Chapter 4

Instructing

"The object of teaching is to enable the [students] to get along without their teachers. . . . to provide them with an independence of mind and soul." [4]

General C.W. Abrams

During instruction, leaders present the information Marines need to perform the training standards. Leaders provide Marines with the information they need to perform a given task and to develop enthusiasm.

PRESENTATION PURPOSES

Presentations serve five basic purposes. First, leaders use presentations to supply Marines with what they need to know to practice efficiently. The amount of detail contained in the presentation depends on the Marines' proficiency. By planning practice activities first, leaders identify the key elements that must be performed and eliminate elements that don't require training. Most importantly, leaders must ensure that the information to be presented is accurate.

Second, leaders use presentations to point out cues. All tasks have cues, which are contained in the task conditions. For example, the alarm that signals Marines to don their protective masks is a cue. Trainers must point out these cues and explain how Marines must react to them.

Third, leaders use presentations to instruct Marines how to make the decisions required to carry out many tasks. For example, they must know how to respond to certain enemy tactics or to an equipment malfunction. If there are several ways to perform a task, leaders show Marines how and when to choose the best way. For example, if Marines must select a firing position, they base their decision on terrain and the enemy situation.

Fourth, leaders use presentations to encourage transfer of learning. Leaders point out steps or actions that apply to more than one task or set of conditions. Marines then understand how training for some tasks help them train for others. For example, after Marines learn to shift gears on a 1/4-ton truck, they can quickly learn to shift gears on a larger truck.

Fifth, leaders use presentations to promote learning among Marines. For example, when Marines train in tactics, leaders emphasize the main points by relating lessons learned from past wars. This information promotes greater interest in the training and helps make the evolution more memorable for the Marines.

PREPARATION OF MARINES

Marines must know when and where training will occur and what equipment will be required. They must also be trained in any prerequisite tasks prior to the training session. To properly prepare Marines for training, leaders—

- Use pretests to identify Marines or units to be trained and to confirm the level of training proficiency. MCCRES or ITS systems are excellent diagnostic tools.

- Identify Marines that do not need training. These Marines may be scheduled to conduct cross-training in other unit duties or to assist as peer trainers.

- Motivate Marines before they receive training. Marines must know why the training is important and how it will help them do their jobs.

- Identify and train in prerequisite tasks before scheduled train- ing.

The required support personnel must know their roles thoroughly and also be properly equipped and prepared to carry out their tasks.

LEARNING COMPREHENSION PRINCIPLES

There are six basic learning comprehension principles: relevance, conceptual framework, learning outcome, method, evaluation, and primacy/recency. By using these principles, instructors help Marines comprehend the instruction.

Relevance

Relevance addresses the significance of the lesson to the Marine. A lesson's relevance is usually addressed in the attention-gaining portion of the lesson. This part of the lesson identifies the benefits the student will receive if he/she listens to the lesson. The instructor should be able to describe the importance of the lesson to the student, if the lesson is indeed relevant.

Conceptual Framework

The conceptual framework provides two important things for the student. First, it is a road map of where the instructor will take the student during the lesson. Second, it creates gaps in the student's mind that must be filled. For example, if we tell a student that we are going to talk about three things and then name them, we create conceptual gaps in the student's mind that can be powerful tools in the learning process. By filling these gaps, we provide the student with closure and understanding.

Learning Outcome

By stating the proposed learning outcome, leaders identify tasks that Marines must be able to perform at the end of the training session. Specifically, the proposed learning outcome identifies what Marines will be able to do, under what conditions they will perform these tasks, and the required proficiency. Knowing the learning outcome can reduce a Marine's anxiety so he/she can concentrate on learning.

Method

The method of instruction identifies how Marines will learn; e.g., practical application, lecture, demonstration. Knowing the meth- od ahead of time can reduce Marines' anxieties so they can concentrate on learning.

Evaluation

Identifying how a Marine will be evaluated also decreases anxiety. Leaders should identify the method of evaluation (i.e., performance or written testing) and when the evaluation will occur. Evaluation information is passed to Marines so they know what to expect for feedback.

