepts, conduct group research and prepare a short facilitated learning experience for delivery to others. It (RRT) is especially useful to allow participants to practice of facilitation skills in a small group setting, which can be scaled to accommodate classes of varying sizes.

**Why?** To (develop and) refine facilitation skills while teaching novel material developed by a learning team.

**How?** Groups of 6 learners will conduct research on an assigned adult learning concept for 35-45 minutes. During that time, the group will use the Internet, this workbook and related resources to develop a facilitated learning experience to be taught in a 10-12 minute instructional block to be delivered by two person teams. At the end of the research and preparation time, facilitation teams will present their topic to the remainder of participants at their table in a round-robin fashion as described in the figure below.

The preparation should include the research, refining a quick lesson plan for delivery and work to make the learning experience student-focused and active rather than a lecture or static presentation. The learning experience should emphasize the facilitator's use of visual, verbal and non-verbal skills to enhance the experience for students.
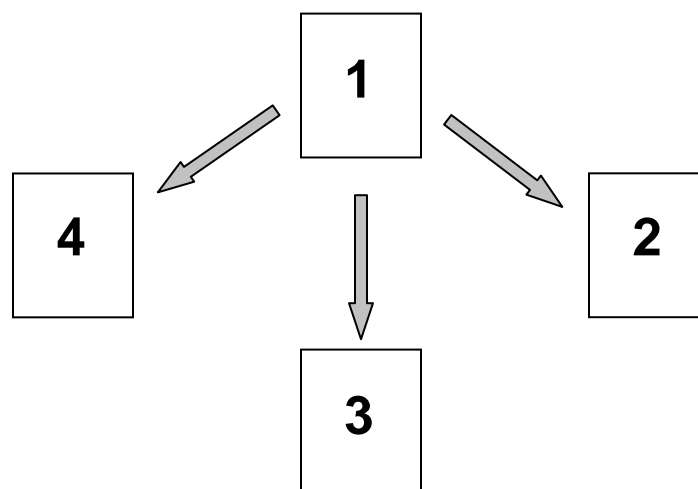


**Facilitation process**: in each group, a trainer or pair will deliver their training to others in their group. Others will follow in succession. At the end of the training cycle, groups will discuss the relationship of the concepts to one another, and their applicability to their own learning and training delivery

# Adult Learning Concepts

The traditional methodology of instruction in the regular basic academy course has been to focus on a teaching approach that emphasizes the teaching of complex information, memorization of various codes and in activities that instill a basic knowledge of the policing profession. Although that approach has merit in many of the competencies and learning domains encountered in the basic course, it may often fall short when the new officer or deputy is required to analyze, synthesize or evaluate how they should use the knowledge gained in the often ambiguous environment into which they will be thrust.

This section will acquaint you with the philosophies and concepts driving changes occurring in the academy curriculum, and also orient you with the ways in which the new curriculum should be taught.

| FROM… | TO… |
|---|---|
| Instructor Centered Training | Student Centered Learning |
| Instructor responsible for teaching | Student responsible for learning |
| Just in case training | Just in time training |
| Memorization of facts, tables, codes and procedures | Identification and retrieval of info at the time it is needed |
| Fact-based training | Problem-based training |
| Blank slate trainee | Knowledgeable adult with little or no police training or experience |
| Teaching knowledge and applied skills | Teaching applied and interpersonal skills and conflict resolution |
| Graduate recruits for field duties as an officer or deputy | Graduate recruits for success in the FTO or PTP  program |
| The "dip" approach | Immersion into the topic and its relation to other topics & concepts |
| Pass tests | Learn Subjects |
| In-class training | Active, blended learning |

## Active Learning
In the context of this manual, active learning is defined as the use of one or more interactive approaches to education and training for the purpose of engaging students in their work to acquire and understand knowledge. The active learning classroom is one that de-emphasizes lecture and other teacher-centered forms of instruction in favor of engaged class environments that are learner centered. Examples of active learning are:
- Adult learning activities
- Experiential learning activities or exercises (note: students don't learn from experience, they learn from using experiences in an educational setting)
- Paired or small group work
- Problem solving exercises
- Blended learning using appropriate technological resources to support training
- Case study exercises
- Problem-based learning exercises
- Individual, group and class work using visual, auditory or kinesthetic stimuli to prompt discussion, discourse and related class work.

## Knowles, et al
The foundation for the transition to active adult learning is found in the adult learning theories of Malcolm Knowles and others in their studies of how adults learn as opposed to traditional teacher-centered models of child and adolescent education.[1] Instructors should be familiar with the Knowles research as a foundation for developing effective lessons and delivering them. In short, adult learning theory is founded on the principles that effective training will be:
- **Relevant** – to the experience or intended experience of the adult learner. Whereas children and adolescents will attempt to learn content isolated from its application, adults learn best when they see the relevance of the taught concept to their experience
- **Engaged** – the adult learner retains knowledge and concepts more readily if they are engaged in the process of discovery and exploration rather than being the recipient of information
- **Active** – the learning process should be active, and replicate as closely as possible the environment within which the skill or knowledge will be applied. Rather than memorizing code sections, adults would retain and apply knowledge more effectively if they worked to discover the content, and then were able to practice its application in a simulation or scenario.
- **Learner-centered** – The traditional classroom taught concepts and prepared students to pass tests and other measures of their progress. Unfortunately, the student's retention of that knowledge was often nominal beyond the confines of the class. The emerging intent of academy training is to produce the most effective outcomes possible; to see students apply classroom skills

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[1] Expanding on his earlier work, *Informal Adult Education* (1950), Malcolm Knowles published *The Modern Practice of Adult Education – Andragogy versus Pedagogy* (1970) which propelled the movement to distinguish adult learners and their motivations to learn (andragogy) as opposed to children and adolescent learners (pedagogy). Knowles work generated more than 200 professional articles by others in the next decade, and remains a significant foundation for all subsequent theory for the education and training of adults.

in a real-world setting. The focus on the learner acquiring knowledge, is a critical step in effective training

## Instructional Systems Design

There are a variety of ways to approach the planning and execution of instruction in any educational setting. This is commonly termed "Instructional Design" or Instructional Systems Design" (ISD). ISD focuses on the most appropriate means of lesson design to move the student to deeper levels of knowing and understanding the content. Good lesson design may also addresses deficiencies in conduct. Lastly, good lesson design also ensures replication by other instructors. There are two dominant methodologies in use by ISD participants; one is ADDIE (Analysis, Design, Develop, Implement, and Evaluate), the other relies on Criterion-Referenced Instruction (CRI) protocols found in the work of Robert Mager. Refer also to the work of McTighe and Wiggins with regard to Understanding by Design (UbD) planning as a component of ISD (components of UbD are included in this manual).

## Problem Solving and Problem Based Learning

Moving most significantly away from lecture- or content-first teaching approaches, problem solving focuses on learning through the context of a problem, and moves the learner into a "learning predicament" to emphasize self-discovery. Problem-Based Learning (PBL) is a problem solving methodology being used in field training programs and some basic course academies nationally. When presented with a problem scenario, students work in one of many roles relevant to the problem, generally to determine
- What do we know?
- What don't we know that is necessary to find solutions to the problem?
- What do we need to find out, learn of discover?
- What solution/s would impact the problem in a manner desired?

## Learning Styles and their Impact in Training

**VAK –** focuses on the way learners acquire new information using the three main sensory receivers; Vision, Auditory (hearing) and Kinesthetic (movement). Learners use all three to receive information; however, one style is normally dominant. The dominant style may not be the same for all tasks.
- Visual learners generally like to learn through reading and writing tasks or through the use of charts, demonstrations, videos and other visual materials. They often easily visualize faces and seldom get lost in new places
- Auditory learners often talk to themselves; they may also move their lips or read aloud. They may have difficulty with reading or writing tasks, doing better talking to a peer and hearing what was said.
- Kinesthetic learners do best while touching and moving. They may lose concentration if there is little or no external stimulation or movement. They may want to take notes by drawing pictures, doodling or by making diagrams. When reading, they may want to scan the material first, and then focus on the details

**<u>Multiple Intelligences</u>** (Howard Gardner)

Gardner's research asserts we have many levels of "intelligence" and use one or two for the most effective learning. Our traditional teaching and testing focuses on two such intelligences; verbal/linguistic and logical/mathematical. Gardner proposes there are at least eight other kinds of intelligence that are equally as important, cutting through language, cultural and educational barriers. They are:

- Musical – sensitive to pitch, melody, rhythm and tone
- Spatial – perceive the world and try to recreate it or transform aspects of it
- Bodily kinesthetic – uses the body skillfully, like a dancer or athlete
- Interpersonal – possesses the ability to access one's emotional life to understand oneself and others; self-aware and aware of how self impacts the environment around them
- Naturalist – connected to the intricacies and subtleties of the world around them, especially the physical world or environment

# Bloom's Taxonomy Overview

Evaluation

Synthesis

Analysis

Application

Understanding

Knowledge
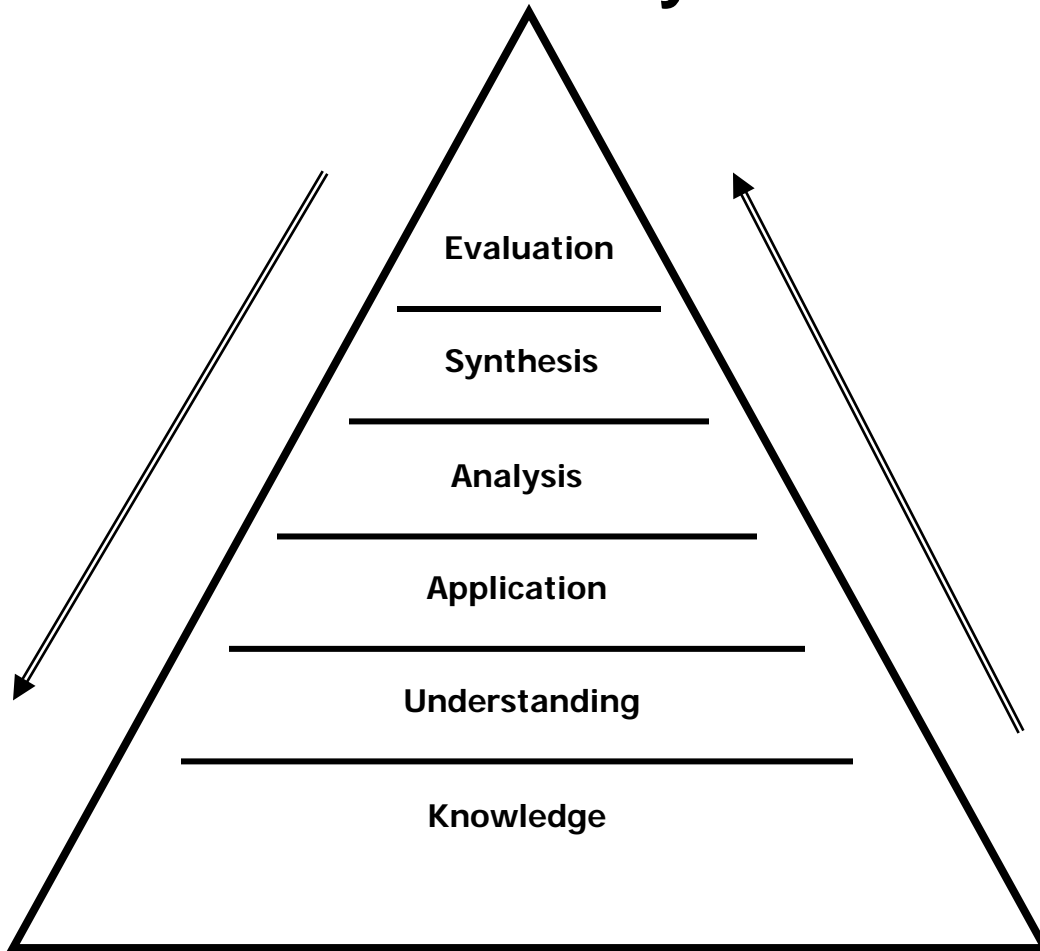
Benjamin Bloom created this taxonomy for categorizing level of abstraction of questions that commonly occur in educational settings. The taxonomy provides a useful structure in which to categorize test questions, since professors will characteristically ask questions within particular levels, and if you can determine the levels of questions that will appear on your exams, you will be able to study using appropriate strategies.

# Bloom's Skills Demonstrated

**Knowledge**
* \*  observation and recall of information
* \*  knowledge of dates, events, places
* \*  knowledge of major ideas
* \*  mastery of subject matter
* \*  question Cues:
  list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.

**Comprehension**
* \*  understanding information
* \*  grasp meaning
* \*  translate knowledge into new context
* \*  interpret facts, compare, and contrast
* \*  order, group, and infer causes
* \*  predict consequences
* \*  Question Cues:
  summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend

**Application**
* \*  use information
* \*  use methods, concepts, theories in new situations
* \*  solve problems using required skills or knowledge
* \*  Questions Cues:
  apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover

**Analysis**
* \*  seeing patterns
* \*  organization of parts
* \*  recognition of hidden meanings
* \*  identification of components
* \*  Question Cues:
  analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer

**Synthesis**

* use old ideas to create new ones
* generalize from given facts
* relate knowledge from several areas
* predict, draw conclusions
* Question Cues:
  combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if, compose, formulate, prepare, generalize, rewrite

**Evaluation**

* compare and discriminate between ideas
* assess value of theories, presentations
* make choices based on reasoned argument
* verify value of evidence
* recognize subjectivity
* Question Cues
  assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize

# BLOOM'S TAXONOMY OF LEARNING

**Adapted From: NWLINK.com/donclark/index.html**

## Domains, Taxonomies and Learning

Following the 1948 Convention of the APA, Benjamin Bloom took the lead to formulate a classification of the goals of the educational process. In 1956, a committee of colleges, led by Benjamin Bloom, expanded on the three domains of educational activities first identified by Bloom in 1948.

- **Cognitive**: mental skills (*Knowledge*)
- **Affective**: growth in feelings or emotional areas (*Attitude*)
- **Psychomotor**: manual or physical skills (*Skills*)

For the purpose of learning in the classroom, we will focus specifically on the **cognitive domain** in this course. The other domains are worth understanding; however, the cognitive domain is used to create learning objectives, develop testing and to assess understanding at POST and elsewhere in education.

Domains can be thought of as categories. Trainers often refer to these three domains as KSA (Knowledge, Skills, and Attitude). This taxonomy of learning behaviors can be thought of as "the goals of the training process" or the observable phenomena as a result of the training intervention. That is, after the training session, the learner should have acquires new skills, knowledge, or attitudes, or capacities.

The committee also produced an elaborate compilation for the cognitive and affective domains, but none for the psychomotor domain. Their explanation for this oversight was they had little experience teaching manual skills within the college level (I guess they never thought to check with their sports or drama departments). There has been significant work done regarding the psychomotor domain since that time, and it is also represented here for your review.

The domains as envisioned by Bloom and others divide 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.

## What's Taxonomy?

**"Taxonomy" is the science of "classification"**, so the well-known taxonomy (science) of learning objectives is an attempt to classify forms and levels of learning. It identifies three "domains" of learning, each of which is organized as a series of levels or prerequisites. It is suggested that one cannot effectively — or ought not try to — address higher levels until those below them have been covered (it is thus effectively serial in structure). As well as providing a basic sequential model for dealing with topics in the curriculum, it also suggests a way of categorizing levels of learning, in terms of the expected ceiling for a given program.

## The Cognitive Domain

The most-used of the domains, "Cognitive" refers to knowledge structures (although sheer "knowing the facts" is its bottom level). It can be viewed as a sequence of progressive contextualization of the material. (Based on Bloom, 1956)

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 above, 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.

The importance of Bloom's to your work as an instructor in policing is that the learning objectives and training and testing specifications of the POST Basic Course and other related training is based in this taxonomy. Specifically, the lower three levels (knowledge, comprehension, application) are the "tested" levels for academy graduation. The higher levels roughly translate to the skills necessary to cope with the complexity of policing in the field or related work environment. It is at the higher levels of Bloom's Taxonomy that we want to focus our teaching and lesson designing.

***Questions for you as an instructor:***

1. How do I shape my lesson plan in such a manner as to address all learning objectives in my subject area?

2. Do I, or should I, try to engage students in learning in any of the upper three levels?

3. Once beyond the classroom, which of the levels will be used most by students? Which is the most important?

## Bloom's Revised

The traditional model above is still "common currency", but Anderson and Krathwohl (2001) have made some apparently minor but actually significant modifications, to come up with a revision to Bloom. They focus on action words, indicating the sense of transfer being sought in learning settings:

|  | **Bloom** | **Anderson and Krathwohl** |
|---|---|---|
| Level One | Knowledge | Remember |
| Level Two | Comprehension | Understand |
| Level Three | Application | Apply |
| Level Four | Analysis | Analyze |
| Level Five | Synthesis | Evaluate |
| Level Six | Evaluation | Create |

Note the new top category, which is about being able to create new knowledge within the domain, and the move from nouns to verbs.

The lower three levels are still quite similar to those found in the original taxonomy, however, there is subtle, but substantive change found in the upper three levels. It is important to note that, even with the "new" version, almost all academic and educational institutions (including POST) continue to use the original taxonomy.

### *Questions for you as an instructor:*

1. How is this most like the previous taxonomy?

2. How is it most different?

3. Why would "create" be above all other levels of learning?

# Lesson Design and Planning

Our focus on effective lesson design begins with two points. First, is the learner and second are the clearly identified goals. The adult learner is a focus of this course. Effective lessons are those designed with the adult learner in mind. Therefore, effective lessons are relevant, engaging, active and learner-centered. Effective lessons incorporate the elements of Knowles' theory.

The second focus of effective lesson design is the clearly identified goals. These goals can be the POST outcomes for your course, or they can extend beyond the POST outcomes and include the life-long, important skills and knowledge necessary to being an effective peace officer. The space provided below, guides our thinking about our lesson goals and the big ideas in policing.

There are some cautions in thinking about effective lesson design. First is the 'convenience' caution. By 'convenience' we mean the convenience of getting the notes from the previous instructor. These notes may be easy to follow, but they may not have been created with clearly defined goals in mind. Another caution is the use of a favorite activity that students like and remember. Favorite activities may be fun and engaging, unfortunately though they may not have much to do with the learning outcome or be the most efficient use of classroom time. Examples of this shortcoming include showing a favorite movie clip or leading a favorite classroom demonstration that is fun and entertaining yet not connected.

The last caution we offer in lesson design is 'coverage.' Some call it, 'death by PowerPoint' or the 'Eternal War Story Epic.' This is the lesson where 150 slides are shown in a two- to four hour segment with no student processing or active student participation. It is the teacher's way of saying, "Hey, I taught it. They just didn't learn it."

To address the cautions listed above and to ensure a strong alignment to your outcomes and adult learning, we offer a lesson design called, Outcome Based Design (OBD). Outcome Based Design sets a tone of deliberate intention on your part as an instructor to address content and teaching from 3 points. OBD results in:

1. a more efficient use of classroom time,
2. an alignment of the learning experience with the desired outcome, and
3. more effectively supporting student learning.

The following page offers a process for designing an OBD lesson.

## _Outcome Based Design_

Think about what you want your students to <u>know</u> and <u>be able to do</u> at the conclusion of your course. Reflect on the three questions below that focus on the impact of your students. At the end of a lesson, an activity, or at the end of your course, as a result of your teaching:
1. How are recruits different, and in what ways?
2. What big ideas and core concepts do they now grasp that are related to your learning objectives?
3. How do you know they "got it"? What assessments did you use, and are they related to the performance expected in the real world?

In your planning and lesson development, a "backward planning" process is often used. By beginning with the end in mind, you ensure the lesson focus remains on where the learners should be at the end of the lesson. Focusing on the end goal expands beyond test scores and focuses on critical thinking.

The steps of this planning model are to:
- Identify the desired outcomes you want students to know and be able to do.
- Identify the 'evidence' the students will produce that demonstrates what they know and are able to do. 'Evidence' might be working through a scenario, producing a segment of a crime report, generating a memo to a superior, or modeling an interview of a victim.
- Consider the means you might use to assess student learning (e.g., how do you know they are getting it?) both "in the moment" (observations, questions, dialogue, demonstrations) and through formal means using performance tasks and other evidence (quizzes, tests, homework and journals)
- Tell the students what they will:
  - Know (key knowledge and skills) and
  - Be able to do
- Develop a lesson (learning experience) aligned with the outcome and student evidence. For example if you want students to know how to write a memo, they should write a memo. If you want students to know options available during a routine car stop, the learning experience should provide opportunities for them to experience the multiple options to consider.
- Design Learning activities to support the outcomes you have identified

# *Outcome-Based Design*

Identify Desired
Results
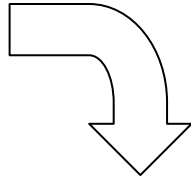
Determine Acceptable
Evidence
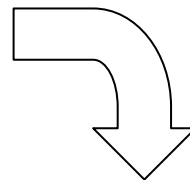
Plan learning
Experiences and
Instruction

- Results: Goals, content standards, training and testing specs, priorities (the "know" and "do")
- Acceptable Evidence: How you know students have achieved desired results; what is the evidence of student understanding
- Plan: Knowledge – key facts, concepts & principles; Skills – processes, procedures and strategies to perform effectively& achieve desired results
- Activities: to equip the student with the knowledge and skills

# A Planning Template

In academy training, your goals and learning objectives are often established by POST and contained in written training guides or pre-existing lesson plans. When training at your own agency or at times when teach for POST, you may be asked to develop a class yourself or in collaboration with other subject matter experts. If this is the case, outcome-based design using a planning template can be invaluable in helping you as the course developer cover material most effectively and efficiently.

## Worth Being Familiar With

### Important to Know and Do

#### Big Ideas
And
Enduring
Understandings
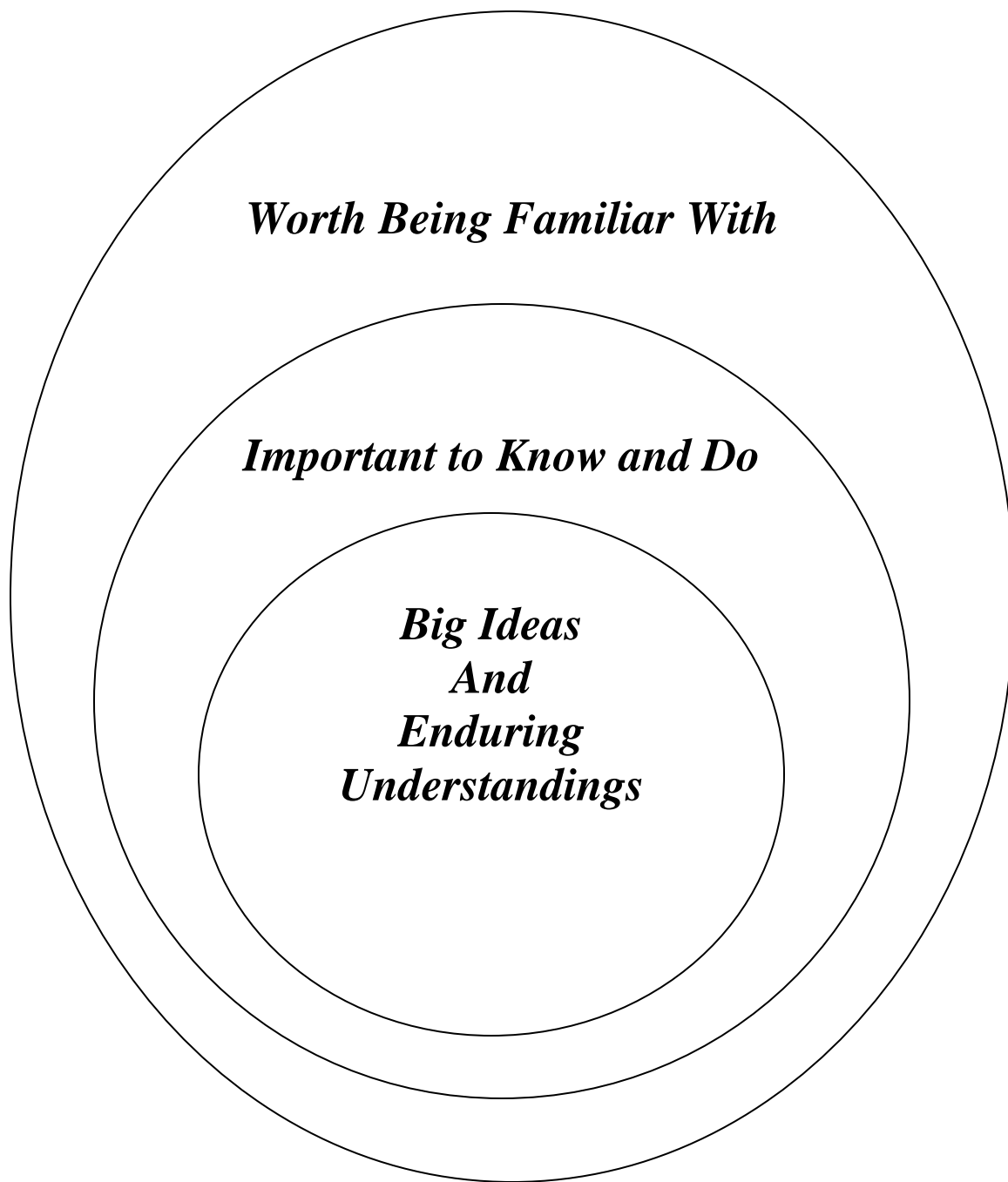
Adapted from G. Wiggins, Understanding By Design, 1998.

**Solving the Time-Content Dilemma**: Focus time on the big Ideas and Enduring Understandings, fill in the gaps with those concepts important to know and do; for items of familiarity, use job aids, handouts, articles, references or other sources.

