UNITED STATES ARMY
SOLDIER SUPPORT INSTITUTE

Staff and Faculty
Instructor / Development Training Course

“We Teach The Teachers”

April 2001

Prepared by the
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SFIDTC Workbook: 100 CVR ver 2, 30202

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STAFF AND FACULTY INSTRUCTOR/DEVELOPER TRAINING COURSE

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CLASSROOM RULES

1. Classes begin at 0800 hours daily and end after all scheduled activities are over. You must be in your seat and ready to begin at 0800 hours.

2. Attendance is mandatory for all classes. Resolve scheduling conflicts such as sick call, dental appointments, signing for household goods or hold baggage, etc… immediately with the Chief, Staff and Faculty Development (SFD). Unexcused absences or an absence in excess of one day may require that SFD drop you from the course. You may request attendance at a future class with the approval of your supervisor and the Chief, SFD.

3. For a service member, you wear the duty uniform of your respective duty section. For a civilian employee, you wear attire of the same standard you will wear in the performance of your job.

4. When a student makes a presentation, other students participate as if they were representative of the presenter's target population.

5. You may have food and drinks in the classroom provided the class maintains the room in a clean and orderly manor. Discard all left over items daily. Students police the classroom daily. No food or drink is allowed in any computer area (i.e., Classroom XXI and the TNET classroom).

6. You may smoke only in designated areas outside the building (such as the break area over the auditorium across from the AAFES Retail Store).

7. Keep newspapers, magazines and other extraneous materials out of sight during class time.

8. Discard recyclable materials in the appropriate recycle containers.

9. The class must clean the coffee maker and surrounding area daily.

10. Turn off your cell phone and/or pager or place it on silent mode. You may use the telephone in the classroom for outgoing <u>official</u> calls only. Do **NOT** give the classroom telephone numbers to anyone. If someone needs to contact you, have the individual(s) contact one of the instruction staff.

10 Commandments for Students

Trainees have an active role to play in the classroom. Your attitude can affect not only your own experience but also that of your fellow students. These 10 Commandments will help you understand what is expected.

1. Thou shalt come prepared.
Know what the course covers. Make sure you master the prerequisite skills. Talk to others who have attended the course and see how they use the skills.

2. Thou shalt meet with your supervisor.
Find out what your supervisor expects you to get from the class. Afterward, discuss the training with your supervisor and determine what support you need to help apply the skills.

3. Thou shalt take responsibility.
As an adult, you are in charge of your learning. Take advantage of the class time, practice sessions, and instructor's knowledge while you are in class. Use resources such as on-line help, and training manuals, instead of relying solely on the instructor or classmates.

4. Thou shalt participate.
Learning is an active process! Active learners are the ones who ask questions, do the exercises, participate in the discussions, take notes, and help other class members. Keep involved and you will not only better master the new skills in class, but more importantly, remember them when you're back on the job.

5. Thou shalt learn from mistakes.
Mistakes are learning opportunities for you, the instructor, and the rest of the class. Don't be embarrassed or frustrated. The goal in the classroom should be to make mistakes so that you'll know how to correct the situation if it happens back on the job.

6. Thou shalt seek to apply the training to your job needs.
Ask yourself and classmates how you can use or adapt each skill or technique to your job demands. You may find that some skills will be more important than others. Then you'll know which ones to focus on mastering.

7. Thou shalt honor the time schedule.
Time is money in a training class, and even a few minutes' delay affects the rest of the schedule.

8. Thou shalt have a positive attitude.
Whining doesn't make the training requirements or the deadlines change. Negative comments do not change policies or procedures. They just wear down your energy, as well as that of the instructor and other learners. If you have concerns about the course or any of the modules, you should discuss these with your group leader or the chief of the division.

9. Thou shalt give feedback.
If you feel that the class is too slow or too fast, or the topics aren't pertinent, convey this to the instructor during a break. Don't keep it to yourself or complain to your classmates. Most instructors will try to be flexible and address your concerns.

10. Thou shalt complete the course evaluation.
Course evaluations are your opportunity to give useful, pertinent feedback about the course content, materials, and instructional approach. Take the time to complete the form thoroughly and give meaningful comments.