Primacy/Recency

Research indicates that humans tend to remember the first and last things they hear or see. Therefore, instructors should not present a main idea in the middle of a lesson. This is an important concept that instructors must understand.

Studies also reveal that humans can remember about seven things in a group at a time. This is just a rule of thumb, but instructors should try to keep the main ideas and secondary ideas to seven or less.

METHODS

Four methods of presenting information are demonstrations, conferences (guided discussions), lectures, and practical applications. They can be used alone or in combination.

Demonstrations

A demonstration shows Marines the correct way to perform a task. It is effective for training tasks in leadership, equipment operations, and tactics. It helps Marines see their individual role in a collective task.

Demonstrations can be done several ways. Live demonstrations are often best because they hold a Marine's interest. Demonstrations must be performed slowly. This allows Marines to see all the steps as they are performed. This is critical if speed is essential to the task. Demonstrations emphasize key points and create pauses for discussion. If the task contains many actions, the trainer performs the entire task first, then demonstrates each step of the task separately.

Demonstrations that incorporate practice times are similar to live demonstrations, but with an added practice session. They are sometimes referred to as talk-through, walk-through demonstrations. After procedures are demonstrated and understood, Marines are given a chance to practice the steps under increasingly realistic conditions until they can perform to MCCRES or ITSS standards.

A skit is another type of live demonstration. Skits show how skills or tasks work in real-life situations. They frequently use humor as an attention-keeping device. Skits show how Marines work together. This type of demonstration works best with person-to-person communications, staff procedures, and chain-of-command functions.

If, due to size, Marines cannot view the entire demonstration, then sand tables, scaled-down models, films, or video tapes are more effective than a live demonstration. Videotaped and/or filmed instruction can effectively demonstrate tasks that may otherwise require substantial resources.

Conferences (Guided Discussions)

During conferences, Marines discuss the information presented. Trainers initiate and guide discussions by giving information and asking questions. Conferences work best when there is more than one correct procedure, when Marines have some knowledge of the tasks, or when time is not critical. Conferences are effective when—

- The group is familiar with the subject. Even though the discussion is guided, experienced Marines will make many good training points, increasing interest among others.

- The subjects are interesting and open to discussion. Conferences allow Marines to state options that trainers and other Marines can then discuss. To encourage participation, trainers must guide the discussions

Conferences do not require Marines to perform tasks. They encourage a free exchange of information. Trainers must know their subject well, and they must also have or develop the ability to guide a discussion among Marines.

Lectures

Lecturing presents information with little discussion. Typically, it is a one-way form of instruction: from instructor to instructed. As the least preferred method of instruction, lectures should be used only when—

- There is a large group and no performance activities are required, such as for training on the Uniform Code of Military Justice or Code of Conduct.

- Training time is very limited and no other method allows the trainer to present information as quickly.

- Marines know very little about a subject and lectures prepare them for demonstration and practice.

- Trainers want to emphasize technical material with one correct or pre-ferred method.

Practical Application

If using practical application, the trainer seeks to provide as realistic a training scenario as possible. They can be time-consuming and involved, but it provides students with the best training environment in which to learn a task. Marine Corps training, which focuses on performance-oriented training, requires the trainer to provide practical application whenever feasible. Factors that can affect the use of practical application are range availability, safety, ammunition, weather, and equipment availability. Practical application, more often than any other presentation method, needs to be fully planned in advance.

INSTRUCTIONAL TECHNIQUES

The following paragraphs identify effective training techniques. Although these guidelines have proven successful, it must be recognized that training is personality-dependent. Each technique should be matched to the situation, instructor, and audience.

Preparation

Demonstrations must be practiced until they can be performed satisfactorily. If a video/film is to be used, it must be reviewed first. If a skit is to be used, it must be rehearsed until mastered. Trainers should write appropriate performance steps in brief, everyday language on a chart or chalkboard to help Marines remember the steps in the proper order.

Once a demonstration has begun, it should not be interrupted by questions. Once the demonstration ends, trainers should review the order in which the tasks must be done, ask questions, and explain the steps as often as needed.

Questions

Asking questions causes an audience to think through their response.