## The Planning Process

| **Step One – Desired Results** |
| --- |

**Established Goals**
- What relevant goals (content standards, training specifications, learning objectives or learning outcomes) will your design address?
- For academy training, identify the relevant learning objectives from the Basic Course Training and Testing Specifications
- For in-service training, this may be identified through your needs assessment or other evidence the training is warranted

| **Understandings** | **Essential Questions** |
| --- | --- |
| "Students will understand that…" | What provocative questions will you |
| What are the big ideas? | Ask to ascertain learning? |
| What specific understandings are desired? | |

**Students will know…**                    **Students will be able to do…**
- What key knowledge and skills will students acquire as a result of training?
- What should they eventually be able to do as a result of the knowledge and skills gained?

| **Step Two – Assessment Evidence** |
| --- |

**Performance Tasks**
- Through what authentic performance tasks will students demonstrate the desired understanding?
- By what criteria will performance understanding be assessed?

**Other evidence**
- Through what other evidence (e.g., quizzes, tests, observation, homework, journals) will students demonstrate achievement of the desired results?
- How will students reflect upon and self-assess their learning?

## Step Three – Learning Plan

What learning plan and instruction will enable students to achieve the desired results? How will the design:
- Help identify prior student's knowledge and interests?
- Hook students and hold their interest?
- Equip students to experience key ideas and explore the issues?
- Provide opportunities to rethink and revise their understandings and work?
- Allow students to assess their work and its implications?
- Be tailored to the differing needs, interests and abilities of learners?
- Be organized to maximize initial and sustained engagement?

*The Lesson Plan*

Once you have considered the following two outcomes of your training you are ready to create your lesson:

1. the means by which you will assess student learning, and
2. what types of instruction will hook, hold and sustain their interest

There is often no set format for the specific lesson plan. Instructors may use a structure that roughly follows the course outline, or may vary from the "front to back" of the outline to describe the individual learning activities and how they link to one another. Your construction of what you will teach should be understandable to others who might view it, and should follow a logical process. It may include:

- An articulation of the learning objectives for the lesson segment
- Links to other segments of instruction (how does it relate to…?)
- Pre-assessment activities (What do they know, and where are the gaps in needed knowledge or skills?)
- Specific direction regarding the instructor's actions, student actions and activities
- Key questions students should be able to answer
- A listing of resources and equipment necessary to complete activities and instruction
- Time sequencing for particular components of instruction
- Means to assess understanding, both formally and informally
- Reflection activities (the synthesis of what was learned to other training segments and the world beyond the training setting)

> *__Note__: In Idaho, POST requires lesson plans to be written in the "T-bar" format using complete sentences for consistency and standardization purposes.*

In planning, designing and executing training, instructors often see they have more "content" than time available to teach. Inevitably, they must elect what to directly teach, and what might be discretionary. The figure on the following page should help in your consideration of content. It displays the concepts of concepts worth being familiar with, those important to know and do, and the "big ideas" and enduring understandings you are seeking for the learner.

Consider the core of what they should know and do as a result of training, remain flexible in your approach, and stay focused on the outcomes of your work.

## POST Lesson Plan Format

*Note: This example is for information purposes only and not an example of a correctly formatted lesson plan.   Your instructors will discuss formatting with you in class.

| | |
|---|---|
| **P O S T** | **Course:**     (List the Course Name here)<br><br>**Topic:**   (List the topic of the block of instruction.) |
| **In-Service Training Program**<br><br>(This may also read:<br><br>**Basic Patrol Academy**<br><br>**If written for an Academy Training Program.)** | **Instructor:**        (List the name of the instructor(s) Teaching this block of instruction.)<br><br>**Lesson Plan           (Name the person(s) who developed this Originated by:       Lesson plan)**<br><br>**Date Prepared:       (Record the date that the lesson plan was first prepared.)**<br><br>**Revision Date:        (Record the revision date(s) that pertain to this block of instruction.)** |
| **Goal:** | **(This is where you record the "GOAL" for this block of instruction.  Keep in mind that a 'goal' is a broad – lofty statement of what you want to cover in the block of instruction.)** |
| **Performance Objectives:** | **(This is where you record the "PERFORMANCE OBJECTIVES" that pertain to this block of instruction. Keep in mind that 'performance objectives' consists of four parts: The Condition, the Person, the Performance, and the Criteria.)** |

| | |
|---|---|
| **References:** | **(This is where you list your sources of information that was used in the creation and writing of the lesson plan.)** |
| **Instructional Time:** | **(Record the time frame for this block of instruction. Keep in mind that a normal block of instruction is 50 to 55 minutes.)** |
| **Equipment:** | **(This is where you list all the equipment that is needed to aid or teach this block of instruction. For example:** Overhead projector, prepared transparencies, screen, flip chart with markers, TV and VCR, PowerPoint projector, prepared PowerPoint presentation, White board with markers or black board with chalk.**)** |
| **Instructional Methods:** | **(This is where you record the method or methods that you will be using to teach this block of instruction. For example:** This block of instruction will be taught by use of a student involved exercise, facilitative style instruction, overheads, flip chart, and white board, and a video clip.**)** |
| **Instruction:**<br><br>In this part of the T-Bar section the following "**instructional notes**" needs to be included.<br><br>1: **Performance Objectives:** When you come to one of the performance objectives that is in the lesson plan, indicate it in this area.<br>2: **Curriculum Matrix Items:** This is where you make a reference note to indicate when one of the curriculum matrix is being covered.<br>3: **Test Questions**: If a test or quiz is being given at the end of this lesson plan, indicate the test question in this area.<br>4: **Visual & Instructional Aids**: Note when a visual aid is to be used.<br>5: **Key Words or Phrases**: The key words of phrases are to | **(This is the section where the "meat and potatoes" of the lesson plan is to be placed. Keep in mind that it is to be done in FULL SENTENCES, and in an OUTLINE FORMAT.)**<br><br>**Introduction:**<br>a. Introduce yourself, *if this was not done prior*.<br>b. Introduce the course and course objectives<br>c. State any expectations you have of the students. i.e. taking notes, on second and subsequent topics, have a transition statement and introduce this topic and cover topic objectives.<br><br>**Focus Events**: (Also referred to as "Lead-in" or "The Grabber".) Use whatever you wish to gain the interest and attention of the students to focus on the topic being taught.<br>a. Show a film/video.<br>b. Role model/scenarios.<br>c. Pose leading questions.<br>d. Pre-quiz.<br><br>**Modeling:** This is where the instructor will demonstrate new learning by using your input material to teach the topic.<br>a. This is where the instructor places all the material that is covered or being taught to the students in the order that it is to be taught.<br>b. This is the "meat and potatoes" of the lesson plan. |

| | |
|---|---|
|       act as a guide as to what is to be covered.<br>6:  **Student Activities:** Making of notes of a student activity.<br><br>7:  **Demonstrations**: Key word to indicate that a demonstration is to take place.<br>8:  **Questions**: Questions that are to be asked to the class or to an individual in the class. | **Curriculum Matrix Items:** Include the curriculum matrix items in the modeling section:<br>a.     Ethics and Professionalism<br>b.     Homeland Security<br>c.     Community Policing<br>d.     Officer Safety<br>e.     Use of Force<br>f.     Cultural Diversity<br>g.     Report Writing<br>h.     Idaho Code<br>i.     Safety Plan<br>j.     Debriefings |
| **Understanding:** | **(This is where you formulate how your are going to check to see if the students understand or can perform what you have just taught.)** This can be done by;<br>a.     A short quiz<br>b.     Student demonstration of technique<br>c.     Scenarios<br>d.     Small group activities<br>e.     Or any other activity that can reinforce the learning and stimulate interest and attention span in the topic. |
| **Closure:** | **(This is where you will go back and review what you have covered. The closure should reinforce the goal and objective(s) of the topic.)** Examples of this;<br>a.     Written POST topic quiz<br>b.     Verbal quiz<br>c.     Written formal exam<br>d.     Performance based exam, such as a demonstrated technique. (Practical Practice, hands on exam). |

# *Outlines*

Definition of an outline:  An outline is an organized or systematized arrangement of important elements of a topic.

There are three types of outlines;
a)  Single-word outline, (also known as a 'topic outline')
b)  Short-phrase outline, (also known as a 'topic outline')
c)  Full-sentenced outline (which is what is required by POST)

The purpose of an outline:  An outline is used to;
a) Prevent wandering off the subject
b) Give a quick over-all view of a topic (single-word or short-phrase)
c) Ensure proportionate space to each part
d) Aid in organizing and giving order to the topic
e) Enable one to spot missing or irrelevant matter

The form of an outline:
I:
II:              First Level
III:             Upper case - Roman Numerals
IV:

    A:              Second Level
    B:              Upper case – Alphabet
    C:

> There must never be less then two entries per level from level two down.

        1:              Third Level
        2:              Numbers
        3:

            a.              Fourth Level
            b.              Lower case - Alphabet
            c.

> Each level is to indent in one tab as you drop in the levels.

                i.              Fifth Level
                ii.             Lower case – Roman Numerals
                iii.
                iv.

| I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | XIII | XIV | XV | XX | L | C | D | M |
|---|----|-----|-----|---|----|-----|------|----|---|----|-----|------|-----|----|----|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 20 | 50 | 100 | 500 | 1000 |

# *References*

**What is a "Reference" section?**

The reference section is a list of resources such as books, articles, and other publications, etc., about a subject, or person, or by a particular author, that is used as a source in your product. Videos and visual aids should also be included to give credit to those who created them.

**Why do we use a "Reference"?**

Why? One word – *"Documentation"*. It is not good enough to have well written lesson plans, and to teach in the best style, for students to obtain the highest levels of retention; we need to know from where the training material came from. In cases where the training comes into play, in the courtroom, lawyers have been requesting to know where the training information came from. What is the source of the training material, was it something that someone just made up as they went? References also give credit to those whose ideas are included in the final product.

**Where do we place a "Reference"?**

In POST lesson plans, the reference section will come after the objectives block. Some instructors discuss references at the end of the training program, while others place a smaller reference section at the end of each block of instruction, with only the source information pertaining to that block.

**Examples of different reference entries:**
The following are examples of a variety of entries that one would find in a reference section.

**Book:**
Kerrigan, William, and Gordon Braden. <u>The Idea of the Renaissance</u>. Baltimore: Johns Hopkins UP, 1989.

**Book - one author:**
Newberry, Louis. <u>Hair</u> <u>Style</u> <u>Design</u>. Los Angeles: Newberry Publishers, 1946

**Book - no author:**
<u>Harper's</u> <u>Bazaar</u> <u>Beauty</u> <u>Book</u>. New York: Appleton-Century-Croft, 1959

**Book - three authors:**
Thomas Murrey, Julie Elwood, Gordon Smith. <u>Integrative</u> <u>Speech</u>. New York: The Dryden Press, 1953

**Journal Article (in a scholarly journal with continuous pagination):**
Craner, Paul M. "New Tool for an Ancient Art: The Computer and Music." <u>Computers and the  Humanities</u> 25 (1991): 303-13.

**Journal Article (in a scholarly journal that pages each issue separately):**
Hallin, Daniel C. "Sound Bite News: Television Coverage of Elections, 1968-1988." <u>Journal of  Communication</u> 42.2 (1992): 5-24.

**Magazine Article:**
Bazell, Robert. "Science and Society: Growth Industry." <u>New Republic</u> 15 Mar. 1993: 13-14.

Rollin, Roger B.  "Beowulf to Batman: The Epic Hero and Pop Cultures".
<u>College English</u>, 31 (February 1970), 431-49

Gilman, Richard.  *"The FemLib case against Sigmund Freud"*. <u>The New York Times</u>
<u>Magazine</u>, January 31, 1971, pp 10-11, 42-47.

Marano, Hara Estroff. "Domestic Violence." <u>Psychology Today</u> Nov.-Dec. 1993: 48+.
(Information only:  Do not give the volume and issue numbers even if they are listed.   If the article is not printed on consecutive pages, write you can record the first page number and a plus sign.)

**Daily Newspaper Article:**
Feder, Barnaby J. "For Job Seekers, a Toll-Free Gift of Expert Advice." <u>New York Times</u>  30 Dec. 1993, Natl. ed.: C1+.

**Entry in an Encyclopedia:**
"Mandarin." <u>The Encyclopedia Americana</u>.  Book 'M', 1993 ed.
Trainen, Isaac N., et al. "Religious Directives in Medical Ethics." <u>Encyclopedia of Bioethics</u>.
Ed.  Warren T. Reich. 4 vols. New York: Free, 1978.

Macaulay, Thomas Babinton.  *"Samuel Johnson"*
<u>Encyclopedia Britannica</u>.  11<sup>th</sup> ed., XV. 463-71

**Pamphlet:**
Chafee, Zechariah, Jr.  <u>Freedom of Speech and press</u>.
New York: Carrie Chapman Catt Memorial Fund, 1955

League of Women Voters of the united States.  <u>Choosing the president</u>.
Publication # 301. Washington.

U.S. Bureau of the Census.  <u>Historical Statistics of the United States, Colnial Times to 1957</u>;
<u>Continuation to 1962 and Revisions</u>. Washington, D.C.: U.S. Government printing office,
1965.

**Television Program:**
"Designing Woman." Rept. by Maria Shriver. *Dateline.* NBC.  KHNL,
    Honolulu. 15 Mar. 1998.

"Hurricane." *Raging Planet.* Discovery Channel. 21 Mar. 1998.

**"Secrets of Lost Empires."** *Nova.* **PBS.  KHET, Honolulu. 26 May 1998.**

<u>**Video Recordings and DVD's**</u>:
Monet: *Legacy of Light.* Write., Dir., and Prod., by Michael Miller.
Videocasette, WBGH Boston, 1989.

<u>**Web Site – (professional or personal)**</u>
*Basic Hula Words.* 8 Nov. 2000 <http://www.geocities.com/~olelo/o-h-general.html>.

Li, Rong-Chang. *English as a Second Language.* 6 Nov. 2000 <http://www.rong-chang.com/>.

Harden, Mark. *Picasso the Legend.* The Artchive. 6 Nov. 2000
    <http://www.artchive.com/artchive/P/picasso_postww2.html>.

*Dinosaurs in Hawaii!* Honolulu Community College. 6 Nov. 2000
    <http://www.hcc.hawaii.edu/dinos/dinos.1.html>.

<u>**E-Mails**</u>:
Crispen, Patrick D.  "Online Tutorials". E-Mail to the author.  32 Aug. 2000.

Johnson, David R.  <u>drjohnson@aol.com</u>  E-Mail to author.  17 May 2003

# *Constructing Learning Activities*

In this segment, participants will have the opportunity to brainstorm ideas for constructing learning activities for their specific training. Using the resources in this workbook (lesson planning templates, the nested circles representing the focus on "big ideas" etc.), by the end of Day Four of the course, you will have completed:
- A brainstorming process identifying potential learning activities
- A draft of at least one learning activity using a structure of your own, or following the listed what-why-how structure provided below
- A peer coaching review session of the draft learning activity
- Preparation for your presentation on day 5 of this course

## Learning Activity Workshop Protocol
The following process will be used to provide each member of the class to work individually and in pairs to generate learning activities.

1. 15 minutes – Individually brainstorm ideas and concepts you might consider for a learning activity. Peer coach asks:
    - What elements of the LA are aligned with the learning objectives of your training module?
    - If you do this LA, what might the students 1) look like, 2) sound like, and 3) be doing when they are engaged in the activity?
    - What elements of the activity will you have that tells you, in the moment, it is effective and that they are "getting it?"
2. 10 minutes – Explain to your partner the learning activity you are considering, including how it might align with the outcomes.
3. Repeat step 2 by reversing roles.
4. 15 minutes to refining what you might wish to do based on the peer conversation
5. 48 minutes (eight minutes per person) for the group of six to review and add ideas and impressions to the draft learning activity
6. Discretionary time for partners to complete work to draft the learning activity and any other work necessary to deliver their presentations on the last day of the course

## What – Why – How
There are a number of possible formats to construct and write out a learning activity. This one is used in this workbook, and is a consideration for your work. The format is:
- What the activity is (title and brief description of the activity)
- Why it is being done (how it relates to the topic, what learning objectives it addresses, what outcomes might be expected, etc.)

How it will be done (the mechanics of the learning activity from start to finish, including decision points for the instructor predicated on time constraints, need for small group versus large class focus, etc.)

# Car Stops

The following is a sample lesson plan template identifying the big idea, essential questions and key knowledge. The assessment is at the bottom identifying what students will create as evidence of their learning.

**Big Idea:**
Car stops have both predictable and unpredictable elements that influence your tactics.

**Essential Questions:**
1. What do you need to know and recognize when making a car stop?
2. What predictable actions might occur?
3. What unpredictable actions might occur?
4. What tactical options do you have and what determines your selection of tactics?

**Key Knowledge**
1. Vehicle placement
2. Traffic flows
3. Escape routes
4. Backup
5. PC
6. Characteristics of the car
7. Number of occupants
8. Partner communication

**Set up and materials**

| Groups of 6 | Materials |
|---|---|
| 2 in the car | Plastic gun |
| 2 officers | Plastic knife |
| 2 observers | Contraband |
| | Alcohol beverage |

**The scenario:**
1. Students in the car decide, among 3 options, what they will do during the car stop (1 min)
2. Observers watch the officers and occupants while they take notes on what they observe officers making the stop (2 min)
3. Pairs as thinking questions (4 min)
4. Group identifies what they learned. Generates at least 2 questions about what they want to know. (3 min)

**Debrief:**
1. Observers ask officers thinking questions and officers respond to thinking questions
2. Observers ask probing and clarifying questions to surface the officers thinking about predictable and unpredictable outcomes
3. Group reflects on what they learned, what they have questions on, and what they want to learn next.
4. Group of 6 rotates roles until each pair sits in each role.
5. Time of activity 30 minutes for all 3 rotations (10 minutes per rotation)

**What student evidence will be generated for evaluation of what they know and can do?**
1. Student demonstrates an appropriate car stop.
2. Student can explain the tactics used and why.
3. Student can appropriately answer questions on key knowledge from peers and instructor.

# Lesson Title

.

**Big Idea:**

**Essential Questions:**

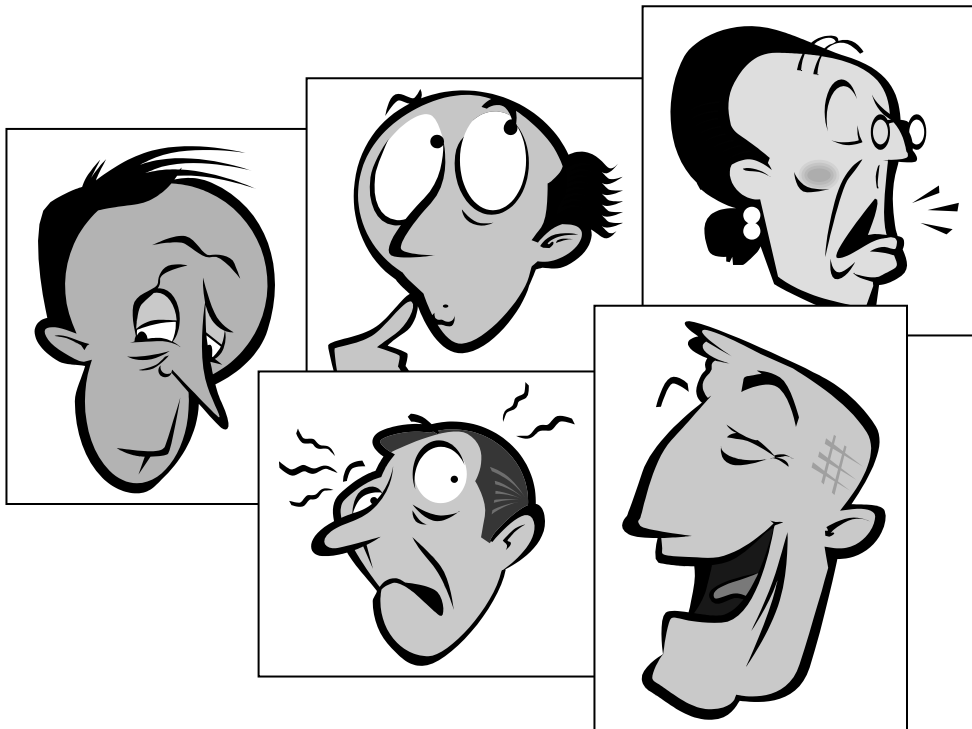**Key Knowledge**

**Set up and materials**

**The scenario:**

**Debrief:**

**What student evidence will be generated for evaluation of what they know and can do?**.

# Chapter 3

# Instructional Uses of Nonverbal Intelligence

# Nonverbal Intelligence Skills for Instructors

Adults can quickly evaluate the quality of a lesson or presentation. Their reactions are based on processes that happen below the surface of consciousness. Often their judgment is based on nonverbal (paralanguage) signals being used by the presenter.

Experienced instructors are generally good at making these kinds of judgments. You rely on a concept called "quick cognition," the same process peace officers use during a crime in progress. This intuition draws from a database built in your subconscious as a result of your experience and reflection. The purpose of this chapter is to bring your intuition to consciousness and give you more control and effectiveness when teaching. Current research and common sense reveals communication outside what we verbally say makes up to 80 percent of the messages (Miller, 1981). What we do with our gestures and voice has an influence on how much learners learn. Surprisingly, the gestures of learners also inform teachers what students know and almost know.

Research also reports the learner's memory is enhanced when a teacher's gestures are coherent and congruent (Alibali, 1997; Goldin-Meadow, 1999). The essence of the research findings is that information flow can be enhanced through the conscious use of gestures and other nonverbals. What you do with your voice, body, breathing, and gestures add information to verbal content (Kelly, 1999), helps develop your relationship with students, and can increase your influence. Planning paralanguage moves is as important as planning teaching strategies and content. Planning allows you to be proactive.  To be reactive restricts your options. If we can plan and anticipate, we have at our disposal our entire range of paralanguage skills.

## Nonverbal Intelligence

Nonverbal communication in itself is not new. What is new is a body of knowledge and credible research that details the results of varying teacher's non-verbal skills on memory, energy and learning environments. We can think of the set of nonverbal skills as being the foundation to Nonverbal Intelligence. Our purpose in this training is to develop and increase your Nonverbal Intelligence. Like any intriguing natural phenomena, like skipping rocks on the surface of water or watching the falling rain, what we see looks simple but what lies underneath is rich with complexity and

nuance. This is true, too, about non-verbal communication.

Without relationship, there is a decreased flow of information.  Without information, there is no learning. In Wheatley's Leadership and the New Science (1992), leadership (like teaching) is always dependent on the context, but the context is established by the relationship we value. Our relationships influence the flow of information. With relationships, information flows. Without relationships, information is impeded. The paralanguage moves that enhance relationship and thus facilitate information flow are explored in this section.

Let's examine how paralanguage is useful in several phases of instruction; getting attention, instruction, transition and independent work.

## The Lesson

Think of a lesson from the frame of four phases (see Figure 1).  First an instructor must 'get the attention' of the learners. Second is the teaching phase where content is teaching. Third is the critical 'transition' phase where the instructor is finished presenting and shifts the energy and focus to the students.  Their job is to engage in an activity that will develop the learning of new material.



**Figure 1**:  Phase of a lesson with feedback loops:
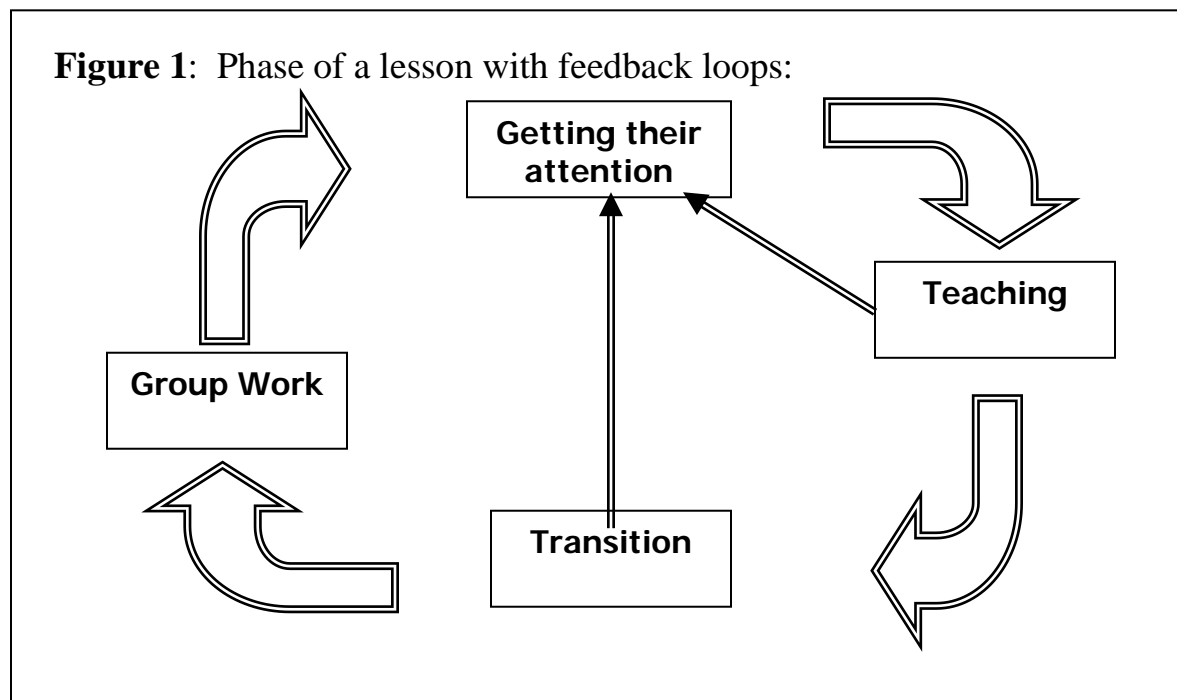
The final phase is when they are released to work alone or in groups. This is a time when students grapple with the content.

After finishing an activity it is back to "getting their attention" and the phases repeat. The movement through the 4 phases is dynamic with the fourth phase being the most unpredictable because students process content at different times, sometimes activities need to be shortened or lengthened depending on the teaching.  What follows explores specific paralanguage skills for each phases of instruction.

## <u>Phase 1</u>: Getting their attention

**Skill 1:** Choose Voice
Chose Voice requires a conscious selection of voice modulation.  The modulation continuum can be labeled "credible" at one end and "approachable" at the other. Either extreme on the continuum evokes a perception from the group. Credible in many cultures is represented by a flat voice tone that drops at the end of a sentence. *For example*, think of the following pattern spoken by the former newscaster, Tom Brokaw: "This is Tom Brokaw, and this is the news."  A voice and chin drop at the end of the sentence signals to the group that what follows is information worth hearing.