STAFF AND FACULTY INSTRUCTOR/DEVELOPER TRAINING COURSE
CLASS SCHEDULE

DAY and **TIME**	**SUBJECT**	**REMARKS**
DAY 1		
0800 - 0830	Class Opening	
0830 - 0850	Administrative Information	
0850 - 0900	Break	
0900 - 0950	Student Introductions	
0950 - 1000	Break	
1000 - 1130	Introduction to course and student requirements	Assign reading TABs A, B, and C
1130 - 1230	Lunch	
1230 - 1400	SAT-1 Systems Approach to Training(TAB A)	
1400 - 1410	Break	
1410 - 1500	Needs Analysis (TAB B)	
1500 - 1510	Break	
1510 - 1600	Task Steps/Tasks/Goals (TAB C)	
1600	Task Selection	Students coordinate with supervisors for tasks and obtain references

DAY 2		
0800 - 0850	Introduction to Task Analysis (TAB D)	
0850 - 0900	Break	
0900 - 0950	Prepare Performance Steps of Task Analysis Report (TAB D)	Students work individually on Task Analysis
0950 - 1000	Break	
1000 - 1050	Prepare Performance Steps of Task Analysis Report	Students work individually on Task Analysis
1050 - 1100	Break	
1100 - 1150	Prepare Performance Steps of Task Analysis Report	Students work individually on Task Analysis
1150 - 1300	Lunch	
1300 - 1420	Target Population Description (TAB E)	Students prepare Target Population Description
1420 - 1430	Break	
1430 - 1600	Identify Skills, Knowledge, & Attitudes necessary for task performance	
Assigned Reading	Review Existing Material (TAB F)	Complete Task Analysis Report (TAR) and Target Population Description (except for TLO) - due COB day 3

DAY 3	SUBJECT	REMARKS
0800 - 0850	Adult Learning Concepts (TAB G)	
0850 - 0900	Break	
0900 - 0950	Adult Learning Concepts	
0950 - 1000	Break	
1000 - 1050	Write Terminal Learning Objective (TLO) (TAB H)	
1050 - 1100	Break	
1100 - 1150	Write Terminal Learning Objective (TLO)	Group PE for TLO
1150 - 1300	Lunch	
1300 - 1350	Select Delivery Method (TAB I)	
1350 - 1400	Break	
1400 - 1450	Select Delivery Method	
1450 - 1500	Break	
1500 - 1600	Select Delivery Method	
1600		**Due**: TAR, Target Population Description, & TLO
Assigned Reading	Construct A Rating Form (TAB M)	

DAY 4		
0800 - 0850	Select Media (TAB J) Develop Training Aids (TAB K)	
0850 - 0900	Break	
0900 - 0950	Select Media/Develop Training Aids	
0950 - 1000	Break	
1000 - 1050	Student Assessment (TABs L, N & O)	Check Validity of Test Items (Performance Tests)
1050 - 1100	Break	
1100 - 1150	Student Assessment (TABs L, N & O)	Performance-Based Tests
1150 - 1300	Lunch	
1300 - 1350	Student Assessment (TABs L, N & O)	Develop Practice Exercise - draft practice exercise due COB day 8
1350 - 1400	Break	
1400 - 1450	Develop a Lesson Plan (TAB P)	
1450 - 1500	Break	
1500 - 1600	Develop a Lesson Plan	

DAY 5	SUBJECT	REMARKS
0800 - 0850	Develop a Lesson Plan (continued)	
0850 - 0900	Break	
0900 - 0950	Develop a Lesson Plan	Draft lesson plan due COB Day 8
0950 - 1000	Break	
1000 - 1050	After Action Review (AAR) Techniques (TAB Q)	Modified to this training
1050 - 1100	Break	
1100 - 1230	Effective Communications (TAB R)	
1230 - 1330	Lunch	
1330 - 1420	How to Conduct a Demonstration (TAB S)	
1420 - 1430	Break	
1430 - 1600	How to Conduct a Developmental Conference (TAB T)	

DAY 6		
0800 - 1150	Conduct a Demonstration (TAB S)	Individual student presentation. Students are divided into groups. Students conduct AAR of each presentation. Each presentation is videotaped. Students review their tapes for self-evaluation.
1150 - 1300	Lunch	
1300 - 1500	Conduct a Demonstration	
1500 - 1600	Student Preparation Time	

DAY 7		
0800 - 0850	Classroom Management (TAB U)	
0850 - 0900	Break	
0900 - 0950	Classroom Management	
0950 - 1000	Break	
1000 - 1050	Test Coordinator Activities	
1050 - 1100	Break	
1100 - 1130	The Power of Listening video	
1130 - 1215	Speaking Effectively video	
1215 - 1600	Student Lab Time	Hands-on practice using AV equipment, preparing training aids, and lesson plans. Rehearse presentation.