Questions reinforce the information presented in the training session. The effective way to pose a question is to state the question first, then identify someone to answer it. By stating the question first, the trainer holds the attention of all the students, makes all of them think through the question, and makes all of them prepare an answer in case they are called upon to answer the question. It prevents Marines from relaxing and disregarding the question if they don't know who will be responsible for answering it. Trainers should critique both correct and incorrect responses. To ask a question effectively—

- State the question clearly.

- Allow Marines time to think of the answer.

- Select someone to answer, taking care not to set a pattern.

- Critique the answer.

If a trainer cannot answer a Marine's question, the trainer should admit that he/she does not know the answer, offer to research it, and provide an answer later. The trainer should not attempt to answer if he/she is unsure. Trainers who present inaccurate information lose credibility, especially if someone in the group knows the right answer. The trainer shows, by example, that it is acceptable to guess at an answer. Trainers who regularly find themselves unable to answer basic questions must improve their know- ledge of the subject. If trainers know the subject and know how to train the subject, they will be able to speak with confidence and answer questions.

Trainers can gauge how well they presented the information by the way Marines practice. For example, a trainer will know that he/she did not present enough information if Marines ask many simple questions or need too much coaching on basic points during the first practice.

Demeanor

Marines get to know their leaders through their actions. Those who act unnaturally when they instruct will make Marines think about the trainer's performance, not about the tasks being taught. While being nervous is normal, trainers use training outlines and well-rehearsed training sessions to reduce nervousness. Trainers must use language and terms that all Marines understand and avoid unfamiliar acronyms and abbreviations. Repeat material only for emphasis or for better understanding.

Trainers should avoid simply reading the training outlines to Marines; doing so gives the impression that the trainers are unfamiliar with the subject and must depend on scripts. Reading also prevents proper eye contact with Marines. To be effective, trainers look and talk directly to Marines, not to the equipment.

Avoid asking individual Marines to read material aloud. Marines with poor reading skills will be embarrassed, withdraw, and harm the training effort.

The equipment can also be distracting. If possible, trainers should cover the equipment if it is not being used. Trainers attempt to direct a Marine's attention to where it should be and to minimize distraction. Trainers should avoid distracting mannerisms; e.g., playing with pointers or pacing back and forth. An incorrectly worn uniform also distracts.

MEDIA

Audiovisual Materials

Prepared products, such as films and VCR tapes, present information the same way each time. This offers standard procedures that help Marines as they move from unit to unit. These products also save preparation time.

Prepared products also have disadvantages. They may not correspond with the assigned training objectives or may lack needed information. It may be necessary to modify or delete portions of the material presented. If used in the field, audio visual materials may require special hookups, generators, etc..

To use training products effectively—

- Ensure that Marines perform the lesson's required steps (any needed materials or equipment must be available).

- Practice using TV tapes or films, especially if they have to be stopped and started many times.

- Introduce the materials being presented. Marines must be told what to learn from the film. If the film will be discussed later, Marines must be told to watch for discussion points.

- Stop as needed to comment on important points.

- Discuss the TV tapes or films. Trainers must answer questions and discuss or reinforce the main points to ensure Marines learned the correct information.

Television Trainers

Television trainers (TVTs) are portable, black-and-white recording systems that trainers use to tape a Marine's performance. TVTs can be used almost anywhere, except in extremely dusty or wet environments. No special lights are needed to operate a TVT. To use TVTs effectively—

- Practice using the equipment. Try different shots on live subjects, such as a company formation or an individual. Determine what sounds the microphones can pick up.

- Start with a fully charged battery pack. Long taping sessions will require an extra battery pack (one should be charging while the other one is in use). External power is best if an outlet is available.

- Assign someone to operate the camera that is not directly involved in the training. The operator should know the training plan so he/she can plan camera moves in advance.

- Share the tapes. Good performances can be used to train other Marines. Rehearsal tapes and critique tapes can be erased and reused once trainers are finished.