On the other end of the continuum, the approachable voice sounds a bit – but not exactly – like asking a question. In fact it is the voice you want to use when eliciting information – it sends the message that this is about interest, not interrogation. The approachable voice signals the speaker is seeking information or being tentative in the delivery of the message if the message may be pointed or not well received.

The speaker's intention should be supported by the appropriate paralanguage pattern. If the intention is to send information, select the credible voice. If the intention is to seek input and ideas, then use the approachable pattern. Congruency of words and voice make good oration. This is especially important in light of the work of Goldin-Meadow (1999), who reports that students who are taught by teachers who are incongruent in their verbal and nonverbal signals achieve at lower levels than students with teachers who are congruent in their verbal and nonverbal signals.

To become aware of your own personal range of voice pattern and to explore beyond that range, the following exercise can be useful. Using a credible voice, say aloud the phrases below, this might be used to open a meeting. Notice your voice and the emphasis on the last word of each line.

- Welcome to today's training
- Today's topic
- Restraint and holds

Now repeat the same script using a very approachable voice with a lot of bounce and rhythm. Lift your chin at the end of each line to accentuate your voice modulation.  Notice the effect on the message delivered.  Hmmmm.  The credible sounds right; the approachable is not congruent with the message.

Approachable

Credible
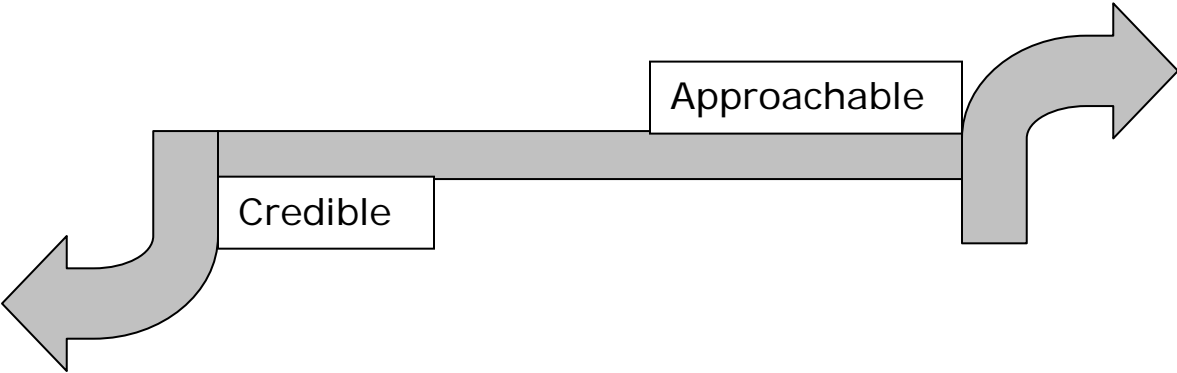
**Skill 2:** The Pause

A second skill, pausing, enhances message delivery and acceptance by allowing the speaker and the listeners to breathe while the message is delivered. Breathing is essential to support cognition, not to mention life in general.

The importance of breathing can best be understood by recognizing the human brain is about 3 percent of body mass but can consume up to 37 percent of inhaled oxygen.  Breathing is controlled from the pons and medulla oblongata at the base of the brain (Campbell, 1999). When we hold our breath, the carbon dioxide levels in the blood increase. The body reacts to a carbon dioxide increase much in the same way that it responds to threat by releasing hormones that support the fight-or-flight response.

In addition, the human brain is hard wired to detect threat, which results in decreasing blood flow to the frontal lobes and increasing flow to the brain stem. When we hold our breath or perceive a threat, thinking is negatively impacted. Action, not thinking, becomes the priority. Pausing in appropriate places during the

delivery of content supports group breathing and establishes a low threat environment, thus allowing both instructor and students to think more clearly and effectively.

To understand the difference between high (shallow) and low (deep) breathing, we must first recognize breathing on a conscious level. Try the following: Recall a situation that was difficult. Stay with it a moment and re-experience it. Notice that your breathing is probably high and shallow. Now, in contrast, recall a vacation that was pleasurable. Notice your breathing. It is probably deep and slow. Both the instructor and students should stay as much as possible with the second type of breathing to maximize their mental functioning.

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**Pausing is particularly effective in five different contexts:**
- As punctuation in a lecture
- After you ask a question
- Before a person responds
- After a person responds
- With the whole group

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How you use the pause as a trainer depends on your intention.  Your intention might be to focus the group on a question, to build anticipation for what you are about to say, to provide think time, or to provide process time for integration and reflection. Individuals need time to process and construct their thinking, and the pause provides that time. Pausing promotes thinking. Not pausing can get in the way of learning and inhibit the flow of information.

**Skill 3:** ABOVE (pause) whisper.

This skill is also grounded in the work of Grinder (1998) and is a skill used to get the attention of a large group. When working with adults, one consideration we must always make is how to manage adult groups without them feeling manipulated. Often when working with adult groups when management becomes overt, the group can shut down. The skill "ABOVE (pause) whisper" is appropriately covert, and can be used with almost any size group.

The speaker's "ABOVE" is slightly louder than the loudest noise in the room. To effectively use the ABOVE, simply wait until the collective volume of the group

begins to decrease before speaking. You need to deliver only a word or two in the "ABOVE" voice. Next comes the pause, the single most powerful nonverbal.  It is a skill that allows the speaker to breathe and to more effectively observe the group. The pause also provides a break in pattern. Since our brains are hard wired to detect changes in patterns, the pause influences the listeners, especially the kinesthetically oriented participants.  Last is the whisper.

Those with acting backgrounds know what a whisper is.  For the rest of us, think of soft stage whisper. The pause offers another change in pattern and quiets the group. At this point, you can face the group and continue with a polite "thank you." An effectively delivered ABOVE (pause) whisper is a sophisticated management tool that can reap respectful results with adults.

**Skill 4:** Freeze Body

A fourth skill for getting the attention is Freeze Body. This is designed to get the attention of the listener by visually saying, "Listen to me." You can think of students as having visual, auditory, kinesthetic preferences in the way they process information.  Freeze body draws the attention of the audience to the speaker and is particularly effective with kinesthetically oriented individuals.  These are participants in a class with whom the instructor has the hardest time gaining their attention. Since kinesthetically oriented learners often do not readily process information they hear or see, the freeze body skill indicates to them in a respectful manner, "be quiet and pay attention!" We all know how quickly an adult group can shift and resist when they perceive overt management tricks. Our challenge is to learn how to manage the group in a sophisticated manner that models respect and safety to support critical thinking.  The successful implementation of freeze body is simply to freeze your body when you talk and during the subsequent pause.  To write about standing still is bit ridiculous, so we will practice the skill.

By using these skills: credible to approachable voice; pause; ABOVE (pause) whisper; and freeze body you can open and sustain the pathways for information flow. At the same time, you establish an environment that is low in threat and high in challenge, what the Caines (1998) call "a state of relaxed alertness," a state that primes the mind for learning.

# Phase 2: Teaching Phase

The paralanguage specific to this phase is simply represented by raising your hand. The nonverbal is the act of raising your hand.  The verbal message is, "Raise your hand if you know ___."   When rapport is high between the students and the instructor, a simple silent raising of the hand to indicate students to do the same is usually sufficient.   If 'call outs' become too frequent and interrupt the flow of instruction, you can do one or more of the following:
1.      Raise your hand, and with the other hand, tap the raised arm.
2.      Raise your hand at the same time saying, "Raise your hand."
3.      With one hand, gesture with the palms down, break eye contact, and freeze
        for 2 seconds. Then with your other arm, raise it and re-establish eye contact.

# Phase 3: Transition Phase

In any lesson, the transition from teaching to individual or group work can be a source of chaos. Instructions are given on what to do, content is provided on what to know. And with the best of intentions, some students still ask, "Where do I start?" or "What are we supposed to do?" And sometimes even with the task as understood, the content presented is not sufficient enough for the students to continue. In any event, the outcome is that you need to GTA again and possibly re-teach or provide the activity process again.   The following section outlines and explains the paralanguage tasks that support effective transitions.

**Go visual**

For most transitions to be effective, the steps of the subsequent group activity should be presented visually, usually on the overhead.  The reason is that people pay attention at different times and to varying degrees.  By placing the activity steps visually, individuals can access their next steps without having to ask. This helps maintain a psychologically safe environment for learning by not requiring adults to ask for something to be repeated.

**PAG-PAU**

PAG is the 'process as given' of the steps of the activity. Once the activity steps have been presented it is useful to assess group understanding of the activity that follows. Participants often interpret instructions differently. You can go slowly in direction giving to allow participants to go fast in task accomplishment. Process as given: Process as understood is a strategy that supports group understanding. PAU, 'process as understood' is simply asking, "Can someone please repeat the process steps we are about to do?" Followed by, "Are there any questions or items that need clarifying before we begin?"

**MITS**

Once an activity process is understood, it comes time to release the group to begin the activity. Sometimes there are questions immediately after an activity starts, often may not be necessary since the answers are visually posted. When it comes time to release the group to an activity, release them. Then stand still for 20 seconds and do not take any questions. The stillness of the instructor is a symbol that the work is theirs to do. Often the one or two questions that do come up during the first 20 seconds are answered in the visually displayed instructions or forgotten because it was not that important. This is called Most Important 20 Seconds.

**Reading the group**

Individuals process at different rates and groups complete tasks at different end times. Knowing when to pull the group back or knowing when the majority of the participants have completed the task is a skill every good teacher needs.

Watching for the approachable voice is one good indicator the learners have completed the task. Typically, approachable voice patterns are not used for content. When visually scanning the group if you locate a group or set of individuals that appears to have completed the task, you can interrupt the whole group and use the skill called minute fingers to re-focus the group.

**Minute fingers**

This skill is powerful in that it promotes group autonomy, group cohesiveness, and honors the different learning styles.  To do minute fingers, ask the group to indicate on one hand, how many minutes they need to complete the activity. And at the signal, raise that hand with the minute fingers you selected. Provide a time range; say 0 to 4 minutes. When you give the signal, scan the room reporting the number of fingers you see. Using humor as the vehicle, say "according to my calculations, it looks as though 1.74 minutes will be sufficient for the groups to complete the activity."

Minute fingers indicate to the individuals where everyone else is in the process. It acknowledges that some have completed the activity and others have not.  By using minute fingers you place the awareness and responsibility of focusing on the group.

Minute fingers may also be used to advise groups how much time remains for that activity.

**Recovery**

Even with the best of intentions, every lesson runs the risk of going off course. Every instructor runs the risk of 'stepping in it.' Maintaining credibility is important to good teaching. Creating credibility comes from knowing the content, designing effective lessons, responding appropriately to questions, and dealing with difficult situations such as bringing a group that is off task back on task, or quieting the incessant talker. Recovery will be discussed later in a section about "break and breathe."

# Establishing Credibility

Credibility is a perception by the group of the teacher or presenter. To enhance their perception of your credibility there are several useful paralanguage    patterns which will be demonstrated and practiced during this training.

Freeze Body

Breath

Frozen Hand Gesture

Hands at 90°

Equal weight on both feet

# Maintaining Credibility

An instructor's credibility can be challenged. This can occur when:
- a student asks a difficult question,
- when the teacher's content knowledge is not sufficient,
- when the teacher provides a response to a question that is not satisfactory to the group

In any of these cases the group's perception of the teacher's credibility can be in jeopardy. The following set of skills is useful in maintaining credibility under these situations.

**Break and Breathe**

Location can stimulate memory. If you are not getting the response you want from the group, that location is no longer effective. When this occurs, consider the following. Wherever you are standing, pause. Then drop all your nonverbals – hands, eyes, and voice. Walk away and do not make eye contact with the group. Exhale as you take your first step. Then 'step' into a new location, with amnesia (meaning a whole new gesture, voice, and position) proceed with the lesson.

The impact on the group occurs on at least two levels. First there is a change in pattern. The brain – an organ that has mastered how to pay attention to patterns and pattern shifts, recognizes this shift. Secondly, since you moved, the individuals in the group needed to move their eyes and heads in order to continue watching you. This too marks a shift in pattern as well as offering a new perspective or angle from which to pay attention.

**Change Location**

Move to a new location. It can be one step or many steps from where you did the Break and Breathe. This creates a new location from your content knowledge and expertise. You can refer back to the old location by using a gesture.

**Acknowledge Resistance**

There are many reasons participants display behavior we recognize as resistance. Sometimes the resistance is directed at content, learning, simulations, role-playing, class, or just simply having to attend a course. In the lesson design, by acknowledging up-front the existence of resistance you set a proactive stage to dealing with inappropriate behavior or comments. Being proactive gives you more options to choose from as you choreograph your teaching.

**Responding to Difficult Questions**

Individuals ask questions for many reasons. Groups form reactions to the questions. Groups may be surprised by the question, or irritated, or even annoyed. Since the group's psychological safety is one of the primary responsibilities of the teacher the following skills are suggested for responding to the group's reaction to difficult questions.

**Challenging Behavior**

When instructing a room full of adults you cannot expect complete attention from each participant all of the time. Nor can you expect all behavior to be appropriate.  In every teaching experience there are surprises, unexpected events, and unexpected behaviors.  The key to navigating through these 'hiccups' is to presume positive intentions.

We all have expressed behaviors that were inappropriate. We may have offended a person or hurt their feelings; perhaps even shocked or surprised them.  Many psychological schools of thought hold that people choose behavior, often unconsciously, to attain some goal or satisfy some need.  Often these behaviors can be counterproductive to the group, but personally beneficial to the individual.  If so, intervention is necessary, yet the most effective interventions are delivered when the instructor works as if there are positive intentions below the inappropriate behavior. One of the author's writes (Garmston, 2005) "I was presenting to a large group and a person at one of the front tables keep closing her eyes and nodding off.  I tried every
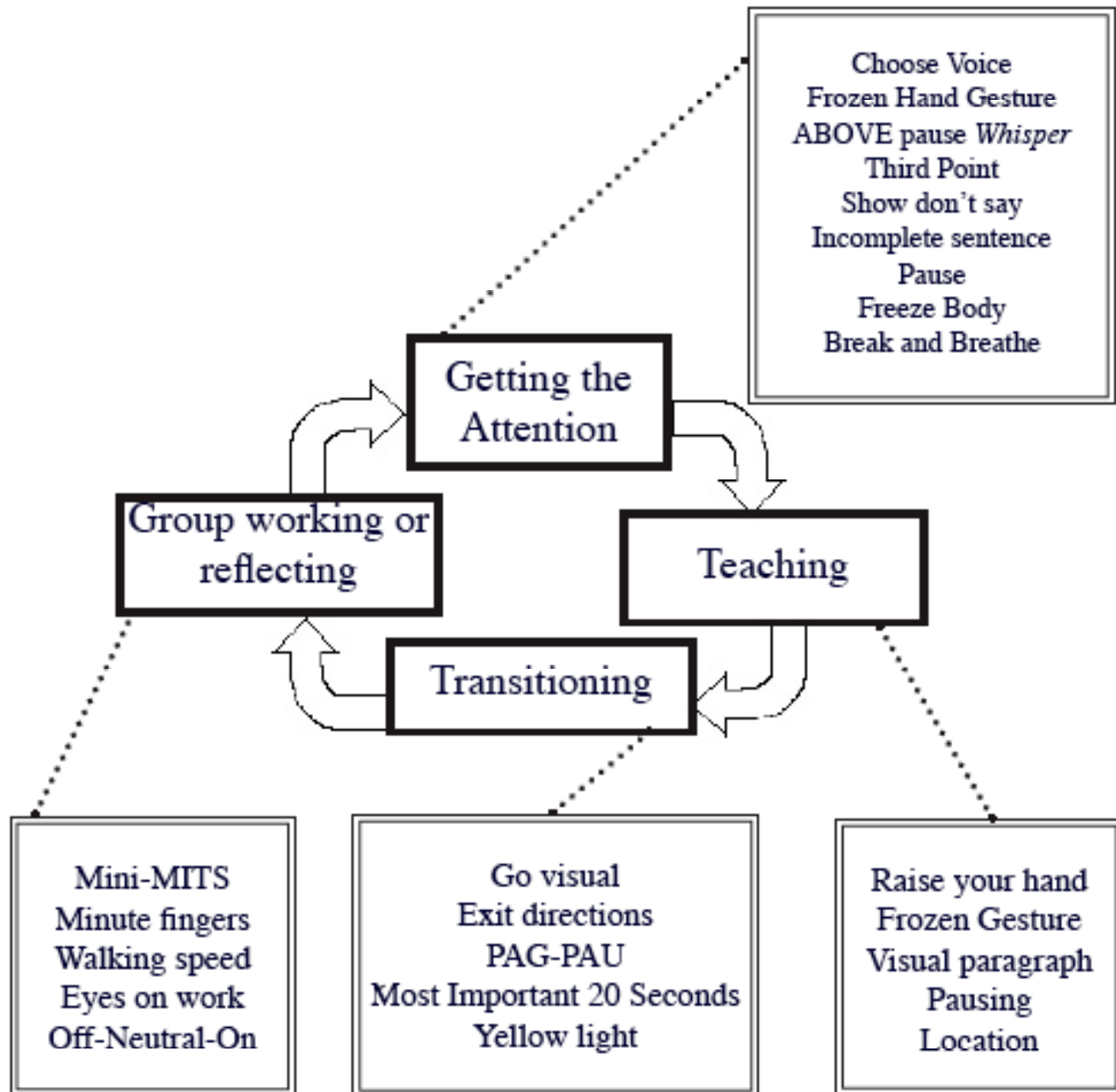
facilitation skill and paralanguage skill I knew and could not get her to react. I was getting frustrated and the presentation was getting rough.  During the break I went over to her to talk.  We visited a few minutes; I soon asked her how she was enjoying the course.  She perked up and said she was really enjoying it. She then apologized and said, "I flew in this morning from Thailand, 15 hours. I have been up for 28 hours straight but I did not want to miss this session. I am sorry I am so tired but I just had to be here."

Whether it is falling asleep, doing crossword puzzles, or side talking, all these behaviors, however annoying, will have positive intentions.  As the instructor, find out why. Then if you have to 'manage' the situation you can do it privately and discreetly. This preserves group rapport, and is respectful to the individual.

## **Remember**

- Apparently inappropriate behaviors are not necessarily aimed at the instructor
- Counterproductive conduct is often beneficial to the person engage in it
- You, as the instructor, should "unhook your ego" and seek data to confirm the underlying motivation of the conduct
- Address the behavior and offer options to resolve the conflict in conduct

# 4 Phases of a Lesson

Choose Voice
Frozen Hand Gesture
ABOVE pause *Whisper*
Third Point
Show don't say
Incomplete sentence
Pause
Freeze Body
Break and Breathe

**Getting the Attention**

**Group working or reflecting**

**Teaching**

**Transitioning**

Mini-MITS
Minute fingers
Walking speed
Eyes on work
Off-Neutral-On

Go visual
Exit directions
PAG-PAU
Most Important 20 Seconds
Yellow light

Raise your hand
Frozen Gesture
Visual paragraph
Pausing
Location

## Group Dynamic Skills

High and Low breathing
Group Reaction - shock, confused, annoyed
Unison responses
Echo
Gestures for linking / seperating
4th Point - acknowledging resistance

# Chapter 4

# Facilitating

# Why Facilitate?

**For You:** In This Training

1. To practice and demonstrate teaching concepts and skills with a partner.
2. To learn by planning, practicing and reflecting with a partner.
3. To learn by watching others instruct.
4. To learn by reflecting and discussing the presentations of group members.

**For You:** When Teaching a POST course or classes at your agency

1. Better planning.
2. Higher levels of personal energy maintained over long periods.
3. Rescuing by your partner when stumped, challenged or tired.
4. Demonstration opportunities made possible.
5. More effective reflection and instructor learning.

**For Participants:** in POST courses or classes at your agency

1. Participant energy is higher
2. Participant learning is greater due to:
   - Variation in voice.
   - Variation in teaching style.
   - Attention is better.
   - One partner serves as back up to monitor and react.

# Some Self-Coaching Questions

- How do we feel about our team work?

- How do we feel about my, your, our contributions?

- What's our assessment of participant learning?

- What do we think contributed to the learning that occurred?

- What are we learning about me, us, co-presenting, this topic, this audience?

- Where and how might we apply our learning?

- What new questions are we asking ourselves?

- What might we work on next?

<u>Co-Facilitation</u>

# Co-Facilitating Agreements

- We are a team

- Learning goals have priority

- Permission to do what is necessary

- There is no right way

- Prior agreements can change

- Plan together, plan apart

# The First Two Responsibilities

1. Personal composure
2. Make my partner look good

Note:

Good facilitation is about motivating students to learn in a manner that is relevant and mindful. Make that your focus and strive to be a co-facilitation team that works together and anticipates each other's moves. If miscues or mistakes happen - *and they will* - recover quickly and adjust to the change by striving by making a fluid course correction.

Don't draw attention to who caused the mistake or miscue in front of the students, it can be discussed later between you and your partner.

# Co-facilitator Tips

- Outline a sequence
  - Decide who starts, who stops
  - Mark concepts to punch
  - Stand close
  - Be focused

- Alternate brief content bursts

- Finish each other's sentences

- Cue with subtle signals

- Overtime, exchange content

- Surprise each other

# Co-Facilitation Forms

1. **Tag Team**

   a. Easy to use in relationships. Useful when one person has content expertise. Off stage partners can learn content and monitor audience response.

2. **Speak and Interject**

   a. First person leads and is the primary presenter. Make decisions. Distance – less than six feet – to pick up signals.

   b. Second person adds. Fills in missing data, tells anecdote, explains, picks up pace, watches and makes contact with the audience.

3. **Speak and Chart**
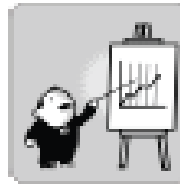
   a. First person presents content or elicits trainee comments.

   b. Second person focuses audience observations by commenting.

**4. Perform and Comment**
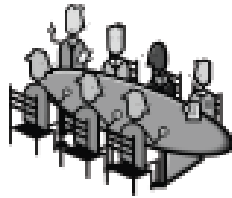
a. First person demonstrates an interactive skill with an audience member.

b. Second person focuses audience observations by commenting.

**5. Duet**

a. Both speak as one mind. Stand close, alternate voices - spontaneously complete each other's sentences.

# Single Presenter Protocol

The single-presenter learning experience is intended to provide you an opportunity to practice material from your training experience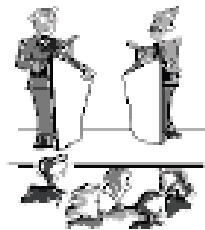, modified as a result of this course. It is also used as a means of completing the final step of the "Competence Verification" process required by POST for all Basic Course instructors. The process will be similar to that used for the co-presentations on Day Four.

1. **Facilitator** (Two minutes)
   - Inform the group of the content and desired feedback areas.
   - Identify a timekeeper who will give a 5-minute warning during the lesson.

2. **Present** (Twenty Minutes)
   - Use at least three of the facilitation strategies for the learning objectives above Bloom's knowledge and comprehension levels
   - The experience should be active, learner-focused and outcome-based, not a "lecture" or "presentation." You may use props, move the group to an appropriate locale, etc.

3. **Conversation with the group** (eight minutes)
   - Learners ask facilitator "thinking" questions
   - Facilitator may respond (pause, paraphrase, and inquire only)
   - \* No judgment, no learner-reflection statements

4. **Conversation with group of six** (six minutes)
   - Learners offer ideas and impressions with no judgment
   - Facilitator does not respond; may face away from group

5. **Facilitator reflects** (two minutes)
   - Summarize personal learning from this experience (about self, teaching or this small group process).

# Peer Coaching

In this course, you will work with one class member to practice presentation and peer coaching skills. As learning partners your supporting roles for each other include the creating or updating of a lesson plan, brainstorming learning activities, and serving as peer coaches to each another during the 20-minute facilitated training block on the last day of the course.

Traditionally, you might have been "taught" as students in the course, and to deliver the information step-by step under the instruction of the training staff. Although there is great value in working with an experienced mentor, we also offer an opportunity for each participant to work with a peer. In this role you can assess your partner's performance during the delivery of a short training block and provide feedback to each another.