DAY 8	SUBJECT	REMARKS
0800 - 1130	Conduct a Developmental Conference (TAB T)	Individual student presentation. Students are divided into groups. Students conduct AARs on each presentation. Each presentation is videotaped. Students review their tapes for self-evaluation.
1130 - 1230	Lunch	
1230 - 1500	Conduct a Developmental Conference	
1500 - 1600	Student preparation time	
1600		**Due**: Draft PE and Lesson Plan

DAY 9		
0800 - 0950	TNET/Classroom XXI Orientation	Class meets in Classroom XXI (Building 10,000, room 508)
0950 - 1000	Break	
1000 - 1200	Instructor Evaluation (TAB R)	
1200 - 1600	Student preparation time	

DAY 10		
0800 - 1130	Conduct a mini-class (TAB V)	Individual student presentation. Students are divided into groups. Students conduct AAR of each presentation. Each presentation is videotaped. Students review their tapes for self-evaluation.
1130 - 1230	Lunch	
1230 - 1500	Conduct a mini-class	
1500 - 1600	Student preparation time	Hand-on practice using AV equipment preparing training aids, lesson plans, and finish "work ahead" modules with SFDE assistance. Also students rehearse presentations.

DAY 11	SUBJECT	REMARKS
0800 - 1145	Conduct a 45-minute class (TAB W)	Individual student presentations. SFDE Group Leader and student's supervisor evaluate the presentation. Other students assume role of the student instructor's target population. Final version of complete lesson plan including the practice exercise (PE) is submitted and evaluated.
1130 - 1230	Lunch	
1230 - 1500	Conduct a 45-minute class	
1500 - 1600	Student preparation time	

DAY 12		
0800 - 1030	Conduct a 45-minute class	
1030 - 1100	Administrative time	Students return course book, video tape, course map and receive certificate; issue critique
1100 - 1200	Course graduation	Issue certificate, collect critique
1200 - 1630	Course make-up time	Students make up any incomplete or unsatisfactory work. Repeat presentation(s) as required for satisfactory performance.

REMINDER: To complete this course, you must turn in your Course Map with all items initialed. You will also return the student workbook and the VHS video cassette used to record your presentations. Please completely rewind the video cassette.

Staff and Faculty Instructor/Developer Training Course
(SFIDTC)

METHOD: Modified group-paced. Group presentation of material with individual study. Group and individual evaluation of student work.

LENGTH: 13 days – incorporating some basic elements of design and development of course materials along with presentation techniques and classroom exercises.

Following is a brief description of each module:

AAR AFTER ACTION REVIEW

An AAR is a review of training that allows soldiers, leaders and units to discover for themselves what happened during the training and why. A training discussion that includes the training participants, the AAR focuses on the training objectives and their linkage to the METL and wartime mission. Their purpose is to provide a feedback method necessary to bring performance up to standards. Students act as AAR leaders for each of the three 20-minute presentations.

ALC IDENTIFY ADULT LEARNING CONCEPTS

The student learns the three domains of learning – knowledge, skill and attitude. The module explains how specific learning concepts apply to teaching within each of these three domains. The section relating to the attitude domain also describes major differences between adult learners and younger students. The practice exercise presents hypothetical classroom situations; students must identify which learning concepts relate to each situation.

ASAT AUTOMATED SYSTEMS APPROACH TO TRAINING

ASAT provides the capability to develop, produce, and manage doctrine and training information and products. The software outputs standardized products, ad hoc reports, and provided electronic staffing capability. The program provides the foundation for Standard Army Training System (SATS), Automated Instructional Management System -- Redesign (AIMS-R), and the Reimer Training and Doctrine Digital Library (RDL). During this block of instruction we will only briefly look at one aspect of the program. We will be introducing the portion that addresses the data tables that support individual task lesson plan and TSP records.

C-1 ASSESSING TRAINEE PERFORMANCE

The students learn the definition of a criterion-referenced test and how to identify a well-developed criterion test. Students practice recognizing test items that are valid for the corresponding objectives. The emphasis is on performance testing. The pros and cons of various forms of performance-based (paper-based) assessments are discussed. A section is devoted to multiple-choice test construction.