Correspondence Courses

The Marine Corps Correspondence Course Program (administered by the Marine Corps Institute) is useful, but advanced planning is required to use the courses. Group enrollment for corres- pondence courses is a good way to train small groups of Marines such as detachments, squads, sections, or crews. Based on command guidance and a leader's experience, the leader selects key tasks for Marines to learn in the coming year and then arranges for enrollment in the appropriate correspondence course. Once groups complete the corre- spondence subcourses, the leader arranges appropriate practice activities.

Actual Equipment and Models

The use of actual equipment improves demonstrations. For most equipment-related tasks, the equipment itself is the best training aid. Sometimes, models can be more effective than the equipment. For example, some equipment parts cannot be seen as they operate, but they can be seen in a cutaway model.

Some models, such as a compass model, are larger than the actual piece of equipment, making it easier for groups of Marines to see. Some models are smaller than the actual piece of equip- ment; this can offer a different vantage point from the actual equipment. For example, Marines seldom get to see an assembled bridge from the air, but a model bridge on a sand table gives Marines a realistic view. Models are also used to describe unavailable equip- ment; e.g., opposing force (OPFOR) vehicles. If a model does not exist, it can be constructed. The use of models is limited only by the trainer's imagination.

Sand Tables

Sand tables are used to build terrain models for demonstrating terrain use and techniques and for describing tactical principles. Marines can frequently get a

better view of the situation at a sand table than from the actual terrain. Sand tables should not be used as a substitute for performing the task on actual terrain in the mission area or close to the garrison. Trainers can use sand tables to demonstrate a task before executing the task on actual terrain. To use sand tables effectively—

- Keep the models interesting. Cardboard cutouts, bits of wood, or stones represent equipment. If training squad-sized units, individual Marines must be depicted (paper cutouts with Marines' identified by name).

- Keep the models simple. Lights, colored sand, and similar features may be distracting.

- Keep the training informal. Use conferences and demonstrations and invite discussions. Marines who practice tactics learn from each other.

Chalkboards, Charts, and Whiteboards

Chalkboards and charts are easy to use, easy to change, easy to see, and usually available. Chalkboards can be used almost anywhere. They are useful in the field to conduct quick training critiques or during a formal AAR. Other surfaces that can be written on with chalk and easily cleaned include—

- Sides of vehicles. (Chalk can be erased with an ordinary felt eraser. Washing the vehicle removes any remaining traces of the chalk.)

- Scraps of canvas. (Do not use good canvas, since it is usually impossible to remove all the chalk without laundering.)

- Walls. (Parts of hallways and outdoor walls can be painted with chalkboard paint. This paint can be written on and cleaned off easily.)

Chalkboards, whiteboards, and flip charts are good to use for lists and drawings that must be changed but usually cannot be prepared ahead of time. Poster-size, homemade charts are also useful. They can be made elsewhere and easily carried and stored for reuse.

To use chalkboards, whiteboards, and flip charts effectively—

- List main points in shortened form <u>as each is introduced</u>. If too many main points are put up at once, Marines will read ahead and their attention is lost. The list can also be used later for review.

- Use the chalkboard or whiteboard for diagrams that change, especially if Marines have difficulty reading. Leaders can draw techniques on the board and change them as needed. Marines can work at the board as the last part of the presentation phase.

- Stand to one side of the board, Marines can see the board better and the trainer is less likely to talk to the board instead of to the Marines.

- Plan chalkboard or whiteboard use. Whatever goes on the board should be in the training outline to ensure smooth use of the board.

- Erase material no longer needed. Failure to do so causes dis- traction.

- Load the material in reverse sequence if using a flip chart. This allows the instructor to flip each page forward rather than struggling to pull the page over the top of the holder.

Overhead and Slide Projectors

Graphics can be made quickly and easily for overhead projectors. Trainers can use clear acetate and grease pencils to create graphics. These graphics are also easy to store. Before making a large collection of overhead slides, trainers must remember that they can be used only when an overhead projector, electricity, and a dark room are available. Some information is best presented in pictures, and the best quality pictures are presented as color slides.

Miscellaneous Technologies

Existing and emerging technologies have provided many new types of media. For example,—

- Video teleconferencing.

- Computer-based training.

- Simulators.

- Distance learning laboratories.

- Video teletrainer centers.