When prompted, you will identify a learning partner. You will work as learning partners throughout the class. Your responsibilities as a peer coach will include:

- Serving as a coach, FTO, assessor and brainstorming peer to one other member of the class

- Assisting in brainstorming and guidance for your partner's lesson planning work during the planning lab activity

- Assisting your partner in the creative process of constructing a learning activities to be delivered on the last day of the course and for use in their academy training in real life

- Observing your partner's training presentation,
  - providing feedback one-on-one,
  - monitoring the process of questions and answers from the group
  - writing down any notes to capture ideas and impressions of the outcomes of training for your partner
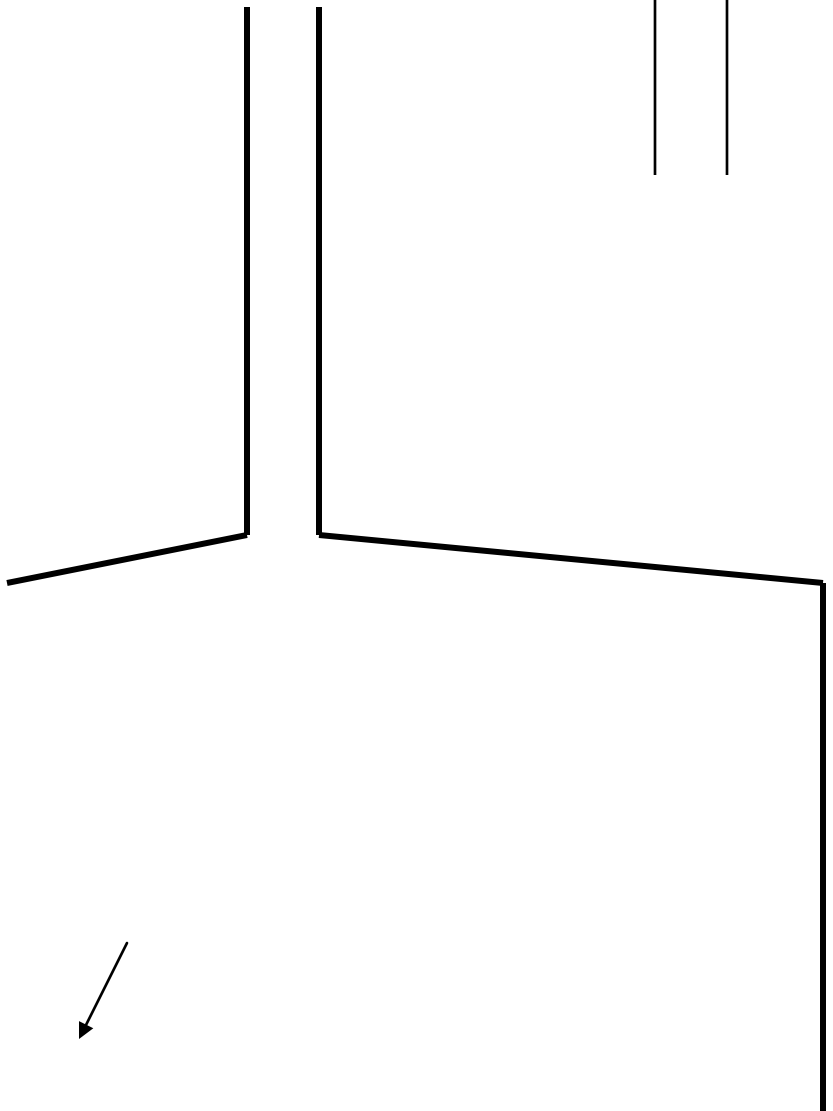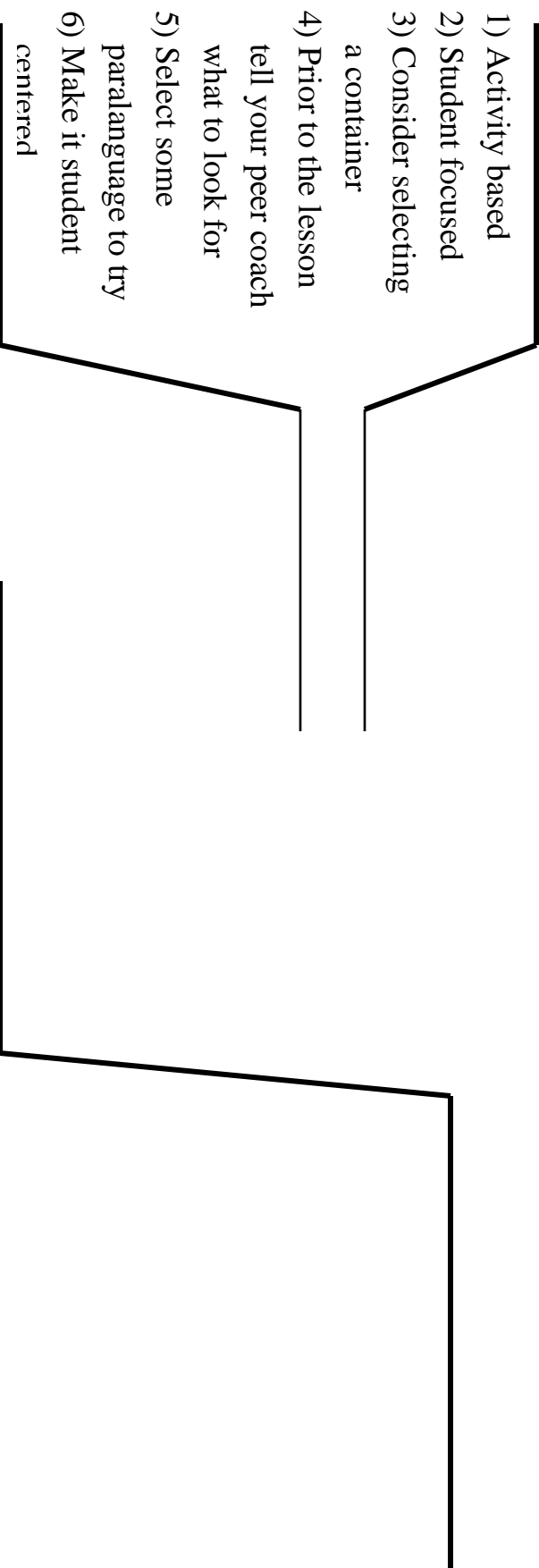
# *Peer Coaching Process and Protocol*

**The following protocol is designed to provide experience as a peer coach and observer. In this protocol you and a partner will each serve as peer coaches to each other. During one cycle, you will teach while your partner observes the process. During the next cycle you will watch process as your partner teaches.**

**During the watching role, pay attention to the nonverbal signals related to thinking and attention. Also watch your partner teach and notice the nonverbal moves they attempt and their impact on the group.**

<u>The teaching cycle – repeated for each person at the table:</u>

1. **The Set-Up (2 min.):** What the training setting is. Their role as participants. The general outcome of the lesson. The peer coach will serve as time-keeper for each segment of the training cycle

2. **Teaching (20 min.):** Real-time training. Be active and engaging using the strategies and structures taught during the week. NO LECTURE (max one minute "tell"). You may use up to three minutes of video-supported visuals.

3. **Personal Reflection (4 min):**
   - **Part 1:** Trainer and peer coach leave the room to discuss the outcomes
   - **Part 2:** The group remains at the table to discuss what they saw and to prepare for thinking questions in the next section

4. **Surfacing the Teacher's Thinking (8 min.):** Group members ask thinking questions (sample thinking questions are in the student workbook). The peer coach will write down any relevant issues or concepts. The group should strive to engage the trainer, and the trainer should be doing the bulk of the speaking as they respond to well-constructed thinking questions

5. **Brainstorming (4 min.):** Group members brainstorming ideas, observations and other options the trainer might consider for the block. During this time, the trainer and peer coach turn their chairs away from the group and only listen (no dialogue or response by the trainer to any statements). The peer coach will write down ideas and impressions

6. **Presenter Reflects (2 min.):** The presenter reflects on their learning during the process of teaching, the thinking questions and brainstorming.

7. **Break** while the next trainer prepares

1) Activity based
2) Student focused
3) Consider selecting
   a container
4) Prior to the lesson
   tell your peer coach
   what to look for
5) Select some
   paralanguage to try
6) Make it student
   centered

# Thinking Questions for Facilitator Conversations

General queries:

- How do you think it went?
- What parts of the training went as you envisioned it in your planning?
- What might you do differently based on this experience?
- What learning outcomes were you seeking?
- How might you have known the learners had acquired the skills or knowledge you were intending?
- What led you to choose the learning activities delivered in the training?

For training intended to engage learning above Knowledge and Comprehension on Bloom's:

- How did you plan for teaching at the levels you were seeking?
- What evidence do you have to indicate learning was occurring? What specific things could you observe to support that evidence?

For Facilitation Strategies and Paralanguage Skills:

- Which strategies and skills were you conscious of practicing?
- What did you notice from learners as you used the strategy or skill?
- Did the responses or reactions from learners alter the manner in which you were delivering the training?

# Chapter 5

# Teaching for
# Critical Thinking

# Facilitating Thinking in the Classroom

Basic Tools
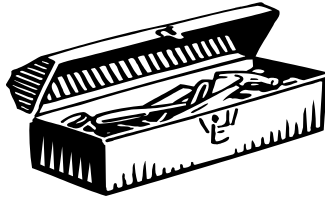
1. Establish a learning environment

2. Tell students the goal for the lesson is about thinking

3. Ask thinking questions

4. Respond with paraphrases and probes

5. Use a class discussion protocol

# Facilitating Critical Thinking

Use these four tools to get groups or individuals to think critically.
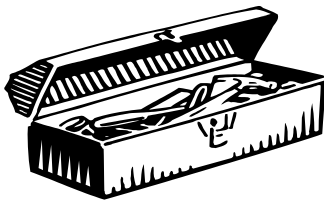
1. **Thinking Questions**
2. **Silence**
3. **Responses**
4. **A teaching protocol**

## 1. Thinking Questions

- Invite thinking out loud
- Use an approachable voice
- Use plurals
- Use tentative language
- Use word substitution
- Focus on thought or perception

## 2. Silence

- 3 to 5 seconds after asking a question
- 3 to 5 seconds after the student respond

## 3. Response

- Silence
- Paraphrasing
- Probe or inquire for more information

**4. A class discussion protocol**

Ask questions about:
- Observations
- Inferences
- Assumptions
- Hypotheses
- Feelings
- Decisions
- Reflection and self evaluation
- Respond by pausing, paraphrasing, probing and inquiring

Thinking questions aligned with Bloom's Taxonomy:

**Knowledge**: What is…? How is…? When did _____ happen? How might you show…? Can you recall…? Can you list…? Who (or what) was…?

**Comprehension**: How might you classify…? How might you rephrase the meaning of…? How would you interpret that in your own words? What is the main idea of…? Which statements or sections support…? How might you summarize…?

**Application**: How might you use…? How would you apply what you have learned to…? How could you organize_____ to show…? How might you demonstrate your understanding of…? What approach might you use to…? What would result if…? What elements could you use to change…? What facts would you select to show…? What aspects of the law might you ask about in an interview with…?

**Analysis**: What are the parts of…? How is _____ related to _____ ? What might the main theme be? How might you classify…? What conclusions can you draw…? How might you identify the different parts of…? What evidence can you find to…?

**Synthesis**: What changes might you make to…? How would you improve…? How might you alter or adapt_____ to create…? What options do you have to design…? Can you think of a theory for…? Might you forecast a possible outcome of…?

**Evaluation**: What is your (opinion, conclusion, level of agreement)…? Why might he or she have chosen…? How might the application of the law be impacted by…? What choices or options might you have made…? How might you prove (or disprove)…?

# Surfacing Thinking – the Academy Class

"We only think when we are confronted with a problem."

--John Dewey

By:    Bob Harrison

It is often easy for us to reflect back on the instructors who we regard as "the best." Having experienced classes with both good and bad, most can easily recall those that seemed to fly by; those where the instructor who somehow created an intensity and high level of engagement that hooked everyone in the room. Some might just think it was the instructor's rare talent. Others could just chalk it up to chance. As you will see, though, in the following pages, there are structures and strategies you can learn and follow to replicate just that kind of experience. This paper is an exercise designed to illuminate the complexity of classroom dialogue and to provide an experience for you to analyze a classroom dialogue to surface questioning strategies. By completing this exercise you will develop a deeper understanding of the belief that teaching is a deliberate act, full of consciousness and in-the-moment applications of effective skills.

To study this further, we will "sit in" on a police academy class and listen to its progress. If you're a peace officer, this might bring forth the emotional response of a similar experience. If you are not, the dialogue will still be quite familiar to that in any other adult learning setting. And so we begin…

Imagine you are sitting in on an academy class. You're there to see "what's happening" in academies today; you may also be wondering how much it will remind you of when you were there as a recruit. The room looks and feels just like one with which you are familiar, and the rows of chairs, plaques on the walls and sights, smells and sounds all rush in to take you back to your days in those same seats. Think back to that experience. What do you most remember?

Many can close their eyes and still see the lectern, the officer or deputy lecturing to them, the chalkboard or Power Point filled with information. Most can recall hurriedly scribbling notes, working hard to memorize code sections, pass tests, rest for the upcoming PT session later that day and hoping whatever they might do in class will not draw the attention of their tac officer or training staff. Few, though, can recall the facts of the lecture, or think of many occasions where, later in the field, they might have thought back and said "Hey; I remember this from the academy…"

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You settle to watch the class. It's their first session on Criminal Law. They're in their second week, and just getting their uniforms to fit the "right" way. Most sneak a glance back at you; you're hopeful that being there doesn't keep them from listening to their teacher. As always, they rise immediately to attention when the instructor walks through the door. He asks them to "sit and relax" and then…

"OK, good morning everybody."

"Good morning, sir" the class responds in unison. You're a little pleased to see some decorum, and also see and hear much of what you have experienced before.

"As you know from our syllabus, we will spend a number of hours together studying criminal law and its relevance to your work as peace officers. Before we start, though, I wanted to throw out a question. Why should we spend your valuable time studying this subject?"

The class hesitates, and then a student in the back raises her hand, is acknowledged, and says "Because we are in law enforcement?"

"Say more about that."

"Well, we are going to enforce laws, so we need to know what the laws are."

"How many laws do you need to know?"

The student ponders that for a moment, and then says "Probably the most important ones?"

"So, there are laws that are unimportant…?"

"No, I guess not" the student says.

"But, are there laws one might need to know more completely?" The class nods and voices agreement with the statement as the instructor continues "Might it not be more effective to assess what the law means and is trying to do?"

The class falls silent; most lean forward as the instructor lowers his voice. "No, I guess not" he says, almost seeming to talk as if thinking aloud.

"Understanding the intent of the law may be one of the most important things for you to learn. That could allow you to act quickly without relying on rote recall."

He continues "What comes to mind for you when you say, or hear others say, the word 'important'?"

"Important means we need to enforce it?" a student volunteers.

"So, you enforce more important laws?"

"No, we enforce all the laws."

The instructor pauses, sweeping his arm across the room. "What does it mean to 'enforce' a law?"

The same student replies "To arrest people who break it?"

"So, do you arrest everyone who breaks a law with whom you come into contact?"

Another student in the back of the room raises her hand and is acknowledged. "Sir, we sometimes let traffic violators go with a warning, and I think that is the right thing to do."

"So, your decisions to enforce are based on a lot of information in code books, reference manuals, case law and other sources?"

You see several heads nod affirmatively around the class. Good, you think to yourself, they at least know a little about where they can find the law.

The instructor continues "think for a second; how many code sections might you possibly be able to memorize, and how would you use that information?"

The class murmurs, and then another student raises her hand. "Sir, we need to know the sections related to arresting people, and for the felonies and other serious crimes."

"OK, so we don't really need to know the laws for minor crime?"

"I guess we need to know them, too. It's just that we need to know the important ones first."

"So, you believe there are important and unimportant laws?"

"No, there are just laws we need to know on the spot, and others we can look up."

"OK, someone else, why spend time studying criminal law?"

"Like she said, so we can enforce them" a student blurts spontaneously.

"So enforcement is the intent of the law?"

"As police officers, we have laws we are expected to enforce, yes" the same student replied.

"So there are laws the police don't enforce?"

"There are criminal laws, and then there are laws for civil things."

"Interesting point. Anyone, what might be some differences between criminal law and civil law?"

You see the students sit for a moment without saying anything, and then start turning to furtively look at one another. They seemed to be silently pleading for someone, anyone, to pronounce the answer. As the tension builds, the teacher breaks the silence.

"Alright, it seems that might be a question for you to discuss amongst yourselves for a minute. Take sixty seconds; turn to the person next to you to discuss what the differences might be between criminal and civil law."

The class immediately buzzes with conversation in pairs. The volume rises, then drops for a few seconds, then rises again. Several students start nodding their heads, then turn towards the front of the room.

"OK, what kinds of things were being discussed in your pairs?"

Several students raise their hands. The instructor nods to one of them.

"Well, sir, criminal laws are the ones you can be arrested for and be put in jail or prison. Civil laws are the ones used to settle differences in civil court."

"What defines a crime under the law?"

"It is an act committed in violation of a law for which you can be punished when convicted" a student voices.

"And…" the instructor comments. The student looks up to the ceiling, squinting, and then continues "It can also be a failure to act."

"So, an act or failure…."

"Yes, an act or failure to act in violation of a law demanding it or prohibiting it"

"So, punishment. What's that?"

Several begin to respond. "Going to jail." "Going to prison for a felony, to county jail for a misdemeanor." "Being put in jail when you get convicted"

"Don't civil laws also have punishment? What punishment do they have?"

Students fall silent momentarily, and then one speaks "you can have property taken away from you, or be made to pay someone else, but you can't go to prison."

"So the big difference between civil and criminal law is…?"

"For crimes, you can lose your freedom. For civil law, you can just lose money or property."

"Who might be able to give some examples of civil law?" the instructor prompts.

More students raise their hand. "Like when neighbors have an argument over a fence; or your roommate moves out and doesn't pay their share of the rent."

"Those are some…what others might be out there?" Students nod, and a number raise their hands to speak. Instead of selecting one, the instructor says "OK, there are obviously a lot more. Rather than thinking about specific examples, who can tell me what distinguishes civil from criminal laws?"

Hands go down across the room with one exception. Once recognized, the student adds "Criminal laws are those for which you can be sentenced to jail or prison. Civil laws are those where you would have to pay damages if you were at fault, but you can't go to jail."

"And how might one know if she or he were reading a section of criminal or civil law?"

The student continued "well, the section would tell you what the punishment is. If it says you can go to jail, it is a crime. If not, it is civil. For murder, it says you can be imprisoned, so it is a crime"

"Alright, let's switch gears for a moment. We talk about 'the law.' When we use that term, what, exactly are we referring to?"

Once again, the class falls silent. Brows furrow, and glances from one student to another reflect a quizzical air. The instructor continues "we have been talking about "black letter law," those things enacted by legislators. What other types of law are there?"

"Well" one student begins, hesitantly, "there is the law created by the Constitution, and there is case law created by judges in courts."

"How might case law impact your work?"

Hands go up across the room. "Judges can keep us from enforcing certain laws, or rule we did something wrong, which means we would have to do things differently" one student says.

The instructor responds "So, judges making you do things differently seems to be an irritant…?"

"Well, yes. I know a lot of cops who get really mad that criminal go free just because a minor rule was skipped. The judges should see we are trying to do the right thing, but not let someone who is guilty get off."

"So…they don't care about the police?"

"No…I think they probably care; they just need to remember the law was written to be enforced, not changed."

Another student voices disagreement. "It's more than that. Case law is where judges try to apply the spirit of the law to how the law is written; to interpret what the law really means."

"So they are bringing morality into the law?"

The class falls silent. The instructor continues "consider as you ponder the study of law that the law seems to try to represent what we think people ought to do or not do. Think about how the law has changed over the years, and how that might impact your role as law enforcers."

"Sir, are you saying the law is written, but then we add morals and ethics to it when we apply it?"

The instructor pauses, and then speaks in a low, paced tone. "That brings up an interesting issue. How might the concept of the spirit of the law and the letter of the law apply to your world as police officers or deputies? Each pair; find another pair to form a group of four. Take five minutes to discuss two issues."

The Power Point screen, which has been on all the time, but barely noticed, now displays "exit directions" for the next chunk of work.

"The encouragement is…" begins the instructor, "for you to think about what the law says and how you might interpret it in police work." The instructor turns to look at the Power Point, continuing, "In your groups, take five minutes to discuss… (you see him point to the visual, you also see students doing the same. They seem to understand without him reading the text). We'll come back as a class at my prompt to see what responses your teams have developed."

> In your groups, take five minutes to discuss:
>
> a) what differentiates the spirit of the law and the letter of the law, and
>
> b) how do those concepts relate to statutory law, case law and law created from the Constitution

The class starts to turn and shuffle; groups emerge and begin to talk animatedly. The instructor hears voices that are strong and flat. He sees heads and bodies forward and eye contact amongst group members. You find yourself wishing you could sit in on the conversations at the tables; students are really into it from everything you can see and hear.

You look at your watch, and are surprised to see more than an hour has passed. You reflect on what you've just seen, thinking you were actually interested, intrigued and energized by the feeling in the room. Knowing the outline for the course, you can click off at least five core objectives the instructor covered. "Wow" you think; "I wish everybody could see what I just saw. Wouldn't it be great if more classes were like this? The kids were excited; they really seemed to be getting it, and they even seemed to be understanding what the law looks like in real life." And then it struck you…

## The understanding was coming from the students, not the instructor; from the discussions and questions, and not from the lecture.[2]

<u>Reflection</u>

1. What was happening?

2. What would a class engaged in this instruction sound like?

3. What would it look like?

4. What processes or structures was the instructor using?

<u>Student-focused Learning</u>
Often, when we see an effective class (or meeting, or presentation), there seems to be a "flow" and continuity where things just "happen." Thoughts surface, questions are asked and answered, and the experience almost brings smiles to the faces of those involved. Without reflecting on "what happened" and accepting that some facilitators or presenters are "gifted" or just better than others, we might fall into the trap of seeing a class similar to the one described as "magic" or "one-of-a-kind."

In fact, the skills and strategies employed by our Criminal law instructor are conscious and purposeful. They are grounded in strong skills and strategies employed in the fluid environment of the classroom. Far from being "magic" these delivery skills can be taught and learned by anyone interested in enhancing their effectiveness communicating their message to others.


<u>The Skills</u>
For the purposes of assessing the skills used in our Criminal Law classroom, we will use the following chart to determine what might have been happening as the instructor deployed a series of related skills to surface the thinking of students and add depth to their understanding of the content.

Review the class dialogue; reflect on which tools were employed at which junctures. Consider what purpose the instructor may have had. Consider also what the envisioned outcome might have been when planning for the class with each of these tools.

Reflection Questions:
1. How do the skills support a natural critical thinking environment in class?
2. How might one 'know' when to use any particular skill or tactic?

Now, consider the pace and blending of questions, statements, probes and reflections by the instructor and students. There appears to be a rhythm to many, although the untrained eye and ear might just enjoy the pace without considering its structure. The following page is the first step in analyzing exactly what was happening. Understanding what you saw and heard is the start of replicating such dialogues in your classes.

The instructor entered the room with established questions and prompts for students. The Power Point was prepared, and the class dialogue was gently guided in that direction. Certainly, the slide could have been displayed early on, and students given their assignments. Think, though, of the manner in which the students seem to have been "hooked;" how they each surfaced a "need to learn." Effective paraphrasing and questioning are the primary tools of an instructor wishing to encourage critical thinking by students. To sharpen your own skills:
- Assess the Criminal Law class conversation amongst the instructor and students using the following chart.

- In either margin, mark P, TQ, TS, PQ, PS or IO for the strategies used
- Analyze the use of the selected strategies and evaluate their impact on the class progress and understanding of the course content Identify what evidence you can find of student learning, and how the instructor might have known, in the moment, learning was occurring

| | |
|---|---|
| **P** – Paraphrasing | **Paraphrasing** – (from the Greek paraphrasis; para – alongside + phrasis – speaking) a restatement of speech (or text) using different words, especially to clarify. Paraphrasing communicates "I am trying to understand you, and value what you say." In a learning environment, it sustains a safe environment for thinking and dialogue. In this frame, the paraphrase is used to surface the thinking of others, therefore, it will avoid the use of the pronoun "I" in all instances. |
| **TQ** – Thinking Question<br><br>&<br><br>**TS** – Thinking Statement | **Thinking questions and statements** – Although the majority of questions and statements in teaching seek information to convey or assess comprehension, there are different questions to stimulate thought and reflection. Thinking questions allow teaching at the higher levels of Bloom's Taxonomy and most often do not have a "right" answer. The most effective thinking question will generate added questions on the same topic. They are characterized as open-ended, intended to promote divergent thinking or reflection. Thinking statements are similar to the questions, but presented as a statement rather than an inquiry. They are intended to prompt thought, but not necessarily a direct response. The thinking statement is purposeful, reasoned and goal-directed. It intends to promote the reasoning process, formulate inferences or evaluate concepts. |
| **PQ** – Provocative question<br><br>&<br><br>**PS** – Provocative Statement | **Provocative questions and statements** – are exciting, stimulating or intellectually challenging. They can be used in lieu of an information-seeking question to initiate or accelerate the pace of thought. They might classically be defined as thinking questions, but may initially prompt a pause before thought due to the "shock" of the question. Provocative statements can be the "wild" goal statement, "outrageous" hypothesis or similar statements one might feel are "out there." They may be used to initiate dialogue on a controversial topic, to introduce opposing views or to prompt rational critical thought in an emotionally-laden lesson. |
| **IQ** – Info-oriented question<br>&<br>**IS** – Info-oriented statement | **Information-oriented questions or statements** – are used to dispense necessary knowledge (from the management of the class to the introduction of cognitive concepts). They may also be useful when assessing and evaluating student acquisition of skills or understanding. The questions are direct, and may infer a "right" or appropriate response. Using question stems aligned with the levels of Bloom's, the skills instructor may quickly "snapshot" the level of understanding in a class, and then use that information to adjust the "altitude" of their next steps. |

<u>Reflection</u>
In closing, reflect on what you may have noticed, and what you may now be considering, as it applies to your own training:

1. Consider three ways you might apply these strategies in your training


2. Imagine two possible outcomes that may differ from approaches you may have used previously


3. What one strategy will you consciously commit to using in your next instructional opportunity?

For more information on paraphrasing and "thinking" questions, there are several sources. Other articles in this series present paraphrasing and questioning strategies at length. They are adapted from the following sources, all of which could be valuable for those wishing to study the concepts in greater depth:

Arthur Costa and Robert Garmston. (2002). Cognitive Coaching – A foundation for renaissance schools. Norwood Mass. Christopher Gordon Publishers

Robert Garmston and Bruce Wellman. (2002). The Adaptive School – Designing and facilitating collaborative groups (fourth edition). El Dorado Hills CA. Four Hats Seminars

Some journal articles describing group process that may also be useful:

Robert Garmston. Expert teachers carry a satchel of skills, in the Journal of Staff Development, Spring 1998 (Vol 19, No 2)

Robert Garmston, with Carolyn McKanders. Skillful paraphrasing allows groups to examine what is being said. In National Staff Development Council, Summer 2006 (Vol. 27, No. 3)

# Paraphrasing to Surface Thinking
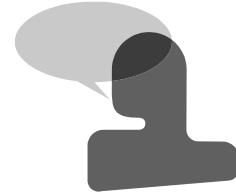
Paraphrasing is one of the most valuable and least used communication tools. Even instructors who naturally and skillfully paraphrase in one-on-one settings often don't paraphrase effectively of consciously when teaching.

Paraphrasing in the learning environment is used primarily to surface the thinking of the student speaking. In police settings, paraphrasing may be taught or learned as a component of initial field investigations (confirming a victim or witness account of their actions or observations) or during interviews and interrogations, where the intent may be to elicit statements or confessions from another. The dynamics of the paraphrase in the above examples are similar. However the difference between the above examples are in the intent of the paraphraser.

For our purposes in teaching paraphrasing, we will focus on the teacher role in the classroom. When the teacher's intention is to clarify a student's own thinking and thinking processes, the paraphrase is the most valuable teaching tool.