C-2 CONSTRUCT A RATING FORM

This module stresses the necessity of developing a test that serves to measure the student's ability to perform the task taught in the formal instruction and not some other unrelated knowledge or skill. This module also contains information on how to construct a process test, a product test and a written performance test. (Read Only)

CP-1 SELECT METHOD OF PRESENTATION

The student is acquainted with fifteen instructional methods and is required to select the appropriate method(s) of presentation for the TLO developed in O-2, based on the type of learning required in the task.

CP-2 CONDUCT A DEVELOPMENTAL CONFERENCE

After an SFDE instructor presents a class on how to conduct a developmental conference, the student leads fellow students in a 15-25 minute developmental conference. Emphasis is placed on proper questioning and discussion techniques and maximum student participation. Topics are chosen in advance. The presentation is videotaped. Following the presentation, the SFDE instructor and fellow students review the developmental conference using the modified AAR technique. The student then views the videotape.

CP-3 CONDUCT A DEMONSTRATION

After an SFDE instructor presents a class on how to conduct a demonstration, the student conducts a 15-25 minute demonstration on the task of his or her choice following the procedures used during the sample demonstration presented to the class. Topics are chosen in advance. The presentation is videotaped. Following the presentation, the SFDE instructor and fellow students review the demonstration using the modified AAR technique. The student then views the videotape.

CP-4 CONDUCT A MINI-CLASS

A lesson is presented concerning platform techniques and characteristics of a good instructor. Each student presents a 15-25 minutes video-taped class to other students. This class must be either a military or job-related subject. The class is reviewed by the SFDE instructor and fellow students using the modified AAR technique. The student then views the video-tape.

CP-5 PRESENT A 45-MINUTE LESSON

This task requires the student to present a 45-minute class using the approved lesson plan (IM-4), practice exercise (IM-5), and training aids (IA-2). Using the Instructor Evaluation Form, FJ Form 350-100-3, the student's supervisor and an SFDE instructor to evaluate the student's instructional techniques and materials. The student's supervisor selects the task.

CS-1 COUNSELING TECHNIQUES

Students learn the types of counseling they will encounter as instructors. They learn the steps of the counseling process and methods of establishing rapport in a counseling session. They view and discuss a film on effective listening skills.

CS-2 SELECT REMEDIATION FOR INDIVIDUALS WITH LEARNING DIFFICULTIES

This task acquaints the student with types of remediation. The student selects a method of remediation for specific learning problems.

F-1 DESCRIBE CLASSROOM MANAGEMENT PRINCIPLES

Pre-class checks, instructor qualities, strategies for maintaining classroom discipline, techniques for dealing with "problem students," and post-class checks are discussed in this task.

IA-1 SELECT MEDIA

The use of media has proved to be quite useful in improving the quality of any formal instruction. This task requires the student to evaluate the various media available and to select the more appropriate for instructing the task described in the student's approved TLO and the respective learning analysis of each.

IA-2 DEVELOP MEDIA

Students learn how to design and develop selected training aids and use them during two class presentations of 20 minutes and 45 minutes, respectively. Students must also learn to operate training aid and related machinery. Students learn to operate a video camera and must demonstrate proficiency by video taping three presentations of their classmates. Training aids include the overhead projector and transparencies, slide presentations, charts, handouts, video tapes, and white board. Equipment available includes copier, 35mm slide projector, VCR, TV, computer with appropriate software, LCD projector, and video camera.

IE INSTRUCTOR EVALUATION

This lesson explains the use of FJ Form 350-100-3, (Instructor Evaluation Form). Specific evaluative criteria are discussed. Students view a videotape of an instructor teaching a class. Students complete the Instructor Evaluation Form to evaluate the instructor on the video tape. Students then get in their groups and come to a consensus on rating the individual.

IM-1 REVIEW EXISTING MATERIALS

The criteria for identifying suitable training materials used to develop training products are presented in this section. Taking the target population description and the approved terminal learning objective, review existing training materials to determine the suitability for continued use of the level of modification necessary to effect the required training.

IM-3 DEVELOP A PRACTICE EXERCISE

Using the approved terminal learning objective (TLO) or enabling learning objectives (ELOs) developed in LA-1, the student develops a practical exercise that serves to facilitate the instruction. The practice exercises are excellent tools for reinforcing learning or embedding skills performing selected task steps. The student must write directions, develop a scenario, and prepare source documents and an answer key. The scenario and source documents reflect current doctrine and training strategies.