Paraphrasing may be used to:
- clarify what was said by the student or speaker
- minimize misperceptions or miscommunications between the speaker's intent and the listener's perceptions
- help the student speaking to move from one level of understanding to another level of greater understanding
- deal constructively with emotionally-charged content in a way that does not create added friction or distance between the speaker and receiver of the communication
- surface generalizations, deletions or distortions often in values-laden speech (e.g. "everybody does it" or "they would never let me do it that way").

The effective paraphrase is oriented to the thinking of the speaker, not to the one who is paraphrasing. When you elect to paraphrase, you are attempting to reflect the speaker's thoughts, words and emotional state. The paraphrase is not used to add your own thoughts. When using an effective paraphrase, you are a mirror to the speaker's words, not a spotlight to add your own thoughts or perspectives.

When used to help surface thinking, paraphrasing does not include the pronoun "I". Using the first-person preface, "I," indicates you are interpreting and reframing the speaker's thoughts.  When we interpret or reframe someone else's thoughts they can perceive being challenged. This can lead to an unnecessary conflict. The recommendation is to frame the paraphrase in the speaker's words and gestures to enhance rapport. Good paraphrases are not agreements, but they give one the sense of being "listened to."

Try this experiment. Paraphrase, and then ask a question. Do this several times. Now ask questions without preceding them with paraphrases. A good paraphrase communicates, "I am trying to understand you—and therefore, I value what you have to say". Interestingly, the paraphrase implies "I" without using "I."   Questions preceded by paraphrases are perceived similarly. Questions by themselves, no matter how artfully constructed, put a degree of psychological distance between the asker and the asked. Psychological distance refers to trust. The lower the trust you have in someone the greater the psychological distance. The greater the trust you have in someone, the shorter the psychological distance between the two of you. When you trust someone, you are more likely to share your thoughts honestly and openly. Paraphrasing aligns the parties and creates a safe environment for thinking.

One powerful use of a paraphrase is that the listener can never be "wrong". Speakers will always correct the listener if they feel they have been misunderstood and the correction is done without having felt attacked or intimidated.

## The Structure and Flow of Effective Paraphrasing

Well formed paraphrases reflect the speaker's content and the speaker's emotions about the content.  A paraphrase also leads the conversation, in that what is paraphrased is most likely what the speaker (whose words are being paraphrased) will respond to next.  Well formed paraphrasing creates permission to probe for details and elaboration. Without the paraphrase, probing may be perceived as interrogation. The process and flow may look, feel and sound something like this:

Before paraphrasing, listen and observe carefully to "hear" the content and "feel" the emotions of the speaker.

Signal your intention to paraphrase. This is done by using an approachable voice and by opening with a reflective stem. Such stems put the focus and emphasis on the speaker's ideas, not on the paraphraser's interpretation of those ideas.

If your habit is to use the first person (e.g. "What I hear you saying is…") focus on modifying your "entry" words. To do otherwise may signal to many speakers their thoughts no longer matter, and the person paraphrasing is now going to insert his or her own ideas into the conversation.

The following paraphrase stems signal that a paraphrase is coming:
- You're suggesting…
- You're proposing…
- So, what you're wondering…
- So, you are thinking…
- Hum, you're pondering on the effects of…
- Your hunch is…

Choose a logical level with which to respond. There are three broad categories of logical levels, any one of which may be used depending on the context and intent of the conversation:

1. **Acknowledge and clarify** content and emotion. If the paraphrase is not completely accurate, the speaker will offer corrections: "So, your father fell from his chair and the bruises on his arms are from you lifting him back to a seated position?" or "The way your boss is treating you…is impeding your ability…to do your job?" in response to declarative statements about, for instance, an account of how injuries might have occurred or an assertion that a job can't be done due to interference from a supervisor, etc.

2. **Summarize and organize** by offering themes and containers to organize several statements or separate jumbled issues. This is an especially important of paraphrase to use when multiple speakers contribute to a topic: "There are two ideas here.  One is that the officer was correct in making the arrest because of _____.  Another idea being expressed is that perhaps this was not a clear violation of the law." This paraphrase is appropriate when the speaker has addressed multiple issues, is wrestling with decisions between two or more distinct futures, or has declared beliefs about a series of facts.

3. **Shift focus** to a higher or lower logical level. Paraphrasing within a flow of discourse often moves through a sequence of acknowledging, summarizing, and shifting focus to a higher or lower logical level. Logical level refers to levels of thinking. When concrete and fact driven, we are on a low logical level – consider it linear and predictable. When we talk about a topic and include our beliefs or values, we shift our logical level higher to more complex ideas. Paraphrases move to a higher logical level when they name concepts, goals, values, and assumptions:

   If a person says, "I can't seem to get anywhere on time. The traffic is so congested." A shift focus paraphrase might be, "So the issue for you is about transportation." Paraphrasing in this manner can shift one's thinking from the 'self' to the 'community,' a more complex and important perspective when thinking about traffic.

   Paraphrase to move to a lower logical level when abstraction and concepts need grounding in details: When someone says, "It is not fair for Tom to run the meeting and share only his ideas."  A paraphrase that downshifts the shift focus might sound like, "So 'fair' might mean each of you gets an opportunity share ideas with one another without interrupting." This manner of paraphrasing is especially effective to dissipate emotional distress by reflecting the speaker's values statements or deeply held beliefs in a way that allows them to examine them from a differing perspective.

## Learning Styles and Paraphrasing

Paraphrases that summarize or shift the logical level of discourse support and stretch the thinking styles of different group members. Global thinkers (those who might initially focus on large-scale issues and make conclusions about smaller, more incremental topics) appreciate paraphrases that separate and organize "thinking in progress." At other times the shift down in logical levels grounds global thinkers in

specific examples and concrete details. Concrete, high sequential thinkers (those who learn from specific instances or facts, and then apply that knowledge to a much larger framework) learn from the shift up to higher logical levels. This helps them explore a bigger picture and creates a wider context for thinking.

Listening to the speaker's word choice might also prove a valuable manner in which to enhance rapport through the paraphrase. Using visual, auditory or kinesthetic words in a paraphrase responding to a declaration in the same learning style adds another layer of perceived "understanding" and rapport to one whose words are being paraphrased.

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# Thinking Questions

Thinking questions differ from questions seeking information. Eighty-five percent of questions teachers ask in classrooms are information questions. Who, what, where, and when are used in information questions. Information questions are necessary in teaching knowledge and comprehension. Thinking questions are required to teach at higher levels in Bloom's taxonomy. Thinking questions most often do not have "right" answers, but explore instead, the way students think about and approach problems or situations.

**Thinking questions have three main characteristics.**
    a. They are invitational.
    b. They are open ended, allowing for many possible answers.
    c. They focus on thought, perception, decisions and self-reflection.

**Invitational**
- Use an approachable voice.
- Use non-aggressive language. "Can you help me understand your thinking here?"
- Use a pattern of pause – paraphrase – probe.
- Use plurals. "What are some ideas.." (instead of idea) "What approaches might you take? (instead of approach).
- Use tentative language. "What are some of…?" "How might you…" "What are your hunches about...?
- Substitute limiting words with words that offer choice as shown below.

**These words limit choice:**

- Is
- Could
- The
- "Why ... did you do that?" *often promotes defensiveness*.

**These words provide choice:**
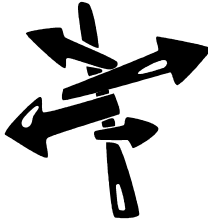
- Seems
- Might
- Some
- "What…factors did you consider when deciding that?" *often promotes thinking.*

As can be seen on the next page a well-formed thinking question  has three parts to its structure.

1. *A question stem that signals a thinking question is about to be asked*
2. I*t names a type of thinking the instructor wants from students*
3. *It focuses on the student's perceptions, thoughts or decisions and refers to Some external event*

As described above, paraphrasing, voice tone, the use of plural nouns, tentative and exploratory language is important to make the question "safe" to answer.

# Inviting Thinking

| Question Stems Signal That a Thinking Question is Coming | Thinking Processes The Instructor may want from students | Thinking questions (1) Focus on Students' Perceptions, Thoughts, and Decisions and (2) Refer to Some External Event |
|---|---|---|
| **Examples:**<br>As you…<br>What are some of…<br>How might you…<br>How did you…<br>What led you…<br>What possible…<br>What might… | **Examples:**<br>Recall<br>Compare<br>Predict<br>Infer<br>Analyze<br>Envision<br>Evaluate | **Internal**<br>Your reactions<br>Your feelings<br>Your inferences<br>Your hypotheses<br>Your conclusions<br>Your decisions<br><br><br>**External Event**<br>What you saw, heard or noticed<br>The law |

## Why Thinking Questions are Important

Students in classrooms in which thinking activities are used, become more skilled in analysis, problem solving and decision-making than students in classrooms not teaching thinking skills.  In any situation, the person with the most flexibility will have the greatest control and be the most effective.   Flexibility is usually associated with the ability to see things from several perspectives, consider short range and long range effects of decisions, and have keen thinking skills.

# *Some Thinking Questions*

**Example**: To assist a learner (or trainee) in their reflection and learning from a contact with a victim of crime or a person of interest:
- What were you thinking or feeling in this situation?
- \* How might you modify your approach next time based on this experience?
- How and what were you working to communicate with the victim? Why?
- What did you see and hear from the (victim, witness, subject) to indicate you were achieving your goals?

**Example**: To enhance thinking as you might work with a trainee preparing to respond to a call involving a crime against a child:
- What might be your emotional reactions to this situation?
- What can you do to manage your emotions in order to stay professional?
- When your emotions start to get out of hand, what might you consider doing to recover?

**Generic Examples of Questions to Surface Thinking**
1. What are some of the decisions you made about when and how to participate?
2. What were you thinking when_____?
3. How would you know you were right?
4. Why is that important?
5. If you had been the arresting officer, what else might you have considered?
6. What might you be paying attention to in order to make a decision?
7. Under what circumstances might you enforce the spirit but not the letter of the law?  How would you know this is a sound decision?

# *Giving Feedback*

| That was a good interview.<br><br>Why did you take that course of action? | I was impressed with how you handled the interview. | Several times you repeated what the driver said before asking a question. | What was your thinking that brought you to repeat what the driver said?<br><br>What actions by the suspect prompted your reaction?<br><br>What were the factors you considered?<br><br>Were their other options you might have considered?<br><br>What did you learn from this situation? |
|---|---|---|---|

# Responding To Questions

*Expand Your Range Of Skills*

Be on the lookout for ways to increase your range of response skills. Here are a few ideas. When conducting a question-answer period after a presentation, tell the group there will be a time period (like ten-minutes) for questions and answers. Recruit a timekeeper to help you stick to this time allotment. This puts the idea of brevity into the audience's mind before anyone rises to ask a question, and it decreases the chances of rambling questions.

Identify the next three people you plan to recognize. This helps people relax and to participate in the conversation (I'm either next or I'm not in the queue) and also sends a signal for brevity- theirs and yours.

Use the Research On Presenter Responses

> "Don't you think that if we implement this POLICY, it's just going to   BE MORE PAPER WORK AND ANOTHER BURDEN ON OFFICERS?"
>
> -An angry student

The session is just thirty minutes old. The participant who is speaking seems tense. His face is strained; his voice loud. Other participants focus intently on him. They are very interested in the instructor's response. The instructor, seemingly at ease, draws from a practiced skill set and responds elegantly. The questioner is satisfied. The class moves on.

Research on participant reactions to how their questions were handled reveals some simple principles for effective responses. First, listen for the syntax of a question to determine whether it is true/false: "Should we announce this to all community leaders?" Multiple choice: "Should we requisition the equipment now or later?" Short answer:  "How many? How much? When? Who? Essay: "Why have the directions changed?"

| Type | Syntax | Response |
|---|---|---|
| TRUE/FALSE | Should we change the schedule? | Yes. For these reason (list0 and elaborate). |
| Multiple Choice | Should we change that schedule now or wait? | We should change now. For these reasons (list and elaborate) |
| Short Answer | How much? <br> How many? <br> When? <br> Who? | $1,000 <br> 30 <br> Monday <br> Sue |
| Essay | Why should we change the schedule? | It's an issue of efficiency. <br><br> Elaborate or… <br> It's a question of… <br> It's a matter of… <br> The central issue is... |

Then, initially answer the question in the syntax matching the way the question was asked. Then explain your rationale. "Should we change the schedule?" "Yes! Here are three reasons why." Short answers, according to research conducted by Communication Development Associates, are more credible than long ones. CDA advises answering the question in summary form first and then elaborating.

Another strategy is to summarize the question first. Your summary does not need to be a full repetition of the question, but it does need to clarify what was asked. There are three powerful reasons for making a simple summary of a question before answering: (1) the questioner is assured that the speaker understands the question, (2) the rest of the group can hear the question, and (3) it focuses the presenter's attention to the exact question. If there are several questions wrapped into one, enumerate them as you respond.

**FEEL – FELT – FOUND**

This section began with an example of a tough question. "Feel, felt, found," is a strategy the speaker in this example might have used. The participant asked, "Don't you think that if we implement this POLICY, it's just going to BE MORE PAPER WORK AND ANOTHER BURDEN ON OFFICERS?"

The presenter might have replied, "I know just how you **feel**, because when I FIRST LEARNED ABOUT THIS POLICY, I **felt** the same way. All I could see was the bookkeeping. It looked like I had to spend time learning new systems and it was going TO WASTE VALUABLE TIME. What I've **found**, however, as I began to work with it, is that while there was some initial up front work, my load is actually easier now, and MY EFFECTIVENESS IN THIS AREA HAS INCREASED."

**What if you don't know how they feel?**

Speakers must be very careful with the first step of this response. If you don't really know how the person feels (and it's likely that you don't unless you have directly experienced it), you can't say, "I know how you feel." What is possible to say, however, is, "I know that many OFFICERS **feel** that way when they first come into contact with the POLICY." Another caution with this response is to keep in mind that your intent is not to persuade this person about the value of the POLICY. Your job is to give information, to support participants in having access to the internal resources needed for learning-energy, interest, and emotions-and to offer them choices.

**When you don't know the answer:**

Q. What is the research on that?

A.    I don't know, but...
            I do know this:
                or
            I'll find out and call you.
                Or
            I know where you can get the answer.

**Overcoming objectives:**

Q.    This sounds like a lot more work for officers.

A.    I know how you feel. Many of us have felt that way.
      However, officers have found that once they learn the system, it actually saves time.

# Handling Challenges or Hostile Questions

**A Question**
"Can it be done by someone else?"

**The Same Content as a Challenge**
"Can't it be done by someone else?
        **Or**
   "It can't be done by us."

1. On the first challenge, answer the question in the challenge:

   **Q.** "Can't it be done by someone else?"
   **A.** "No.  You are the only ones with sufficient knowledge."

2. On the second challenge, once again, answer a presumed question in the challenge:

   **Q.** "But the other bureau doesn't have any work to do."   <u>You hear</u>…"Does the other department have work to do?"
   **A.** "Yes. They are as busy as you are.  One of their major tasks is to…"

3. On the third challenge, the objector might say:

   I don't get it.  Their workload is far less than others.  I think we are being had.

   You now might consider this a hostile challenge.

   Respond with:  Feel, Felt, Found…

"I know exactly how you **feel**.  I **felt** the same way when I asked about the workload of the two departments.  What I **found** was…"

# Writing Effective Multiple Choice Questions

**Pedagoggles: Exploring Teaching Practice – Vol. 2 No. 4**
For all Pedagoggles: http://edu.georgianc.on.ca/teaching/pub/pedagoggles/

## Lens on Learning Theory

Multiple Choice Questions (MCQs) may be used in both summative and formative tests, as well as for diagnosis of student learning problems. MCQs have a reputation for being easy; this misconception suggests that they can only test recall but not the higher levels of learning indicated by Bloom's taxonomy. As with any assessment mechanism, the key is in creating questions that test the required skills at the appropriate level. Increasing student numbers and greater assessment burdens may make use of MCQs particularly attractive, especially if marking and provision of feedback can be automated (for example online).

*"I had previously thought that higher-level MC questions would require a lot more work than they do. I also enjoy being more creative as I cast the topic into a unique setting that requires my students not only to recall but also to apply concepts. However, what has surprised me most is how much more my students 'enjoy' higher level assessment questions than recall questions."*
        *~Anonymous Faculty Member*

## Reflection on Practice

• How can I write MCQ test questions that prevent overall scores from being unrealistically high?
• How do students guess correct answers, and how can I defeat this?
• How can I use MCQs and still measure higher level thinking?
• Is there a way to provide feedback when using MCQs?

## Expanding Your Teaching Toolkit

> ***Stem-*** The stem is the introductory question or incomplete statement at the beginning of each test item.
> ***Options-*** The options consist of the answer. This includes the correct option and the distractors.

### 1. Write distractors (wrong-response options) that are plausible

• Do not write distractors that are obviously wrong or nonsense words and unreasonable
• Write the options so they are homogeneous in content
• Employ as distractors answers from previous open-ended exams to provide plausible answers

### 2. Use a question format

• MCQs should be ideally be prepared as questions (rather than incomplete statements)
*Incomplete Statement Format*: Jack Sprat could eat no _____.
*Direct Question Format*: What food does Jack Sprat **NOT** eat?

### 3. Emphasize critical thinking and higher level cognitive skills beyond simple recall

• Use *memory-plus application* questions.
• Memory-plus application questions place the concept in a life situation or context that requires the student to first recall the facts and then apply or transfer the application of those facts into a situation.

### 4. Keep Option Lengths Similar – Avoid making your correct answer the long or short answer.

### 5. Balance the Placement of the Correct Answer – Correct answers are usually the second and third option, use the other positions.

**6. Be grammatically correct** – Use simple, precise and unambiguous wording. Grammatical errors hint at the right answer.

**7. Do not write clues that hint at the correct answer** – You might answer one question in a test by giving the answer in the stem of another question.

**8. Avoid negative questions and questions that use the words never, always, and only** – Students may be able to use these to find an incorrect answer without knowing the correct answer.

**9. Use only one correct option (ensure that none of the distracters might be argued as correct)**
• The distracters should include one and only one correct or clearly best answer.
• With one correct answer, alternatives should be mutually exclusive and not overlapping.
• Using MC with questions containing more than one right answer results in arguments over grades.

**10. Give clear instructions** – explain the purpose and aim of the questions.

**11. Use a single, clearly-defined problem and include the main idea in the stem** – Students should understand the problem without having to read the response options.

**12. Avoid the "All the Above" & "None of the Above" options** – Students only need to recognize two correct options to get the answer correct and you will not determine if students know the correct answer.

**13. Don't use MCQs when other types are more appropriate.**

**14. Remember that tests are for measuring learning, not teaching** – Avoid devising questions that are really teaching moments. For example, many teachers develop TF questions where the majority of the answers are true.

# Matching Test Questions

Good for:
- Knowledge level
- Some comprehension level, if appropriately constructed

Types:
- Terms with definitions
- Phrases with other phrases
- Causes with effects
- Parts with larger units
- Problems with solutions

Advantages:
- Maximum coverage at knowledge level in a minimum amount of space/prep-time
- Valuable in content areas that have a lot of facts

Disadvantages:
- Time consuming for students
- Not good for higher levels of learning

Tips for Writing Good Matching items:
- Need 15 items or less
- Give good directions on basis for matching.
- Use items in response column more than once (reduces the effects of guessing)
- Use homogenous material in each exercise
- Make all responses plausible
- Put all items on a single page
- Put response in some logical order (chronological, alphabetical, etc.)
- Responses should be short

# True/False

Good for:
- Knowledge level content
- Evaluating student understanding of popular misconceptions
- Concepts with two logical responses

Advantages:
- Can test large amounts of content
- Students can answer 3-4 questions per minute

Disadvantages:
- They are easy
- It is difficult to discriminate between students that know/don't know the material
- Students have a 50-50 chance of getting the right answer by guessing
- Need a large number of items for high reliability

Tips for Writing Good True/False items:
- Avoid double negatives
- Avoid long/complex sentences
- Use specific determinants with caution: never, only, all, none, always, could, might, can, may, sometimes, generally, some, few
- Use only one central idea in each item
- Don't emphasize the trivial
- Use exact quantitative language
- Don't lift items straight from the book
- Make more false than true (60/40).  Students are more likely to answer true.

# Short Answer

Good for:
- Application, synthesis, analysis, and evaluation levels

Advantages:
- Easy to construct
- Good for "who," what," where," "when" content
- Minimizes guessing
- Encourages more intensive study-student must know the answer vs. recognizing it

Disadvantages:
- May overemphasize memorization of facts
- Take care - questions may have more than one correct answer
- Scoring is laborious

Tips for Writing Good Short Answer Items:
- When using with definitions: supply term, not the definition-for a better judge of student knowledge
- For numbers, indicate the degree of precision/units expected
- Use direct questions, not an incomplete statement
- If you do use incomplete statements, don't use more than 2 blanks within an item
- Arrange blanks to make scoring easy
- Try to phrase question so there is only one answer possible

# Essay

Good for:
- Application, synthesis and evaluation levels

Types:
- Extended response: synthesis and evaluation levels; a lot of freedom in answers
- Restricted response: more consistent scoring, outlines parameters of responses

Advantages:
- Students less likely to guess
- Easy to construct
- Stimulates more study
- Allows students to demonstrate ability to organize knowledge, express opinions, show originality

Disadvantages:
- Can limit amount of material tested, therefore has decreased validity
- Subjective, potentially unreliable scoring
- Time consuming to score

Tips for Writing Good Essay Items:
- Provide reasonable time limits for thinking and writing
- Avoid letting them to answer a choice of questions (You won't get a good idea of the broadness of student achievement when they only answer a set of questions.)
- Give definitive task to student-compare, analyze, evaluate, etc.
- Use checklist point system to score with a model answer: write outline, determine how many points to assign to each part
- Score one question at a time-all at the same time

# Oral Exams

Good for:
- Knowledge, synthesis, evaluation levels

Advantages:
- Useful as an instructional tool-allows students to learn at the same time as testing.
- Allows teacher to give clues to facilitate learning
- Useful to test speech and foreign language competencies

Disadvantages:
- Time consuming to give and take
- Could have poor student performance because of lack of practice
- Provides no written record without checklists

# Test Questions and Bloom's Taxonomy

~Knowledge~

| Useful Verbs | Sample Question Stems | Potential activities and products |
|---|---|---|
| tell<br>list<br>describe<br>relate<br>locate<br>write<br>find<br>state<br>name | What happened after…?<br>How many…?<br>Who was it that…?<br>Can you name the…?<br>Describe what happened at…?<br>Who spoke to…?<br>Can you tell why…?<br>Find the meaning of…?<br>What is…?<br>Which is true or false…? | Make a list of the main events.<br>Make a timeline of events.<br>Make a facts chart.<br>Write a list of any pieces of information you can remember.<br>List all the…. in the story.<br>Make a chart showing…<br>Make an acrostic.<br>Recite a poem. |

~Comprehension~

| Useful Verbs | Sample Question Stems | Potential activities and products |
|---|---|---|
| explain<br>interpret<br>outline<br>discuss<br>distinguish<br>predict<br>restate<br>translate<br>compare<br>describe | Can you write in your own words…?<br>Can you write a brief outline…?<br>What do you think could of happened next…?<br>Who do you think…?<br>What was the main idea…?<br>Who was the key character…?<br>Can you distinguish between…?<br>What differences exist between…?<br>Can you provide an example of what you mean…?<br>Can you provide a definition for…? | Cut out or draw pictures to show a particular event.<br>Illustrate what you think the main idea was.<br>Make a cartoon strip showing the sequence of events.<br>Write and perform a play based on the story.<br>Retell the story in your words.<br>Paint a picture of some aspect you like.<br>Write a summary report of an event.<br>Prepare a flow chart to illustrate the sequence of events.<br>Make a coloring book. |

~Application~

| Useful Verbs | Sample Question Stems | Potential activities and products |
|---|---|---|
| solve show use illustrate construct complete examine classify | Do you know another instance where…? Could this have happened in…? Can you group by characteristics such as…? What factors would you change if…? Can you apply the method used to some experience of your own…? What questions would you ask of…? From the information given, can you develop a set of instructions about…? Would this information be useful if you had a …? | Construct a model to demonstrate how it will work. Make a diorama to illustrate an important event. Make a scrapbook about the areas of study. Make a paper-mache map to include relevant information about an event. Take a collection of photographs to demonstrate a particular point. Make up a puzzle game suing the ideas from the study area. Make a clay model of an item in the material. Design a market strategy for your product using a known strategy as a model. Dress a doll in national costume. Paint a mural using the same materials. Write a textbook about… for others. |

~Analysis~

| Useful Verbs | Sample Question Stems | Potential activities and products |
|---|---|---|
| Analyze distinguish examine compare contrast investigate categorize identify explain separate advertise | Which events could have happened…? I … happened, what might the ending have been? How was this similar to…? What was the underlying theme of…? What do you see as other possible outcomes? Why did … changes occur? Can you compare your … with that presented in…? Can you explain what must have happened when…? How is … similar to …? What are some of the problems of…? Can you distinguish between…? What were some of the motives behind…? What was the turning point in the game? What was the problem with…? | Design a questionnaire to gather information. Write a commercial to sell a new product. Conduct an investigation to produce information to support a view. Make a flow chart to show the critical stages. Construct a graph to illustrate selected information. Make a jigsaw puzzle. Make a family tree showing relationships. Put on a play about the study area. Write a biography of the study person. Prepare a report about the area of study. Arrange a party. Make all the arrangements and record the steps needed. Review a work of art in terms of form, color and texture. |

~Synthesis~

| Useful Verbs | Sample Question Stems | Potential activities and products |
|---|---|---|
| Create invent compose predict plan construct design imagine propose devise formulate | Can you design a … to …? Why not compose a song about…? Can you see a possible solution to…? If you had access to all resources how would you deal with…? Why don't you devise your own way to deal with…? What would happen if…? How many ways can you…? Can you create new and unusual uses for…? Can you write a new recipe for a tasty dish? can you develop a proposal which would… | Invent a machine to do a specific task. Design a building to house your study. Create a new product. Give it a name and plan a marketing campaign. Write about your feelings in relation to… Write a TV show, play, puppet show, role play, song or pantomime about…? Design a record, book, or magazine cover for…? Make up a new language code and write material suing it. Sell an idea. Devise a way to… Compose a rhythm or put new words to a known melody. |

~Evaluation~

| Useful Verbs | Sample Question Stems | Potential activities and products |
|---|---|---|
| Judge select choose decide justify debate verify argue recommend assess discuss rate prioritize determine | Is there a better solution to… Judge the value of… Can you defend your position about…? Do you think … is a good or a bad thing? How would you have handled…? What changes to … would you recommend? Do you believe? Are you a … person? How would you feel if…? How effective are…? What do you think about…? | Prepare a list of criteria to judge a … show. Indicate priority and ratings. Conduct a debate about an issue of special interest. Make a booklet about 5 rules you see as important. Convince others. Form a panel to discuss views, e.g. "Learning at School." Write a letter to … advising on changes needed at… Write a half yearly report. Prepare a case to present your view about… |

From: Dalton, J. & Smith, D. (1986) "Extending Children's Special Abilities – Strategies for primary classrooms" pp.36-37

Available at: http://www.teachers.ash.org.au/researchskills/dalton.htm#knowledge

# Power Point Tips

Power Point commands 90% of the market share on presentation software. Yet eye rolls are not uncommon when experienced respond to the suggestion that they might like to start using Power Point. Why? It has been misused, overused, and abused. It has essentially been treated as an information-dispensing machine, especially in its early history. It is possible to use it effectively, even brilliantly as an extension of good instructional principles.