IM-4 DEVELOP A LESSON PLAN

Using products developed in O-2, LA-1, and IM-3, the student develops a lesson plan for a 45-minute presentation in the prescribed lesson plan format. The lesson plan includes a practice exercise with answer key for each ELO (if no ELOs, a practice exercise with answer key for the TLO) and at least two training aids. The student later presents a final class using the lesson plan.

NA-1 NEEDS ANALYSIS

An overview of what a Needs Analysis is and the reason that this activity is necessary. The mechanism of what prompts this portion of the overall training process is discussed and the results.

O-2 WRITE TERMINAL LEARNING OBJECTIVES

In this task, the student must write a terminal learning objective (TLO) from the task analysis conducted in TA-2. The TLO must meet all the criteria for a well-stated objective established in O-1.

SAT-1 DESCRIBE THE SAT PROCESS

This module introduces the student to the five phases of the Systems Approach to training (SAT). Students learn to describe the procedures and products involved in analysis, design, development, implementation and evaluation of training. During the follow-up discussion, a SFDE instructor provides additional information concerning Individual Training Plans (ITP) and Programs of Instruction (POI). The instructor emphasizes the relationship between the overall process and the individual parts of the SAT as they are taught in subsequent modules.

T-1 ADMINISTER A TEST

This task prepares the student to fulfill the obligations of a test proctor when administering a standardized, objective test. Procedures discussed include preparing to administer the exam as well as proctoring and critiquing the test.

TAR-1 PREPARE TASK ANALYSIS REPORT

The students complete a task analysis report of the task they will be teaching in their 45-minute presentation (CP-5). The analysis should show the major steps of the task, the sequential relationship between task steps, the initializing cues, and task completion indicators. The student must use the approved TLO to prepare the task analysis report that serves to identify the following:

- the major steps, sub-steps, and sub-sub-steps (if any) of the task under analysis;

- the knowledge and skills needed to perform each of the above;

- knowledge and skills which are prerequisites to the performance of each task step.

After identifying the above items, the student must write acceptable enabling objectives (ELOs) for the task, if appropriate.

TI IDENTIFY TASK STEPS/TASKS/GOALS

Identifying task steps, tasks, and goals are fundamental to the development of instruction. The student learns to identify all three and distinguish among them. The student also identifies a technical task for which he/she will develop training materials during the remainder of the course. This task is usually a task that the student will be involved with training his/her job environment.

TP PREPARE A TARGET AUDIENCE DESCRIPTION

This module explains the five major areas of a target audience description and how instructors/developers use this information to plan and present instruction.

DEMONSTRATION
DAY 6

TIME: 20 minutes (+ or - 5 minutes)

TOPIC: Must be "hands on." You must bring in an object and physically work with it. Does not have to be military topic.

SAMPLE TOPICS:

Iron the Military Uniform.	How to Set Up Claymore Mine.
How to Camouflage Self.	Placing Brass/Ribbons on a Class A Uniform
How to Don Protective Mask.	How to Cook an Omelet
How to Plant Flower Bulbs.	How to Apply a Tourniquet
How to Hit a Golf Ball.	How to Administer CPR
How to Operate a 35mm Camera.	How to Check Air Pressure in a Tire.

RESTRICTIONS: CANNOT be a paper/pencil task. Filling out a form is NOT an acceptable topic. CANNOT involve alcohol use. Must have finished product to show.

OTHER REQUIREMENTS:
1. Topic must be approved by Day 5.
2. You must have written outline to guide your presentation.
3. You must have all elements of introduction and closing.

DEVELOPMENTAL CONFERENCE
DAY 8

TIME: 20 MINUTES (+ OR - 5 minutes)

TOPIC: Must be something that everyone in the class will be able to discuss. Does NOT have to be a military topic.

SAMPLE TOPICS:

Tips for Buying a House	Tips for Buying a Car
Tips for Buying a Computer	Creating a Personal Budget
Keeping Good Customer Relations	Leadership
Why People Enlist/Reenlist	Ethics
Advertising	Motivation
How to Plan a PCS Move	Stress Management
Effective Communication	Planning for a Vacation

RESTRICTIONS: CANNOT be a controversial topic.

OTHER REQUIREMENTS:
1. You must cover specific teaching points.
2. You must have an outline with open-ended questions written out to ask students.
3. You must have all elements of introduction and closing.
4. Your topic must be approved by Day 5.

MINI-CLASS
DAY 10

TIME: 20 minutes (+ or - 5 minutes)

TOPIC: Should be task you will teach/develop after graduation from SFIDTC. You will give this class as if you were actually teaching your target audience. NOTE: We will refer to this topic as "Task #2."

OTHER REQUIREMENTS:
1. You must have a written outline to guide your presentation.
2. You must have all elements of introduction and closing.
3. You must use two different types of training aids.

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45 MINUTE CLASS PRESENTATION
DAY 11 OR DAY 12

TIME: 45 minutes (+ or - 5 minutes)

TOPIC: You must obtain task/subject from your supervisor by 0800 Tuesday, Day 2. NOTE: We will refer to this topic as "Task #1." You will give this class as if you were teaching your target audience.

OTHER REQUIREMENTS:
1. You must have a copy of a complete lesson plan (including appendices) for yourself, the SFDE group leader, and your supervisor(s).
2. You must have at least two different types of training aids. (May not use more than 7 overhead transparencies/slides).
3. You may NOT repeat your Mini-Class presentation as part of your 45-minute class.

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SAT - 1

Systems Approach to Training (SAT)

OBJECTIVE:

List at least five issues to consider before fielding a new Army product using a description of the product. Your answers must relate to the five phases of the SAT process as described in TRADOC Regulation 350-70, and module “SAT - 1”.

CRITERION-REFERENCED TEST:

List at least five issues to consider before fielding a new Army product using a description of the product. Your answers must relate to the five phases of the SAT process as described in TRADOC Regulation 350-70, and module “SAT - 1”.

The Systems Approach to Training

THE SAT PROCESS

The Systems Approach to Training concept begins with an overall view of the training process. The SAT concept follows an orderly process for gathering and analyzing collective and individual performance requirements. This process allows experts to respond to identified needs. The final outcome of the SAT process is a combat-ready, well-trained soldier competent to perform critical tasks in the field.

Army trainers continue to provide combat-ready units with well-trained soldiers because they use a systematic process that standardizes all training. In TRADOC, the Training Development (TD) process guarantees the quality of its training program and materials through TRADOC Reg 350-70. The TD model at Figure-1 applies the processes, or phases, of evaluation, analysis, design, development and implementation to determine the who, what, where, when, why and how of training.

An overall view of the training process reflects the concept base of the TD process. This concept began in the early sixties, when the Army relied on the performance training approach. These training programs related directly to objectives, but the quality of each objective remained open to interpretation. Army leaders clarified the objective by specifically defining it in terms of a task, condition and standard statement.

As a later improvement, Systems Engineering introduced training objectives formulated by observing the performance of a task and then breaking the task into distinct steps. A further refinement, Instructional Systems Development (ISD), categorized training into five different phases, separate and distinct. The TD process resulted when the five phases became interdependent and interrelated. The TD process defines the objective in terms of an action, condition, and standard.

The SAT model, with its five processes, remains the key to standardization in training. The five phases in the SAT process include, ***Evaluation***, ***Analysis***, ***Design***, ***Development*** and ***Implementation.*** The arrows in Figure-1 demonstrate the continued evaluation of training during each process, as the outputs of each process serve as inputs for the subsequent processes. The SAT model allows entry at any point, making reviews and feedback an important, continuous evaluation process.

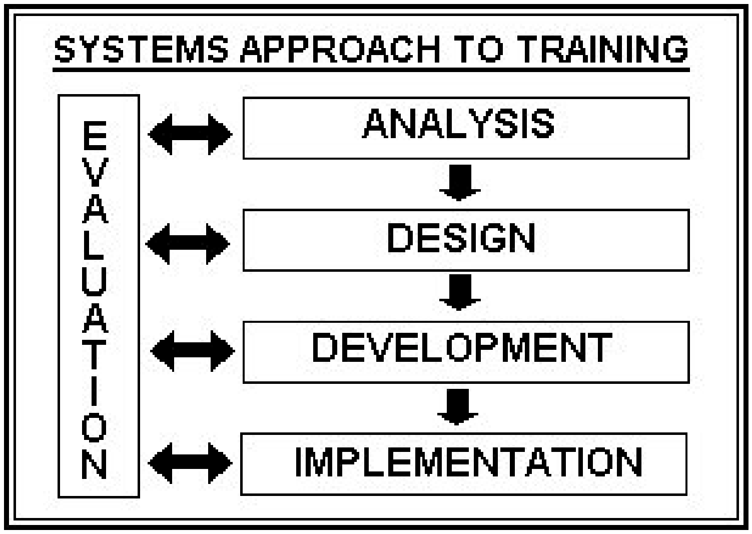

Figure - 1

EVALUATION

The evaluation process internally evaluates the training program during each phase of its preparation and subsequently conducts external evaluations of training programs to determine their value to soldiers in the field. Feedback helps to evaluate the program, assess the quality of soldier and leader performance, and check the training support to the total force. For example, at SSI, evaluators use the validated student passing rate of 70% to monitor class test results (feedback on student scores). Any substantial deviation in the scores continuing over more than one class alerts evaluators to a possible trend in test adequacy - either positively or negatively.