## Pitfalls

"Get to the Point, Lieutenant", read one newspaper headline, telling the story of how a senior officer in the U.S. Army, tired of endless charts, graphics, and 'fly in' words whooshing their way onto the screen, called for a halt to its use. Rather than distilling the essence of what needed to be communicated, young officers, eager to make an impression on superiors, were filling their reports with unnecessary bells, whistles and details. These officers were diverting the audience from the message. Images should be used to make a presentation more interesting, to show things in different ways, to add emphasis – in short to support the enhancement of learning. Power Point images can be so pleasing however; there is a risk in overdoing the visuals.

## 10 Keys to Potent Power Point Presentations

Increasingly, trainers are using PP effectively. Here are some good tips. As a rule of thumb, about one slide every 5 minutes is a good starting place.

### 1. Keep It Simple!

A few powerful words make the point. Too many words will never be read. A general rule is one concept per slide, no more than 6-8 lines per slide, no more than 6-8 lines per slide and 6 words per line. Less is more.

**Use a common format:**
- ☐ **Titles- 36 to 44 pt.**
- ☐ **Titles – flush left**
- ☐ **Text-24 pts or larger**

### 2. Shhh!

Let the learners do the reading. The words you use should not be read to your participants; let them read the words for themselves. You speak about major points from trigger words on the slides.

### 3. Make your slides clear, consistent, and readable.

a. Common format and background. The slide title should appear in the top sixth of the screen, set in a 36-to-44 point size font. Since people tend to read in a Z pattern – that is from the top left of the screen to the lower right, place the title flush left. Bold face but don't capitalize each letter. This last is a principle, not a rule. I sometimes find caps in the title help set off the content in sentence script below.

b. Legible font. Bold Face is easier to read than thin lines. Ariel and Helvetica are two good choices. They are sans serif (a type face without flourishes on their tips) they are simple and don't run into one another. Comic Sans is another favorite of mine. I like it because it seems friendly and informal. No font should be smaller than 24 points unless it is a footnote.

c. Uniform sizes. On each slide and throughout the presentation wherever possible.

d. Consistent color scheme with restraint. No more than three colors per slide. Yellow on a black background is a good combination. Hot colors like yellow, orange, and red are good for foreground. The cooler colors of blue, green and purple are better for background. Strive for contrast. Pair a hot with a cool.

e. *Check grammar*

f. *Check spelling*

g. *Check sequence.* Have you changed your notes since you developed your slides?

**4. Leave space around the words on the slide.** It is much easier to read the slide if it isn't crowded or cramped. The lower right is usually the place with least words, and a useful zone in which to place an image or logo. This is consistent with what Michael Buckley advises about "white space" on charts.

**5. Face your participants.** Don't turn around and read from the screen. Talk about your slides; look at your computer screen and talk to your participants.

**6. Make sure not to overdo animations and sound effects.** Too much motion and sound distracts from your message and no one will pay attention to the real message.
Don't use animations unless they help communicate a point. For example, avoid
WHOOSH sounds as letters appear on the screen.

**7. Graphics and clip art enhance your content.** Use clip art to strengthen your message; otherwise they become the focus instead of your message. Be cautious about too much cutesy clip art. Use images from your camera as much as possible when they help illustrate a concept. Those who work with one of the authors knows that pictures of his grandchildren usually find a place on the screen whether he is using transparencies or Power Point, but of course, they are always there to make a point. (This, sometimes is as simple as, and important as, speaker connection with the audience.)

**8. Having said the above, do use a high image to text ratio.** We construct more meaning from images than words. The most effective political campaigns demonstrate this principle – rich images with limited text have memorable impact.

**9. Know your equipment and make sure you have a contingency plan.** Check your equipment before you start. Be prepared to shift gears if necessary. Ask for help if you have trouble; there's usually someone in the group who knows the technology.

**10. Number your slides**. It makes it much easier to reference materials for your participants and yourself.

**11. Beware the slickness test.** If you appear too slick and polished folks might relate the session to a sales presentation. Don't use Power Point when working with relationship communities – it interferes with the message, which should be coming through interaction with you.

**12. Anticipate content.** Anticipate content that audience members may feel compelled to have in their notes. Some keynote speakers make a hard copy of slides available with a column to write personal notes. In workshop settings – in which a number of slides may be directions for activities – place quotes and "have-to-have" data in the margins of your handouts.

# CONE OF LEARNING

## WE TEND TO REMEMBER OUR LEVEL OF INVOLVEMENT

(developed and revised by Bruce Hyland from material by Edgar Dale)

| | | |
|---|---|---|
| 10% of what we read | READING | **P A S S I V E** — Verbal Receiving |
| 20% of what we hear | HEARING WORDS | |
| 30% of what we see | LOOKING AT PICTURES | |
| 50% of what we hear and see | WATCHING A MOVIE<br>LOOKING AT AN EXHIBIT<br>WATCHING A DEMONSTRATION<br>SEEING IT DONE ON LOCATION | Visual Receiving |
| 70% of what we say | PARTICIPATING IN A DISCUSSION<br>GIVING A TALK | **A C T I V E** — Receiving and Participating |
| 90% of what we both say and do | DOING A DRAMATIC PRESENTATION<br>SIMULATING THE REAL EXPERIENCE<br>DOING THE REAL THING | Doing |

Edgar Dale, *Audio-Visual Methods in Teaching* (3rd Edition). Holt, Rinehart, and Winston (1969).

# Walkabout Review
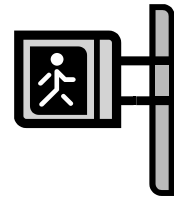
| | | |
|---|---|---|
| **Recollections** | | |
| NAME | NAME | NAME |
| **Insights** | | |
| NAME | NAME | NAME |
| **Applications** | | |
| NAME | NAME | NAME |

**Meet with nine others to share (3 each), from the concepts you have learned, your recollections, insights and applications. Walkabout until all boxes are filled.**
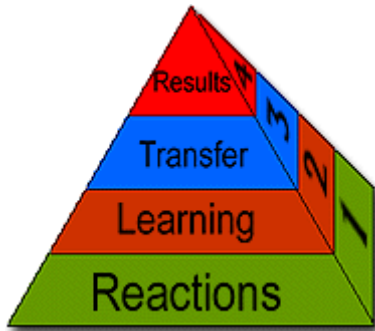
# Formative & Summative Evaluation

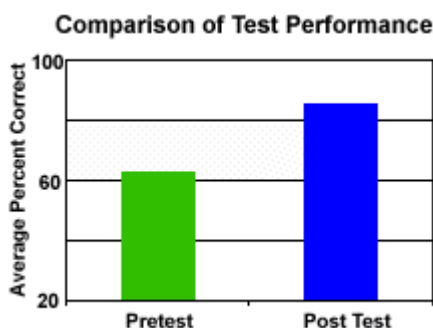| Formative | Summative |
| --- | --- |
| | |

# Kirkpatrick's Four Levels of Evaluation



In Kirkpatrick's four-level model, each successive evaluation level is built on information provided by the lower level.

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.

## 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.

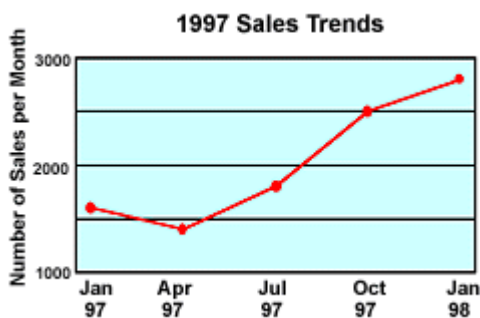## Level 2 Evaluation – Learning



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).

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.

## *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*



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.

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.

## *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)

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Winfrey, E.C. (1999). Kirkpatrick's Four Levels of Evaluation. In B. Hoffman (Ed.), *Encyclopedia of Educational Technology.* Retrieved September 10, 2007, from http://coe.sdsu.edu/eet/Articles/k4levels/start.htm

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**Summarize the main point(s) of this article below in three sentences or less.**

# Course Evaluation

**I came expecting...**

**I got...**

**I value...**

**I want next...**

# Possible Course Evaluation Questions

Questions would be scored on a 5-point scale (5-Strongly Agree, 4-Agree, 3-Neutral, 2- Disagree, 1- Strongly Disagree) with a space left for "not applicable".

**General**

- Student responsibilities and expectations were clearly defined.
- The objectives and expectations of the course were clearly defined at the beginning of class.
- The objectives of the course were met (what the instructor said would be taught was taught).
- Class time was used efficiently.

**Delivery**

- Material was presented at a basic enough level.
- Material was presented at a too basic level.
- Course handouts were related to the course.
- Audio/visual materials used were effective in helping me learn course material.
- Written assignments and projects were valuable in helping me learn course material.
- Reading assignments were valuable in helping me learn course material.
- Group interaction/work was valuable in helping me learn course material.
- The equipment students and instructors used was adequate.
- The facilities students used were adequate (classrooms, firing range, etc.)
- The amount of outside work (homework) was appropriate.
- Test materials were covered in class.

**Conclusion**

- The course helped me develop new skills by adding to my knowledge of the field.
- The course as whole was (excellent, good, so-so, not good, poor).

**Response/comments**

- Are there ways that the course could be improved?  Please explain anything you rated a 2 or 1 (this will help in updating the course for the next class).

# Test for War Story Appropriateness

Stories can be a great teaching tool. They transport listeners to a childlike state in which they absorb and retain information with very few filters that might reject the message. There is a best time and place for war stories in during instruction. The following are some self-assessment questions about telling stories?

1. Am I clear about my purpose in telling the story?
    a. To make a point
    b. To set the stage for an activity
    c. To pose reflective questions
    d. To teach through example
    e. To teach to the unconscious mind
    f. To change the pace of instruction

2. Is this story for me because I enjoy telling it?

3. Has the learning point already been made rendering a story unnecessary?

# Closing

- Plan your closings in detail. Memorize them if necessary.

- Provide a cognitive summary of the day. Support this with visuals.

- Provide an affective component.

- Acknowledge the important work and contribution of the audience.

- Include encouragement for the next steps.

- Inspire

Closings that are too long lose energy. Time is precious, when people are moving towards the end of their anticipated time of being in the room. Two to four minutes is the maximum time to spend on the affective part of the close.

End early. You will never make an enemy by adjourning the meeting a bit early. As you close, turn some music on. It warms the room a people are leaving.

# Learning Partners

Make an appointment with four different people – one for each icon.  Be sure you
both record the appointment on your page.  Only make the appointment if there is an
open slot at that icon on both your calendars.

_____

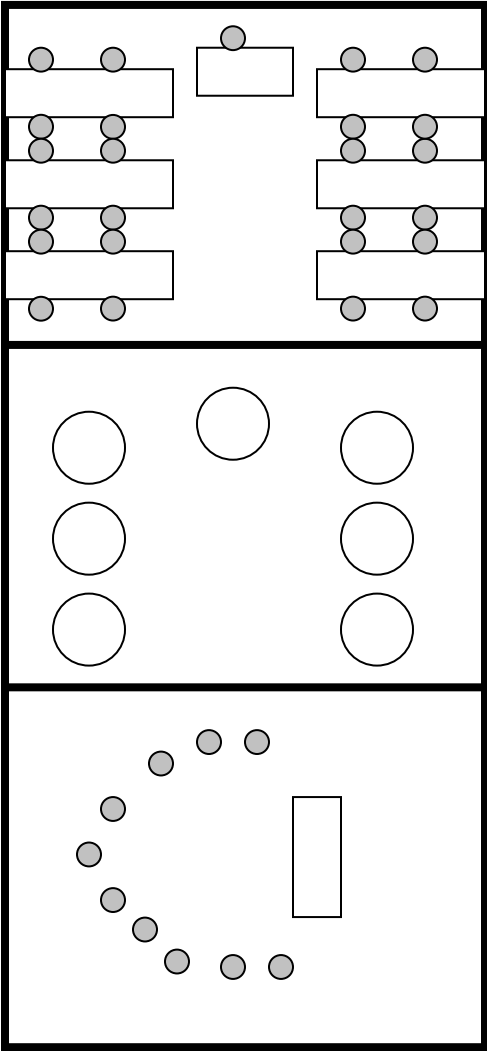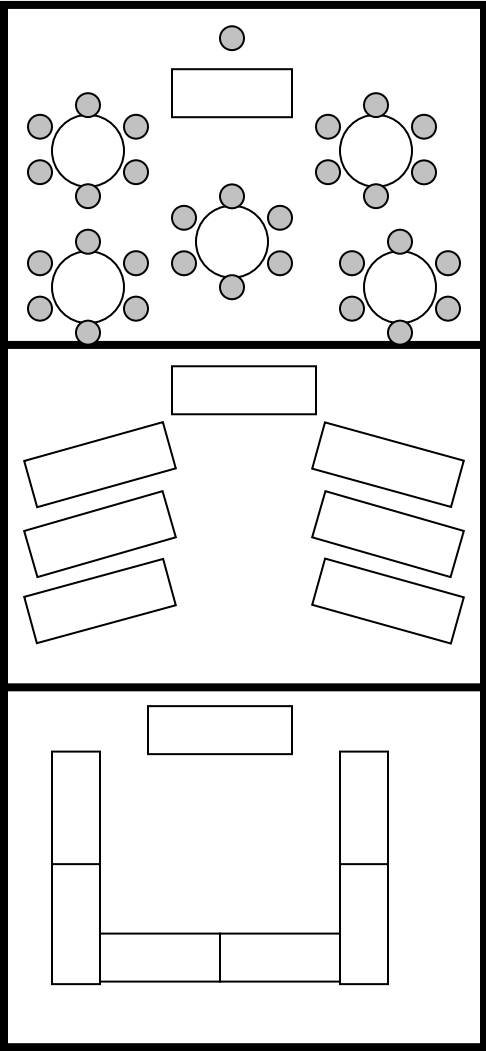_____              _____

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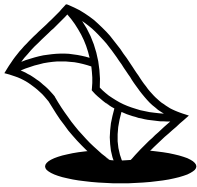
# *Room Arrangement*

The arrangement of your classroom maximizes effective learning. When setting up your classroom think about its arrangement as it relates to the facilitation teaching style.

## Here are some ideas:

# KEEP AN EYE ON THE HAND

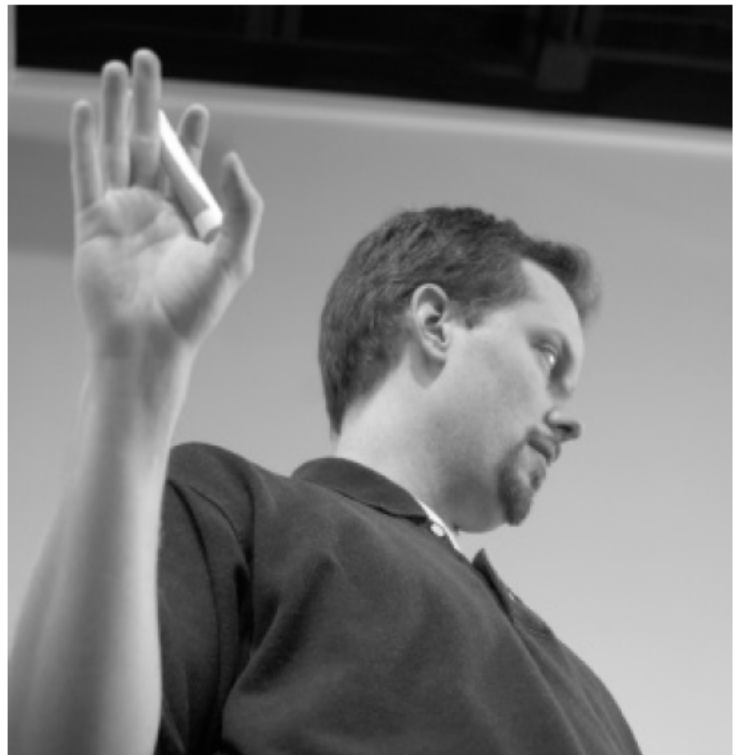## Non-verbal communication is part of a leader's arsenal

BY KENDALL ZOLLER



You are presenting to a group, running a meeting, or facilitating a discussion and you need to get the group's attention to move to a next step. Do you say, "Listen up!" or "Eyes up here!" or "May I have your attention please?" Overt management statements work often, but not all the time, and can even have a negative impact on an individual's learning.

Nonverbal or paralinguistic strategies respectfully get the group's attention. A good meeting is led by someone who not only carefully chooses words and contexts but also plans paralinguistics that support and enhance respectful group dynamics.

Paralinguistic is defined in two parts: para meaning "around" and linguistic meaning "words." Paralinguistic skills are the skills around the words we speak; they include how we use our voice, body, breathing, and eyes.

Patrick Miller (1981) says 82% of communication in the classroom is nonverbal. A survey of the literature reveals that adult groups are not too much different. Recent research also indicates a connection between a speaker's gestures and listeners' mem-

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ory (Goldin-Meadow, Kim, & Singer 1999; Roth, 2001). Using appropriate gestures and body language are vital to getting the message across — and having the group remember it.

The April 19, 2003, edition of *Science News* reported that a study by Emily Cross and Elizabeth Franz showed that "hand gestures amplify the impact of spoken words" (Bower, 2003). By attending to gestures, we can help improve listeners' access to

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information. Michael Grinder (1993, 2000) proposes a model with four junctures at which to use paralinguistic skills in teaching: getting the group's attention, teaching, transitioning, and seatwork. Outside the classroom, when working with other educators, the categories could be:

- Getting their attention: when the leader needs the group's focus;
- Presenting: when the leader has information to impart;
- Transitioning: when the leader wants to start a group or individual activity;
- Doing the work: when the group works on a task or activity.

These four categories are dynamic, rather than occurring in a linear progression, during any meeting.

For getting attention, Grinder suggests pausing, voice modulation, a skill termed ABOVE (pause) whisper, and the frozen hand gesture.

The first skill, pausing, allows the speaker and listeners to breathe after the message is delivered, enhancing the delivery and acceptance of the message. Breathing supports understanding because although the brain is only about 2% of body mass, it uses as much as 37% of the body's oxygen. Pausing in delivery supports breathing and provides an environment low in threat, allowing the group to think more clearly and effectively (Garmston & Wellman, 1999).

Secondly, group leaders must be aware of voice modulation. Think of a voice modulation continuum, with one end labeled "credible" and the other end "approachable." Credible in the American culture and English language is represented by a flat voice tone that drops at the end of a sentence. For example, think of the following pattern spoken by newscaster Tom Brokaw: "This is Tom Brokaw, and this is the news." A voice and chin drop at the end of the sentence signal to listeners that information is going to be delivered and will be worth listening to. The approachable

voice is best understood as it contrasts with asking a question. The intonation rises at the end of a question. This signals to the group that the speaker is seeking information or being tentative in delivering the message (Grinder, 1997, p. 46). Speakers have their intention, and the group has its perception of the message's context on the continuum. Good speakers select the voice pattern that supports the intention of the words being delivered. Congruency of words and voice makes good oration.

The third skill is ABOVE (pause) whisper. The assumption here is that our brains are hardwired to detect pattern changes. For example, think about taking a long drive. While you are driving, you converse and think more about what you are saying than about driving. But a car turns in front of you or a dog runs across your lane and your attention shifts from talking to driving — a pattern change occurs. The disruption in pattern gets attention.

Groups have patterns, too. A group volume modulates up and down and can be influenced to increase or decrease in volume. To quiet a group using a nonverbal technique, introduce a pattern shift by saying a word louder than the loudest voice in the group. This loud noise is the first pattern shift. Then pause. Silence is the second pattern shift. Lastly, whisper the message in a stage voice, slowly bringing your voice to a normal speaking level. The whisper is the third pattern shift. When all three pattern shifts are completed, the group volume level is often lowered, and the speaker has gotten everyone's attention without ever saying, "May I have your attention please?"

A final strategy is the frozen hand gesture. This skill is best used during a pause. When a speaker holds the same hand gesture throughout a pause, it indicates to the group that more information is coming. It can also indicate that the next item is

more important than the previous item. Most people use this skill as a habit. However, using it consciously when delivering a plan draws attention to each point the speaker makes.

A good workshop or meeting depends on good presentation skills. Planning and incorporating a deliberate choreography of paralinguistic skills and developing a repertoire of skills to use on the fly can make a speaker more effective at getting the group's attention without overt management. Since nonverbal communication can account for 80% of the message, staff development leaders must consider paralinguistics to do their best work.

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# Get Ready for the Gamer Generation

By Adam Carstens and John Beck

*"Sooner or later, those who grew up without video games will have to understand the gamers."*

There is a new generation of workers taking over key positions in your organization and in your classrooms. This generation is younger, yes, but they're also different in ways that will definitely change how business is done and how learning is accomplished. Our research shows that the way they spent their formative years has given them an entirely different set of skills from those who came before. They are different from their predecessors in significant and verifiable ways, and we believe those differences are driven by one central factor: growing up playing video games. The results of our research are chronicled in the book *Got Game: How the Gamer Generation Is Reshaping Business Forever* (Beck & Wade, 2004).

This "game generation" will soon outnumber their elders in the workplace. Their way of thinking will soon pass the business tipping point and become standard operating procedure. Sooner or later, those who grew up without video games will have to understand the gamers. That means not only learning what they're all about, but finding ways to redesign educational and training curricula around their needs.

## Games have a huge impact

If that sounds unlikely, you may — like many people — have overlooked just what a force video games have become. But games are not a "niche" any more. Americans now spend more money on video games each year than they do going to the movies, and more time at home playing video games than watching rented movies. Already, five out of every ten Americans — about 145 million consumers and employees — play video games in one form or another (ESA, nd). But to most outside the video game industry, games are still practically invisible. Most professionals know games exist, of course, but still view them as a child's toy. But many of your co-workers and students have already spent billions of dollars, and billions of hours, in the virtual worlds created by these machines. Many of their most precious childhood memories revolve around these games.

Games are a powerful information technology, unique in history, and radically different from technologies that came just before, such as television. Games and their powerful interactivity and reinforcement of particular behaviors, as opposed to the one way delivery of television, have created an entirely new individual — and as a result, new and different needs for training.

## Forming the neural pathways

Research into the development of the brain has shown early childhood and adolescence are the critical years for how the brain is prepared for perceiving and

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reacting to the world around it. As evidenced by Paus and co-authors, "Structural maturation of individual brain regions and their connecting pathways is a condition sine qua non for the successful development of cognitive, motor, and sensory functions." Such structural maturation of these fiber pathways occurs continually throughout adolescence, but then fades as people reach adulthood (Paus et al., 1999). Thus, these critical years often leave our brains with a particular set of assumptions and beliefs about how the world works. While their opinions about specific matters may change, their basic operating system has largely taken shape by the time they enter the workforce.

Around the early 1980s, video games started to take more of children's time. After school, in the evening, on the weekend — games began to invade the free time of adolescents and children alike. The percentage of those who played them steadily rose from the low single digits to a near universal presence today. New data from the Kaiser Family Foundation shows 8-10 year olds spend more than an hour a day with video games (Rideout et al., 2005). The immense amount of time spent with games during a child's formative years has led them to be literally "hard wired" in a different way than those who came before.

## Games created a new belief system

Games are now pervasive among those now in the workforce — with more than 4 out of 5 managers under age 34 reporting they have significant video game experience (Figure 1).

Games reinforce certain beliefs about the self, how the world should work, how people relate to one another and finally, about the goals of life in general. Games create a self-centered universe where the player is running the show, and can manipulate other people and objects to his or her will (within certain rules, of course).

To confirm these new beliefs, we commissioned a study of 2,500 Americans, mainly business professionals, followed by numerous personal interviews within that group (Beck & Wade, 2004). Our group included a wide range of ages, women as well as men, with all levels of gaming experience. We also deployed a carefully selected group of questions used and found reliable in numerous past surveys. We used these questions to explore how gamers (defined as those who had grown up playing video games) think and feel about their work compared to non-gamers. What we found surprised and delighted us, as gamers showed a range of different opinions and behaviors compared to their non-gamer brethren.

For example, instead of trying to seek "one" answer, games teach there are many potential paths to "victory," and one should try as many as possible to see what happens. Victory is possible — the game designer wouldn't have made the game without one. And the cost of failure is low if not zero — all that is required is another token or a press of the reset button. The value is not all tied up in "winning" one way; it is more about the path to victory itself. Gamers are more likely to believe that "winning is everything" and "competition is the law of nature" than non-gamers (Figure 2).

Games teach players that the world is a competitive place, and standing still won't get you anywhere. If there's a fork in the road, take one and see what happens. Whoever you run into along the way will either be a friend or an obstacle — it's up to you to try and figure out which one, and what effect they'll have on you.

Finally, games teach that being the hero is important — people are counting on you to save the day and defeat that evil "level boss" waiting for you at the end of the maze. Thus, traditional leaders and top-down systems don't earn a lot of respect from gamers, as they've been taught their entire lives to dispatch with those in authority as quickly as possible. Gamers correspondingly believe that they are "considered deep experts" in their companies, and believe "if something needs to be done right, they had better do it themselves" (Figure 3, next page).
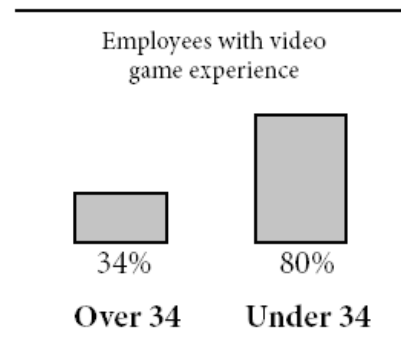


Figure 1. Age group comparison related to levels of significant video game experience
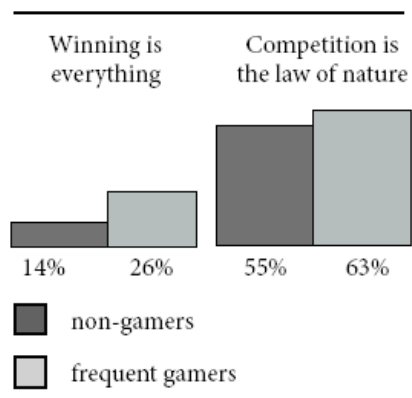


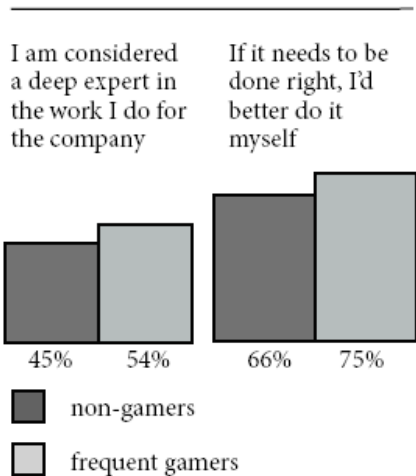Figure 2. Comparison of Non-gamers and Frequent gamers related to attitudes on winning and competition.

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I am considered a deep expert in the work I do for the company

If it needs to be done right, I'd better do it myself

45%  54%   66%  75%

■ non-gamers

□ frequent gamers

*Figure 3: Comparison of non-gamers and frequent gamers related to attitudes on self-efficacy.*

Of course, not all gamers feel this way — and as with many things in life, it's a matter of degree. But our research found that enough gamers had these attitudes and stood in stark contrast to those older than them who did not have the privilege of these technologies when growing up. As with any generational shift, the advantage of time belongs to the young. But for those charged with training and educating this new generation, the challenges are formidable. The same old tools just won't cut it.

## The new rules of training

We think gamers are better prepared to deal with the challenges of the future than any other workforce before them because of their exposure to these new technologies. After all, corporations have been forced to become less rigid, more global, and a lot better at responding on the fly. Employees have to work harder but they also have to work smarter. But gamers have already mastered that new management model. Individual control, trial-and-error, constant change — those are all a standard part of life for these up and coming managers.

To succeed in training gamers, one must create a curriculum which:
- aggressively ignores any hint of formal instruction
- leans heavily on trial-and-error (after all, failure is nearly free, you just push "play again")
- includes lots of learning from peers but virtually none from authority figures
- is consumed in very small bits, exactly when the learner wants, which is usually just before the skill is needed
- allows for people to take risks in a safe environment
- allows for players to achieve a skill or talent which is not only meaningful but perceived as having value

Gamers will respond positively to this curriculum because their games have conditioned them to accept these previous conditions as valid, at least compared to other forms of learning. Video games contain very few formal instructions (though there are "cheat guides" one can use for help) and allow for an infinite number of replays until the correct solution is achieved. Games allow players to trade information freely about how best to solve the puzzle — as opposed to formal tests which require each player to replicate knowledge independently. And finally, games are paced according to the player's ability or skill level — with each play, you progress a little further and can spend as much or as little time on different parts as necessary.

Gamers are much more comfortable in this sort of learning environment primarily due to their comfort level with risk. By a whopping fifteen percentage points (61% versus 46%), gamers believed "the best rewards come to those who take risks." This comfort level with risk has been developed over a lifetime of crashing and burning, largely through games.

Gamers also strive more than non-gamers to succeed, as long as the goal has meaning to them. They say "my life could be happier than it is now" by nine percentage points more than non-gamers (68% versus 59%). Thus, gamers seem much more willing to take the steps necessary to get to the next level because they sense they are capable of more than they currently have. Gamers will respond, but only if the skill being learned is placed in a proper context — they will not learn for learning's sake alone.

Organizations need to adapt not only their training programs but many of their internal processes to give gamers new ways of learning to harvest their potential. Said one young manager, "Training would be much more effective if it was more interactive, like a game, with input and interaction with the system. I don't mind whether it's a computer or a person, it just has to be more interactive than just reading." How are your current training tools meeting that need?

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## How to get the most from your gamers

To get the most from your gamers, try some of the following. Get to know some specifics of how they prefer to spend their free time. This might mean actually playing a game or two, or truly watching, really paying attention, to what your children play. By building real relationships with gamers you know professionally, you can find out more about what makes them really tick. It might even be worth it to indulge in some cultural tourism — hang out in a game store, attend a LAN party or take a GameBoy on your next road trip. But remember to look past the superficial parts of games and focus on the life lessons they impart — games are powerful metaphors for many of the conflicts and challenges we face every day at work and school.

To find the best gamer leaders, you need to develop projects specifically designed to get future leaders from the game generation working side by side with current leaders. This will allow for cross-pollination of ideas and working styles, so that each can see what the other has to offer.

Finally, you can also try to use the power of a "war game" in your organization by tackling a crisis before it happens — just to see what reactions and solutions people will come up with. You might be able to find areas you hadn't thought about before that need a tune-up, identify the biggest potential changes that seem most likely to touch on your business or identify signposts or indicators that will tell you early on whether that change is taking place. For each area you think needs attention, spend about a half hour brainstorming what could happen, how it could threaten you, how you could exploit it.

We think the possibilities are endless when it comes to how best to train this new generation. But doing so requires acceptance of a new way of doing business, which can be hard at first. But take a look at how successful or effective traditional training styles have worked so far on this generation. In our extensive field work interviewing members of the gamer generation, we don't hear a lot of raves out there for sitting in seats and listening to lectures — even from non-gamers. For material to be truly compelling, it must reflect the new reality of how these gamers have been formed to think.

## Are you ready for the game generation?

Would you have expected all that from video games? Neither did we when we started this research. But the important qualities of the game generation will go deeper than business acumen, work ethic or competitive drive. It will be how they adapt, learn and overcome the challenges the business world will place in front of them every day. To give your organization an edge, you're going to have to create new systems for gamers to learn and flourish. Now that you understand a little more about how gamers work and what motivates them, you should be better able to create environments for them to thrive and really get down to business — your business.

Games and gamers are known for nothing if not their exceedingly quick evolution. So it's worth remembering that to really stay on top of this phenomenon, you're going to have to keep up. As video games become a bigger influence on our culture, we all will need to pay attention to the ins and outs of what gamers are thinking not only today, but also tomorrow. It's going to take some effort, but in the end, it will keep you in the game.

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# The Millennial Generation

**Overview**

According to Neil Howe and William Strauss' *Millennials Rising*, the next great generation of students consists of those born after 1980 and graduating high school following the year 2000. This generation, in spite of negatively-framed predictions, has demonstrated many unique characteristics that can make them successful in the academic and economic world of the future.

These characterizations often are of the broad, sweeping generalities variety. The challenge for academics is to understand these characteristics and to translate them into specific pedagogical practices. However, this charge will take some creativity as hard data on which practices work best is slow in coming.

**These are our students; how do we reach them?**

## Managing Millennials:
## Eleven Tips for Managing Millennials
Susan M. Heathfield

The millennials joining your workforce now are employees born between 1980 and 2000, or 1981 and 1999, depending on the author. Unlike the Gen-Xers and the Boomers, the Millennials have developed work characteristics and tendencies from doting parents, structured lives, and contact with diverse people. Millennials are used to working in teams and want to make friends with people at work. Millennials work well with diverse coworkers.

Millennials have a "can-do" attitude about tasks at work and look for feedback about how they are doing frequently – even daily. Millennials want a variety of tasks and expect that they will accomplish every one of them. Positive and confident, millennials are ready to take on the world.

They seek leadership, and even structure, from their older and managerial coworkers, but expect that you will draw out and respect their ideas. Millennials seek a challenge and do not want to experience boredom. Used to balancing many activities such as teams, friends, and philanthropic activities, millennials want flexibility in scheduling and a life away from work.

Millennials need to see where their career is going and they want to know exactly what they need to do to get there. Millennials await their next challenge – there better be a next challenge. Millennials are the most connected generation in history and will network right out of their current workplace if these needs are not met. Computer experts, millennials are connected all over the world by email, instant messages, text messages, and the Internet.

1.  **Provide structure.** Reports have monthly due dates. Jobs have fairly regular hours. Certain activities are scheduled every day. Meetings have agendas and minutes. Goals are clearly stated and progress is assessed. Define assignments and success factors.

**2. Provide leadership and guidance.** Millennials want to look up to you, learn from you, and receive daily feedback from you. They want "in" on the whole picture and to know the scoop. Plan to spend a lot of time teaching and coaching and be aware of this commitment to millennials when you hire them. They deserve and want your very best investment of time in their success.

**3. Encourage the millennial's self-assuredness, "can-do" attitude, and positive personal self-image.** Millennials are ready to take on the world. Their parents told them they can do it - they can. Encourage - don't squash them or contain them.

**4. Take advantage of the millennial's comfort level with teams. Encourage them to join.** They are used to working in groups and teams. In contrast to the lone ranger attitude of earlier generations, millennials actually believe a team can accomplish more and better - they've experienced team success. Not just related to age, watch who joins the volleyball match at the company picnic. Millennials gather in groups and play on teams; you can also mentor, coach, and train your millennials as a team.

**5. Listen to the millennial employee.** Your millennial employees are used to loving parents who have scheduled their lives around the activities and events of their children. These young adults have ideas and opinions, and don't take kindly to having their thoughts ignored. After all, they had the best listening, most child-centric audience in history.

**6. Millennial employees are up for a challenge and change.** Boring is bad. They seek ever-changing tasks within their work. What's happening next is their mantra. Don't bore them, ignore them, or trivialize their contribution.

**7. Millennial employees are multi-taskers on a scale you've never seen before.** Multiple tasks don't phase them. Talk on the phone while doing email and answering multiple instant messages – yes! This is a way of life. In fact, without many different tasks and goals to pursue within the week, the millennials will likely experience boredom.

**8. Take advantage of your millennial employee's computer, cell phone, and electronic literacy** Are you a Boomer or even an early Gen-Xer? The electronic capabilities of these employees are amazing. You have a salesman in China? How's the trip going? Old timers call and leave a message in his hotel room. Or, you can have your millennial text message him in his meeting for an immediate response. The world is wide, if not yet deep, for your millennial employees.

**9. Capitalize on the millennial's affinity for networking.** Not just comfortable with teams and group activities, your millennial employee likes to network around the world electronically. Keep this in mind because they are able to post their resume electronically as well on Web job boards viewed by millions of employers. Sought after employees, they are loyal, but they keep their options open – always.

**10. Provide a life-work balanced workplace.** Your millennial employees are used to cramming their lives with multiple activities. They may play on sports teams, walk for multiple causes, spend time as fans at company sports leagues, and spend lots of time with family and friends. They work hard, but they are not into the sixty hour work weeks defined by the Baby Boomers. Home, family, spending time with the children and families, are

priorities. Don't lose sight of this. Balance and multiple activities are important to these millennial employees. Ignore this to your peril.

**11. Provide a fun, employee-centered workplace.** Millennials want to enjoy their work. They want to enjoy their workplace. They want to make friends in their workplace. Worry if your millennial employees aren't laughing, going out with workplace friends for lunch, and helping plan the next company event or committee. Help your long-term employees make room for the millennials.

By Internet research counts, 75,000,000 millennials are preparing to join or joining the workforce. These are desirable employees. Make your millennial employees happy in a fun, yet structured setting, and you are building the foundation for the superior workforce you desire. You are developing the workforce of your future.

As always, when I characterize a group of employees based on age, or any other characteristic, some employees will fit this description; some employees will fit part of this description; some employees will not fit this description. Yet, I believe that, if you heed these tips, you will steer your organization forward, more times than not, with a positive approach to managing your millennial employees.

# Role Playing & Realistic Scenario-Based Training

**Prepared by Kenneth K. Knoelk**

## Introduction:

**History:**

The term "role" comes from the "rolled-up scripts" actors used to use over two thousand years ago in Ancient Greece. In time, the script became the part, and the actors then were said to "play the part" or as to say the "role". Playing the part or playing the role = "role playing".

Dr. Jacob L. Moreno (1889-1974) in 1910 designed the first known role-playing techniques to be used in area of training. Role-playing became more widely known and used after he moved from Vienna, Austria to the United States in the 1930s.

Role-playing is a primary technique to provide participation and involvement in the learning process. In a training environment, role-playing allows the learner to receive objective feedback about one's performance. Role playing techniques can be used to diagnose interactive skills, to provide models and practice, and to motivate individuals to pay more attention to their interpersonal impact. One of its primary benefits is that it allows the learner to experience a real life situation in a protected environment.

Over recent years, there has been greater interest in employing active learning techniques in the college classroom. Faculties have recognized that learners gain knowledge and insight through action. In addition, professors are more aware of differences in learning styles, and the importance of using a variety of instructional techniques to address as many of these as possible. There has also been increased emphasis on creating community in the classroom, whereby students learn through interactions with each other and assume joint ownership of the educational experience.



## Liability Issues:

*"Liability,"* . . . a word that strikes immediate concern in many law enforcement instructors, but it is also the word that makes them strive to do their best.

Law enforcement trainers, regardless of the discipline they teach, have the same basic function, to help reduce liability. A teacher becomes well versed in their art, which limits their personal liability. This allows them to teach the appropriate techniques to students to limit their liability as well. All this helps limit the organization's liability and, just as important, it limits the liability to the communities they serve. It is important to note, the term "liability" does not just apply to a civil tort, it also refers to the burden created by injury, and the ripple effects to the rest of the organization/community.

*One of the best ways for a law enforcement trainer to manage liability is through Realistic Scenario-Based Training* (RSBT). While RSBT has been around for numerous years, there are still a large number of law enforcement agencies that do not use it or that do not use RSBT to its full potential. It has been called by many names, such as "Force-on-Force Training", "Confrontational Simulation", and "Simulation Training," just to name a few. Regardless of the name used, the goals are the same. It is designed to help the student become proficient in *real-world situations* with an eye toward limiting liability. It is imperative to note that classroom instruction and training in static environments are still valid; however, these techniques alone are not sufficient. While many law enforcement trainers now use some form of RSBT, it is essential to know why this type of training is important. If you, as a law enforcement trainer, were asked why RSBT is needed would you have an intelligent answer? Could you justify the cost of RSBT to your budget committee? If asked, during a civil trial, to support a particular training scenario could you provide legitimate sources, statistics, and case law?

For your sake, your student's sake and for the sake of your organization the answer should be a definitive "Yes." Let us start with one basic question, why is Realistic Scenario-Based Training important? Simply put RSBT is important because the courts tell us it is important. The courts have been stating this for decades and have reaffirmed their statements with recent trial decisions. It is vital law enforcement trainers keep track of these court decisions.

## Case Laws:



Below there are just a few Cases Laws (of many) that address training, but they speak volumes about the type of training we must provide our law enforcement students. By reviewing these cases, it is clear that training must take place regardless of budgetary constraints. Training must address situations the student is likely to encounter, must concentrate on all the tools being issued and used, and it must be realistic. If you fail to address all these issues during your training, you may be opening yourself and your department to liability.

Walker vs. City of New York

If it is known that employees will encounter particular events during the course of their employment, the employer must train those employees to aid their decision-making regarding the events, especially if employees have made incorrect decisions when presented with similar types of events in the past.

Owens v Hass:

Individual officers must be trained to perform the requirements of their jobs. Suspect may sue for negligent training, right on up the supervisory chain, if injured. This case indicated that training must be *"street real"* as much as safety will allow. Job tasks should be

examined and instruction should be tailored to the officer's assignment, equipment, and risks.


Lewis v Sacramento  No. 93-15924 10-9

Deputy acted outside policy.  The Ninth Circuit said he was personally liable for death of passenger on motorcycle.  ***Low frequency – high liability training MUST be reinforced with scenarios and discussions***


Parker vs. District of Columbia:

If the agency issues equipment, they are required to train the officer with it.  Likewise, if an action is required as part of an officer's job, the agency has the responsibility to train the officer to perform that action. This means that ***you cannot simply hand an officer a "Taser" without having real-based training, scenarios or simulation or role-playing training***.

McClelland vs. Facteau:

Budgetary constraints that limit training resources generally have not been considered a valid defense for failing to train.  ***If your agency believes they do not have the money to train, have them consider the millions they may lose in a civil case if training is not provided***.

City of Oklahoma v Tuttle, 471 US 808, 105 S. Ct. 2427 (1985)

This case dealt with police misconduct, not in the realm of proper policies or inadequate training, but rather ***the court did emphasize strongly the need for 'Real Time Training', or Realistic Training'.***  (Inadequate training).  Officer responded to a report of a 'robber in progress' and shot a man armed with a toy gun.

## **Role Playing**:

One of the most effective training tools is "Role Playing".  Role Playing is excellent in many ways, which benefit agencies, both in management and with the employees. Role Playing allows a group (or one-on-one) to 'act-out' work related scenarios. ***Role Playing allows for realistic and real-time training*** that is in a low-stress environment where mistakes can be safely made, causing no damage.  When errors are made, it is easy to make corrections immediately.  Role Playing is the systematic building of correct habits while learning the acceptable methods of performing the duties of a job.

Role Playing is an excellent exercise for;
- γ    Analyzing problems
- γ    Developing creative 'problem-solving' skills
- γ    Developing teamwork and cooperation
- γ    Developing communication and listening skills
- γ    Aiding in establishing 'Skill Acquisition' and 'Skills of Initiative', improving one's performance.

γ Aiding in establishing 'Habits' – automatic responses (memory/muscle retention)

γ Aiding in effecting changes in attitudes and values

γ Allowing students to develop an understanding of others' perspectives

γ Encouraging students to work with others in analyzing situations and developing workable solutions

γ Providing students an opportunity to apply concepts they have learned in a rich and realistic environment.

γ Giving students the chance to gain insight into interpersonal challenges they are likely to have in their careers and private lives.

γ Enabling students to effectively contrast problem-solving methods by role playing a situation several times from diverse perspectives

γ Offering a constructive channel through which feelings can be expressed and feedback processed

γ Presenting students with a forum for building self-esteem and confidence.

γ Helping students realize that the training process CAN BE FUN!!!!

## How to implement effective Role Playing:



Have you ever tried to implement new techniques and found difficulty changing habit patterns?  Have you ever exposed your personnel to correct methodology and found that they just were not doing what you had taught them?  Have you ever identified an error in your own skills or that of others and found that it just somehow did not get corrected?  If the any of these problems sound familiar to you, the solution is Role Playing.  However, there is a right and wrong way to implement "*Correct Role Playing*".

**Correct Role Playing**:          1:

What is 'Correct Role Playing'?  There are much misunderstanding surrounding this invaluable training tool.  Role Plying is NOT just "Practicing Out Loud" and certainly NOT imitating material in front of others.  Rather Correct Role Playing is the systematic building of 'correct habit patterns' in a low-stress environment, followed by individual critique and correction of errors through rehearsal.

In the Glenn Kaminsky's Field Training Officer Program, the process is

γ Describe (explain)

γ Demonstrate (show)

γ Perform (do)

γ Evaluate (critique)

γ Follow up or remedial training.

The process for Correct Role Playing is very similar.

**"Test and Evaluation" versus "Teach and Learn":**

 Most training programs are structured so that the role-playing or simulation exercise result in a "**Test and Evaluation**" of the trainee's skill level. A prime example of this type if training is firearms qualification. During a firearms qualification, instructors test and evaluate the trainee's ability to meet    a minimum standard when shooting at a silhouette of a human being. While this is necessary to document proficiency with a firearm, **this exercise does absolutely nothing to teach the trainee** how to quickly acquire a target and accurately hit it. In other words, no learning has taken place by the trainee.

By taking the same exercise and viewing it from another perspective, that of **"Teaching and Learning",** the exercise takes on a whole new meaning. Fore example, what if each qualification included a brief video showing the trainee their sight picture/sight alignment, stance and trigger press as they shoot? Might the trainee leave the qualification having leaned what they can do to improve their ability to shoot? The answer, obviously, is yes. Unfortunately, due to a variety of constraints, most instructors feel that they do not have time to add to an established training curriculum. The solution is simple, change the mindset from "Test and Evaluation" to "Teach and Learn".

By "Teach and Lean", an instructor can make learning the primary goal of ANY training exercise. "Test and Evaluate" then becomes a by-product of the learning that takes place.

## **Setting up a Role Playing and Simulation Scenario:**

γ        **Defining the Goal and Performance Objectives of a role-play or simulation scenario:**

Role-play rules are relatively simple, role-plays must be **focused**; the **objectives must be clear and understood**. Role-playing can become ineffective if people are unclear about what they are supposed to do. Instructions must be clear and understood; be clear about the purpose, the goal and the performance objectives.  Be very clear about what you want people to get out of the role-playing experience. Muddy thinking at the outset will result in muddy outcomes. Clear thinking and role-play preparation result in clear outcomes.  Ask yourself, "what is it, as an instructor, that I hope the students will learn by participating in the exercise?"

Defining the goal and performance objectives: The details of what you need to do depends entirely on why you want to include role-playing exercises in your course. What topic do you want the exercise to cover? How much time do you and your class have to work on it? What do you expect of your students, for example research, report, presentation? Do you want the students role-playing separately or as a group? Do you want to include a challenge or a conflict element?

γ    **Role-playing and simulation scenarios must be 'realistic':**



All roll-playing scenarios and all simulation **scenarios have to be realistic**. For instance, if you are teaching a complex behavioral block, break it down, rather than have people role-play it in one huge chunk. Just as actors do not rehearse a play in one huge lump, they break it down into (sometimes) tiny micro-units and rehearse until they really feel confident with each bit, so the same principles apply to any complex new skill to be learned. Being over-ambitious causes people to lose confidence in themselves and in role-playing as a tool. Like any tool, role-playing must be used properly or it will not work. If you do not have time to eventually have the participants doing the whole thing properly, in depth, with plenty of rehearsal and revisiting, then just do a part of it.

γ    **Role Playing must fit within the scope of job. (Scope of the employment)**

Roll-Playing Training and Simulation Scenarios not only have to be realistic, but they also need to be within the scope of employment. Training must fit the job, it must be job related.

γ    **Role Playing and Simulation Scenarios must be well scripted (the script must be "standardized")**

 The most important component of successful, meaningful simulation training remains the development of well-trained, *fully controlled* actors. Instructors must assign these actors roles that are *specific*, limited, and carefully supervised to *prevent a deviation-from-role* that can lead to poor training and injuries.

*Tell actors specifically, and in writing, what they can do and,* equally important, *what they cannot do.* Remember, if you use officers for role players (and most of us do), they love to win. With adrenalin pumping, it is hard for an untrained, unsupervised role player to remember that the ultimate goal of the actor is eventually to lose (i.e., be controlled by the officer in the simulation). Yes, actors need to be challenging and realistic, but if the trainee performs effective tactics, the actor should give realistic responses and allow the technique to succeed.

γ  **The script can have alternatives**.

It is true that the scenario needs to be written out, well scripted and standardized, however, in that script, you need to write in "alternatives". This is to say that if the officer being tested does one thing, the actor may do one thing, if the officer does another thing, the actor will counter accordingly.

For example, you are working on a domestic violence scenario. You have a mock living room set up, with a sofa on the north wall, an easy-boy chair on the east wall, a television and stand near the front door, etc. You have verbally covered officer safety issues, in particular. Before you have a suspect sit down, you make sure the sofa is free of weapons. In the scenario, there is a handgun placed between the cushions, Officer 'A' wants the male suspect to sit down, if officer 'A' checks the sofa and finds the gun, great, this is what you want. The actor sits down, and every thing is fine. If, however, officer 'A' tells the suspect to sit, and has failed to check the cushions, then the actor can pull the gun and shoot officer 'A'.

Keep in mind, the 'alternatives' need to be written down, they need to be performed with standardization based on what the officer does or does not do. The actors cannot deviate from the alternatives.

γ  **The evaluation needs to be pre-written**.

    1.  The areas that were taught and need to be tested must be written down.

    2:  The areas that are to be tested must be based off the performance objectives.

γ  **The evaluators need to be instructed as to what they are** e**valuating**

For the observers, explain clearly what you want them to look out for. Again, this should be in line with your performance objectives.

γ  **Debriefing and Feedback needs to be provided:**

**The Debrief**:

Debriefing also refers to 'closure' or 'wrap up', a verbal (and in some cases a written) assessment of the program, and an opportunity to change and tweak the scenario. Feedback is what is given to the student by the instructor, based on the performance objectives and the expected outcome of the scenario.

In addition to feedback on performance, trainees must be able to clearly articulate in their own words, according to law, policy, and procedure why they performed the way they did during the training scenario.

The last step consists of debriefing the officer's responses in these decision- making, scenario-based simulations. Debriefing is a critical tool in changing and improving an officer's future performance, but it is often not done or done poorly.

Debrief in a positive manner. The old way of "reading the officer the riot act", telling them everything they did wrong and putting them back into line is both destructive and counterproductive. Instead, conduct debriefing in a team-building atmosphere that includes the following components:

- γ      Are you OK? (the wellness check);
- γ      How do you think you did?
- γ      Positive comment, if possible;
- γ      What would you do differently?
- γ      Role player, and/or peer jury comments; and
- γ      Instructor summation

**The Feedback:**

*Feedback needs to be specific, relevant, achievable and given immediately.* Feedback is crucial to learning and developing behavior options, knowing what works, what does not work, and the range of behavior available to an individual. Feedback provides an opportunity to go back and have another attempt or several attempts at bits of the role-play and/or the whole role-play.