TRADOC Regulation 350-70, Chapter III-1, Evaluation and Quality Assurance Program, and the SSI Student Critique Program, define the policies and procedures used to evaluate training.

If a program evaluation indicates a need for change, experts can reenter the SAT cycle at the appropriate point. Evaluators collect, assess and report the data and information extracted from a variety of sources. Obtaining data and information from several sources provides a broad picture of the quality of feedback and contributes to its reliability.

During the evaluation process, general factors and steps must be completed. The first step is to evaluate the needs assessment by studying the findings and changes in threat, doctrine and missions. A needs assessment identifies discrepancies between what exists and what is required and identifies possible causes. For more information on needs assessment, see page SAT-6. For example, the postal mission (mail delivery) for the Army shifted from an active duty mission to a Reserve forces function over the last 10 years. During the Desert Storm War, volumes of mail to soldiers in Saudi Arabia stagnated at various delivery points. The backlog became so critical that postal workers began separating official military mail and delivering it as a priority. Evaluators began checking postal procedures, policies and personnel training to determine the cause of reduced mail delivery.

To help evaluators judge the quality of training in Army schools, each school produces its own master evaluation plan, offering guidance in performing both internal and external evaluations. The master evaluation plan explains overall evaluation methods and suggests procedures for assessing the effectiveness and efficiency of collective and individual training in the training base and units.

Using the master evaluation plan as a guide, evaluators develop supporting, detailed evaluation plans, both internal and external. They identify requirements for specific data or information, choose the method for collecting, processing and analyzing data or information, and validate the evaluation instruments.

Evaluators use a variety of products to evaluate school training from various vantage points. Some of the evaluation products appear below.

TEST RESULTS

“Did the student achieve the objective?” Evaluators answer this question before examining test results. If the student successfully achieved the objective, then evaluators can use statistics to gain feedback from the test. As stated earlier, evaluators monitor overall test scores to determine trends among student classes. They can determine test adequacy by individual test item evaluations, locating subject areas within a course that may need changes in instruction, training or training time. For instance, if students continually missed questions 22 through 28 on a test, these individual test items would signal an area of concern to evaluators. If further investigation showed that questions missed pertained to one subject area, evaluators would examine possible problem areas such as inadequate test question construction, training time and teaching methods.

STUDENT CRITIQUES

Schools must offer three separate critique programs to provide maximum opportunities for feedback to instructors and school officials. With the end-of-block critiques, students can provide valuable information on the quality of specific blocks of instruction. The end-of-block critique is one way to validate course material presented. The continuous critique offers students an immediate and continuing means of providing feedback on any area any time during the course. The end-of-course critique allows students to offer timely feedback on the overall quality of training. Each school provides standardized forms for each type of critique.

INSTRUCTOR FEEDBACK

“The shortest note is better than the longest memory.” All instructors and course directors at the Soldier Support Institute must keep a written log of all significant occurrences associated with a course. The log reflects problems the instructor or course director encounters with materials, student management, and facilities. The log also reflects that leader's recommendations and suggestions for improvement - not necessarily addressing a problem, but recording anything that leader thinks will improve training. Periodic meetings between course directors and their instructors provide a forum for the exchange of log information, so that recurring problems can be resolved and recommendations for improvement shared.

CLASSROOM OBSERVATIONS

When instructors graduate from the Staff and Faculty Instructor/Development Training Course, they mainstream into teaching positions in the schoolhouse. Staff and Faculty personnel periodically consult with new instructors and perform follow-up evaluations as one means of evaluating their instructor training and improved teaching performance after gaining experience.

The Directorate of Evaluation and Standardization (DOES) also conducts evaluations of instructors, but for a different purpose. DOES personnel conduct independent evaluations of the quality of training and testing, the competency of instructors and examiners, the relevance of the course content, and the adherence to objectives and performance standards.