Feedback should broadly follow <u>SMART Principles</u> *(Specific, Measurable, Agreed, Realistic, Time-bound)*. Role-play feedback should describe specific things that the observer saw and heard, relevant to the exercise and to the person(s) doing the role-playing. Role-play feedback should not contain subjective judgments or comments based on personal knowledge or assumptions. Feedback should be meaningful and specific, something that the role player can act on. Role-play feedback is not helpful if it suggests that the role player should 'get a new personality' or 'be nicer'. Remind participants that the purpose of the role-play is for the development of the person or people doing the role-play. Objectivity facilitates learning.

Make sure you listen to your officers' perceptions and reasons for responding as they did prior to telling them what you think they should have done. Several years ago, we designed a scenario that tested officers' ability to use their firearm to stop a threat. Two officers responded to a domestic disturbance involving two brothers fighting. Upon the officers' arrival, one brother was straddling the other on the floor while hitting him on the head multiple times with a steel pipe. The assaultive brother refused to stop. We interpreted this scenario as a clear shoot situation, but we were shocked that less than 20 percent of the officers fired their firearms. They used a whole range of other force options. When we asked them why they didn't shoot the assaultive brother, we received numerous answers, including:

- γ      The subject wasn't attacking them;
- γ      This was a domestic;
- γ      They weren't sure what was going on;
- γ      They could have unintentionally shot the apparent victim;

γ      The subject was turned away from them;

γ      The baton was in the their hand; and

γ      Liability concerns

This led us to ask officers in future classes what they saw and why they responded the way they did before giving our "right" answer to the scenario.

**Verbal Debrief and use of Video Recordings in a Debrief:**

Generally, a debrief is done directly following the officer's participation in the scenario. In most cases, the debrief is done verbally. The debrief can be done with the individual officer, or with a group of participating officers. In a few cases, the debriefing was done with all the officers being taught, so that the others officers can provide feedback.

Using a video or a DVD recording of the scenario is good to play back. On one occasion, using the ASP and the Red Man suit, an officer struck the red man, the red man went down to the mat as he was instructed to do if the strike was done correctly. One participant kept striking the downed red man. In the debrief the student was asked why he kept hitting the red man when he was down. The officer said he did not. The trainer said you did, and the student insisted he did not. Simple, "let's roll the recording". Sure enough, the student observed that he had repeatedly struck the red man. There was no more argument. People tend to watch themselves and critique themselves more fairly and accurately when watching themselves on a recording.

**Word of caution:** Erase or dispose of the recording following the debrief. Training is a time for people to make mistakes, and they will make mistakes. By keeping or filing such recordings, they can be used against the trainee in court. In the case above when the officer kept striking the red man, correction was given, the student was retested, and all was well. If the recording was stored or kept on file, and it was known, it can be brought out in a trial and used against the officers.

γ      **Failing Forward- How Failure Can Equal Success**

Simulation training must contain two components that are missing from most training programs, the ability to fail and the ability to succeed. The ability to fail implies training must be challenging enough to reduce the possibility the trainee might get lucky and guess the correct behavior. Additionally, the instructor has a difficult job in convincing students (who, by the nature of their jobs, are expected to always win), that failure is not only allowed, but is desirable under simulation conditions. Trainees and instructors need to know that training is a constant learning environment where past actions are improved through repetition and drill. If the student completes training scenarios perfectly, it is likely because the instructor failed to detect problem areas and thus has lost a golden opportunity to correct any deficiency.

The ability to succeed implies that each scenario should allow the student to repeat the training as many times as necessary until the correct behavior, articulated by the instructor, has been applied. Again, repetition is likely the only way in which trainees

will develop confidence in newly learned skills. Instructors also should avoid presenting non-winnable scenarios as they wrongly condition students into believing they are powerless to affect outcomes. We have all have seen examples of where this defeatist mindset has resulted in injury and even death to law enforcement officers.

γ    **The Role of the Observer:**

The role of the Observer is to "observe". The observer is the coordinator or the author of the training activity. He or she checks to see if the activity is working correctly.

γ    **The Role of the Evaluator:**

The role of the Evaluator is to "evaluate". The evaluator watches the person or persons who are engaged in the activity to see if he/she or they are doing what the activity was designed to do. The evaluator then presents a written or verbal assessment (or reviews a video recording) with the person(s) being evaluated.

γ    **The Role of the Safety Officer:**

The Role of the Safety Officer is to "protect". When engaged in a role-playing or simulation activity, the players can get so involved that the adrenaline might kick-in. A player may go over board and hurt an actor. Safety Officers are there to say, "Time Out", to stop the activity if thing get out of hand. Once the desired result is achieved, the Safety Officer should stop the activity. The Safety Officer watches to see that there is no 'horse-play', watching both the players and the actors. (See the articles of personnel who were killed while training.)

**Resources:** (NOTE: I do not take credit for the information in this article. The information and material came from the following sources. I took what others have said, and organized it into the article above.)

1: The 2007 State of Idaho – POST Standards and Training, Instructor Development Training Manual. Material taken from a block of instruction in Liability Issues, and from the block Test Questions and Evaluations
2: Article: Role-Playing: A Vital Tool in Crisis Negotiation skill Training By: Vincent B VanHasselt, Ph.D. and Stephen J. Romano, M.A.
3: Article: Simulation Training – Get Off On the Right Foot By Gary T. Klugiewiez and Officer Gary Montréal, New Berlin (WI) Police Department
4: Article: Effective simulation Training – "Test & Evaluation" versus "Teaching and Learning" By: Columnist Todd Brown Todd@ies-usa.com Article is from 'Police One' web page.
5: Dr. Jacob L. Moreno (1889-1974) Noted to be the first to use Role-Playing by designing training program using these tools, in 1910. (History)
6: Article: Role Playing Helps Staff Excel (Author – Unknown)
7: Article: Role Plays and Expressive Exercises (Author – Unknown)
8: Article: Role-Playing: From Knowing to Doing – How to implement By: Steve Finkel
9: Article: Role-Playing in Education By: Adam Blatner; M.D. (Aug. 2, 2002)

# Role Playing / Simulation Scenario Worksheet:

**Scenario Title:** _____  **Date:** _____/_____/_____
**Location of the training:** _____

**The GOAL or PURPOSE of the Scenario:**

_____
_____
_____
_____
_____

**The Scenario's Performance Objectives:  (List out the performance objectives.)**

> **At the end of this role playing / simulation scenario the students
> will be able to:**

**1)** _____
_____
**2)** _____
_____
**3)** _____
_____
**4)** _____
_____
**5)** _____
_____
**6)** _____
_____
**7)** _____
_____
**8)** _____
_____
**9)** _____
_____
**10)** _____
_____

**Equipment, Props, and Training Tools needed in this Scenario:** (List out all and every piece of equipment, prop, or tool needed in this training scenario. Also make note of 'how many' is needed.)

| Equipment and tools to be provided by the students. | Equipment and tools to be provided by the instructor (agency) |
|---|---|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |

**Special Equipment, Tools & Props:** (List out any special equipment, props or tools that are needed.)

_____

_____

_____

_____

_____

_____

_____

_____

**Student Instructions:** (What information or instructions needs to be given to the students prior to entering into the scenario – i.e. simulated dispatch call given out, verbal instructions and/or written instructions, etc.)

_____

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_____

**Role Player's Instruction:**  (List out what each of the Role Player's actions are to be, what they are to do, what their 'role' is that they are to act out.)

| Role Player #1 | Role Player #2 |
| --- | --- |
| | |

| Role Player #3 | Role Player #4 |
| --- | --- |
| | |

| Role Player #5 | Role Player #6 |
| --- | --- |
| | |

**What the Role Player's are NOT ALLOWED to do:** (List out any specific activities that the Role Player is not allowed to do. Remind the Role Player to stick the pre-written script, and that they are to use only the pre-designed alternatives as given in the scenario)

## RP #1:

_____
_____
_____

## RP #2:

_____
_____
_____

## RP #3:

_____
_____
_____

## RP #4:

_____
_____
_____

## RP #5:

_____
_____
_____

## RP #6:

_____
_____
_____

**Evaluator Instructions:** (List out the specifics of what the evaluators are to be looking for, keeping in mind the Performance Objectives.)

_____
_____
_____
_____
_____

**Safety Officer Instructions:** (List out the specifics of what the Safety Officer is to do.)

_____
_____
_____
_____

**Diagram of the Scenario:** (Diagram or sketch out what the scenario is showing, the locations of props and equipment, location of the evaluators, location of the Safety Officer, location of the video tripod or personnel holding the video camera, location of the actors, location of the students, etc.)

◇ **Role Player**   ⬤ **Student**   ▪ **Prop**   △ **Video**   ✚ **Safety**   ⬠ **Other**
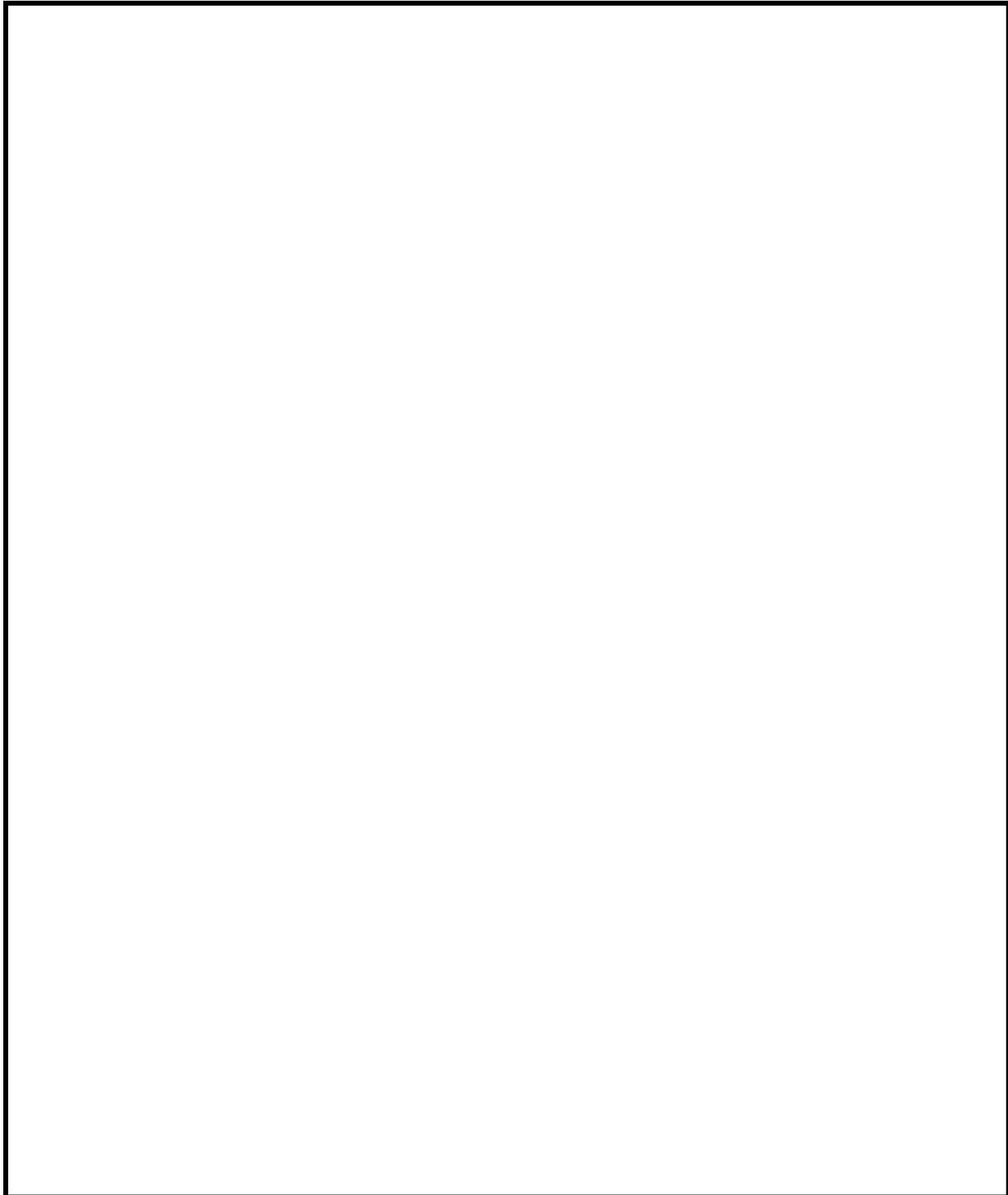
# Officer Fatally Shot During a Training Exercise

## Corporal Joseph Thomas Cushman
**Arlington Police Department**
**Texas**
End of Watch: Thursday, June 7, 2001

**Biographical Info**
**Age:** 27
**Tour of Duty:** 4 years
**Badge Number:** 1676

**Incident Details**
**Cause of Death:** Gunfire (Accidental)
**Date of Incident:** Thursday, June 7, 2001
**Weapon Used**: Officer's handgun
**Suspect Info:** Not available

Corporal Joseph Cushman was accidentally shot and killed while performing training for a school shooting.

A group of officers were conducting the training at a local junior high school when Corporal Cushman was shot in the head. All of the officers involved were wearing helmets and vests and supposed to be using rubber bullets.

Corporal Cushman and a second instructor were demonstrating a drill to other officers when the other instructor's weapon discharged. The school year had already ended and no students were present during the training exercise.

Corporal Cushman had been employed with the Arlington Police Department for four and one half years, and had been awarded Rookie of the Year in 1999. He had been promoted to Corporal the day before he was killed.

Corporal Cushman is survived by his fiancée and parents.

## Police Officer Tara Marie Drummond

**Kennesaw Police Department**
**Georgia**
End of Watch: Tuesday, September 13, 2005

**Biographical Info**
**Age:** 23
**Tour of Duty:** 4 months
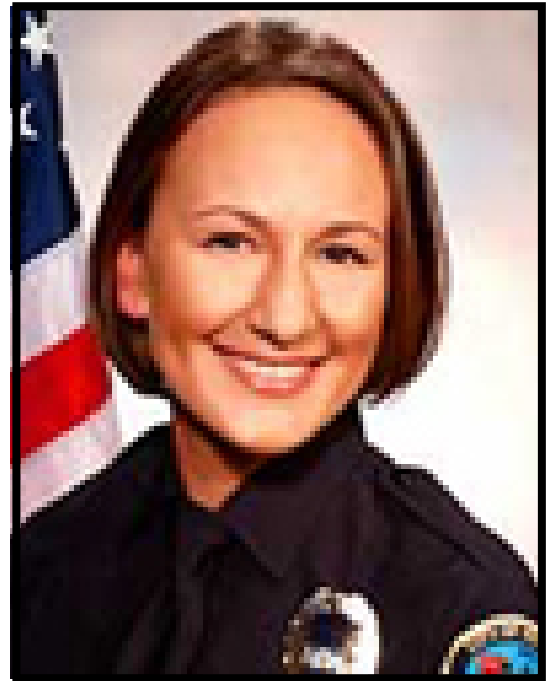**Badge Number:** 9979

**Incident Details**
**Cause of Death:** Gunfire (Accidental)

**Date of Incident:** Tuesday, September 13, 2005
**Weapon Used**: Handgun
**Suspect Info:** Not available

**Officer Drummond was accidentally shot and killed while attending training at the North Central Georgia Law Enforcement Academy. She was shot during a firearms training session when the instructor's firearm discharged as he was performing a demonstration. Officer Drummond was transported to a local hospital where she succumbed to the wound.**

**Officer Drummond was sworn in as an officer with the Kennesaw Police Department only four months earlier. She is survived by her parents and siblings.**

# Trooper Jimmy Ray Carty Jr.

**Texas Department of Public Safety**
**Texas Highway Patrol**
**Texas**
End of Watch: Thursday, May 26, 2005

**Biographical Info**
**Age:** 30
**Tour of Duty:** 7 years
**Badge Number:** Not available

**Incident Details**
**Cause of Death:** Training accident
**Date of Incident:** Thursday, May 19, 2005
**Weapon Used**: Not available
**Suspect Info:** Not available

Trooper Jimmy Ray Carty succumbed to head injuries sustained one week earlier while attending training at the agency's academy.

He sustained the head injury while participating in an arrest and controlled tactics drill.

Trooper Carty had served with the Texas Highway Patrol for only several months, and had previously served with the Smith County Sheriff's Department for 7 years. He is survived by his wife, three children, two sisters, and parents.

# TOMMY F. BERNAL

**Dept:** Fairfax County, Virginia, P.D

**City/State:** Fairfax, VA

**DOI:** 06/28/2001

**DOD:** 06/28/2001

**Rank:** Captain

**Age:** 51

**Service:** 29 Years

**Children:** 3

**Circumstances:** Motorcycle accident.

Captain Bernal was participating in a motorcycle training exercise south of Front Royal, Virginia. While attempting to negotiate a curve, one of the trainees lost control of his department motorcycle in front of an oncoming sport-utility vehicle. The sport-utility vehicle avoided the trainee's bike, but unfortunately struck Captain Bernal. Captain Bernal was flown to Inova Fairfax Hospital, where he was pronounced dead.

# Representational Systems

*Pictures, sounds, feelings, self-talk*

## Preferred processing systems

| Visual | Auditory | Kinesthetic | Digital |
|--------|----------|-------------|---------|
| See | hear | feel | think |
| View | listen | grab | procedure |
| Insight | sound | pull | tendency |
| Reflection | tone | grasp | knowledge |
| Watch | accent | rub | model |
| Show | musical | sticky | theory |
| Look | call | get hold of | principle |
| Picture | tune out | wrestle | meaning |
| Focus | jingle | warm | know |
| Scan | say | touch | specific |
| Appear | click | pressure | interesting |
| Reveal | resonate | handle | obvious |
| Hazy | rhythm | texture | random |
| Misty | harmony | heavy | special |
| Observe | clash | firm | typical |
| Image | speak | slip through | usual |
| Glow | amplify | catch | excellent |
| Brilliant | dialogue | slimy | basic |
| Vivid | ring | smooth | understand |
| Shine | chime | gritty | integrated |
| Dim | discord | pushy | incremental |
| Flash | noise | sting | enhanced |
| Sparkle | quiet | contact | systematic |
| Highlight | melody | itchy | optimal |
| Bright | buzz | concrete | compatible |
| Transparent | shout | wobble | paradigm |
| Opaque | announce | snag | contingency |
| Mirror | mute | solid | idea |
| Snapshot | loud | tight | interactive |
| See | whisper | soft | balanced |
| | | tough | variable |
| | | sharp | experience |

# GLOSSARY OF STRATEGIES FOR ADULT LEARNING

**POST FACILITATION SKILLS COURSE**

**GLOSSARY OF STRATEGIES FOR ADULT LEARNING**

The glossary provides brief descriptions or definitions of strategies modeled during the facilitation course session. The brief descriptions are intended to reinforce instruction and are not intended to be complete explanations with examples.

**ABOVE- (pause)- *whisper*** – a paralanguage strategy used to get the attention of the group. It can be implemented during any phase of a lesson including pulling a group back from group work to the full class. Using the participant's natural cycle of voice tone in the room, the instructor speaks just above the loudest volume as the group volume descends, then the instructor pauses, next the presenter whispers to facilitate silence, then continues in a normal teaching voice. It is also useful during instruction to get the attention of individuals or groups if concentration wavers.

**Break and Breathe** – a paralanguage strategy. Break from verbal and visual contact with the class, use a frozen hand gesture, and then move to a new locale to begin again. Useful to allow class members time to catch up, to slow energy in the room as desired or to allow the instructor time to think and start again.

**Choose Voice** – a paralanguage strategy. Vary from credible to approachable voice depending on intent of communication. Credible voice is one that is relatively flat in tone and drops off at the end of the sentence. The purpose of the credible voice pattern is often to send information or to make a point. The other end of the continuum is the approachable voice characterized by rhythmic tones and ending with a rising tone at the end of each sentence.

**Expectations and Concerns** – a grounding activity to help establish group identity. An individual and group exercise to surface the concerns of adult learners and the expectations of students with regard to course outcomes. Useful near the start of training, and then as a closing exercise to review expectations to align the learning experience with the original expectations and concerns.

**Eyes across the room** – a strategy to move class members and "mix" the room. Directions are to suggest that class members make eye contact with another person across the room, then stand, meet and talk about a specific topic given by the instructor(s). The strategy may be used for realigning groups, as a short interim exercise, or to infuse energy into the room when necessary.

**Focused Reading** – adapted from Jerome Harste, a class or group strategy to move students through reading at the same pace. The instructor tells the class to mark in the margins as they read. Use a "check mark" for things you already know or to reinforce your thoughts. Use an "exclamation point" for the 'a-ha' moment, new insights or new understandings. Lastly, use a "question mark" for those sections that you disagree with, don't understand or have additional questions on.

**Freeze Body** – a paralanguage strategy. Used to gain attention, re-focus energy in the room to the instructor, and in combination with a frozen hand gesture to convey information to follow.

**Frozen Hand Gesture** – a paralanguage strategy – using a frozen hand gesture accompanied by a pause to encourage thinking, reflection and similar class activity.

**Gots and Needs** – a data collection exercise most effective at the end of the first day of a multiple day course, at the lunch break of an all-day course, or at similar junctures in shorter or longer instructional blocks. **Gots and needs** are collected anonymously, then the issues are presented to the class near the start of the next session or training block. Honor all comments.

**Incomplete Sentence** – a variation of the skill, ABOVE (pause) *whisper*, this strategy is used to gain the attention of class or group members by starting a sentence, and then stopping mid-word or mid-syllable to induce students to look up or otherwise be attentive by the auditory break in words

**Like Me** – a grounding exercise facilitated by instructors where class members stand or raise their hands in response to statements that describe them. Useful for students to see others who share their perspectives, for instructors to assess the breadth of experience or knowledge by students and to enhance a sense of affiliation amongst class members

**Minute Fingers** – a visual strategy for timekeeping in the class. Minute fingers may be used as a visual for directions for group breakout time, or for time remaining in group work. A variant of this strategy is to ask groups how much time, between 1-4 minutes, they need to finish work, then verbally or visually advising of the time consensus

**MIP** – the Most Important Point. May be used as direction to group work, for individual work or for the class to identify and discuss. Adds depth to understanding and synthesis of taught concepts by encouraging the learner to recall and discuss with a peer or small group their "Most Important Point."

**MITS** – the Most Important Twenty Seconds – a paralanguage strategy to release a class to small group or individual work by articulating directions, then standing without moving for 20 seconds. Used with visual exit instructions, it

enhances class willingness to transition by ensuring kinesthetics do not follow the instructor's movements.

**Officer Partners** – an exercise and group movement strategy. Assists individuals in class with becoming acquainted with itself, preparing them to move to new groups or pairs quickly or other similar purposes.

**PAG-PAU** – Process as Given – Process as Understood – after process instructions are given verbally and visually, ask a class member (or solicit a volunteer) to recount the directions.

**Paired Verbal Fluency** – an activity for pairs used to bring energy into the room and to surface prior knowledge about a topic. Pairs stand. One person starts and says everything they know about a topic. At a signal, about 1 minute, they stop talking and the partner then starts talking saying everything they know about the same topic. At the signal, about 45 seconds, the stop and the first partner starts talking. Again saying everything about a topic. Neither partner can repeat anything that has been said. Repeat this cycle about 3 times.

**Paired Visual Introductions** – an introductory and grounding exercise to help establish and maintain positive group dynamics, also activates the right brain. Have pairs introduce each other to the group using poster paper. Pairs take 10 minutes to prepare a visual representation of their partner with no words. At the end of 10 minutes the pictures are shared and everyone is introduced.

**Pause** – a paralanguage strategy. The pause can be used to accent a point, get attention, or allow for breathing. Pauses can be used in at least four ways during class discussions: 1) before a question is asked, 2) before an answer is given, 3) after an answer is given or 4) by the whole group to allow for individual processing.

**Round Robin Teaching** – a Group research and teaching exercise, especially useful to move groups through complex concepts, enhance delivery and teaching skills and to improve group study in preparation of teaching

**Say Something** – a literacy strategy. The instructor informs the group where to break a large piece of text into readable sections, about 3 or 4 sections. At the end of each section, pairs say something about the text to each other with no crosstalk. They then move on to the next section and repeat the 'say something' process at the end of each section. This strategy moves large groups of people through text at relatively the same time. Also by requiring each reader to say something to their partner, adults tend to read for more detail when they are pressured to talk. This strategy supports self-cognition.

Show, don't say – a paralanguage strategy used by the instructor to get the attention of groups and to maintain rapport. During instruction or exit directions when you are saying something to the group, leave out some detail that is visually displayed and use the term, "this _____." For instance, write the page

number of an activity on the easel, then say, turn to **this page**. By leaving out the necessary information, people need to look at you or the easel to gain the information.

**Sort Cards** – a multi-step strategy that may be used as a grounding exercise, to surface knowledge of participants or to provide groundwork for the delivery of content. 3x5 cards are distributed to each person (4-5 each at minimum). Step 1: write as many ideas as you can on 3x5 cards, one idea per card. Write large enough to see while standing. Step 2: at your table share cards and look for patterns. Step 3: Organize your cards at your table in a presentation that is useful. Step 4: One person stays to answer questions; the remaining group members walk around the room and discover other's ideas and patterns. Step 5: Return to your home table, share ideas, insights, and new learnings. Instructors can use this strategy to determine the gaps in knowledge and understanding of the group.

**Visual Exit Directions** – A paralanguage strategy to support group learning and free an instructor from being a manager during group work. Write 3 or 4 directions on an easel describing the process you want participants to engage in. Leave the directions visible so when the group is released if they have additional process questions they can access the easel for necessary information.

**Visual Paragraph** – A paralanguage strategy used to anchor content and chunk information to support learners in the processing of new information. When teaching, as you break the content into 3 or 4 chunks, you deliver each chunk in a specific location. Separating each location with a pause and a 'break and breathe." If participants ask questions, return to the location where the specific content was delivered.

**Yellow Light** – a paralanguage strategy to support group dynamics and rapport. Light the yellow traffic light that signals something is about to happen, the yellow light in a presentation or lesson informs the group of what is coming. This can be a break, difficult content, a deep dive, or anything you want to let people know is coming. The yellow light is delivered within content as a statement. For instance, after this next section we will take a 10-minute break.

# Strategies and Moves

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# Citations

(If not noted elsewhere in the manual)

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