GRADUATE & SUPERVISORY QUESTIONNAIRE & EVALUATIONS

Periodically, post-graduates receive questionnaires concerning their service school training. The surveys become part of the school's system for tracking graduates' performance in the field. The feedback gained from these questionnaires helps evaluators to identify areas of concern and issues of new equipment in the field. Graduates and supervisors work together in communicating different Job training needs to the schoolhouse. School trainers stay current with actual performance standards.

ANALYSIS

The analysis phase ensures the accurate description of collective and individual tasks and determines what is to be trained. The products of analysis become the foundation for all subsequent development activities and provide an operational definition describing successful Unit and Individual performance.

NEEDS ANALYSIS

A needs assessment identifies discrepancies between “what is” and “what should be”--between what exists and what is required--and identifies probable causes of the discrepancies. A needs assessment may indicate a lack of training as a probable cause of a performance discrepancy or suggest training as a probable solution to a performance problem.

A needs analysis, which grows from a needs assessment, analyzes and verifies that a performance deficiency exists (or may exist in the future) and determines if training is the appropriate means of satisfying the deficiency. It allows the school to identify the problem and go directly to the problem's source without going through an entire evaluation-analysis-design-development-implementation cycle.

ANALYSIS PLAN

Whenever circumstances require an analysis, an analysis plan must be completed. This document, sometimes called a Job and Task Analysis Plan, details an upcoming analysis: who will conduct it; exactly what that person will analyze; when and how the analysis will be done; reasons for the analysis, and the cost of the analysis.

INDIVIDUAL TRAINING PLAN (ITP)

The ITP is one of the three documents in the Training Requirements Analysis System (TRAS). The TRAS is a long-range planning and management process that integrates the SAT with PPBES by documenting training strategies, course and related resource requirements.

The ITP is a long range planning document that outlines the resident, nonresident, TATS, DL, IRR, and MOB training strategies and courses for a Branch, MOS or Area of Concentration (AOC). It identifies estimated dollar, ammunition, facility, equipment and training aids/devices that are not currently available to the school/institute. TRADOC Pamphlet 350-70-8, Total Army School System - Training Requirements Analysis System, defines policies and procedures for the ITP.

JOB BACKGROUND DESCRIPTION

In order to make many training decisions, one must access as much job-related information as possible. A thoroughly researched and concisely written Job background description has many uses throughout the entire training development process. Analysts follow two rules in writing a Job background description: collect as much information about a Job from as many different sources as possible and document those sources.

While no right or wrong way exists in writing a Job background description, good analysts learn as much as possible about the Job being analyzed. The Analysis Plan for the specific MOS under study provides a good starting point for analysts, since it lists an abbreviated Job background description. Analysts sometimes cannot conduct field interviews with incumbents on the Job, job supervisors, subject-matter experts, unit trainers or training managers.

An alternative to the field interview is to survey by telephone a small cross section of this group to obtain valuable needed information.

TASK INVENTORY

A task inventory lists all tasks performed by soldiers holding a particular specialty (enlisted/warrant officer MOS or officer branch/functional area) regardless of the criticality or importance of those tasks.

TASK SELECTION

To complete the Job analysis, one must select for training those tasks that are critical or important to the soldier's Job performance in the field. Selected tasks appear in the Soldier's Manual (SM) for the subject MOS, or the task selection board results for the subject branch, or as directed by the proponent school commandant.

SITE SELECTION

Schools will staff both task and training site recommendations at the same time. The site selection reflects a process of two phases: formal training and on-the-job training. A panel, created for this purpose, makes initial site recommendations. School commandants and the Director of Training Support (DOTS) review and approve the panel recommendations, which then become tentative site decisions. Initial site decisions must be made during the analysis phase, but final site decisions occur during the design phase of the training development process.

TASK ANALYSIS

Once the (DOTS) director approves the critical task list, the proponent school must analyze each selected task in detail. If the school previously analyzed the task, then it reviews the analysis carefully to ensure it correctly reflects current doctrine and procedure. School personnel use the completed task analysis to develop or revise a task summary (Soldier's Manual) or other training materials. SSI Regulation 350-19 governs Individual Analysis.

JOB PERFORMANCE AID (JPA) ANALYSIS

After proponent school representatives analyze critical tasks, they review these tasks to determine if they can develop a JPA, or "Job Aid" in lieu of training. Soldiers can do certain kinds of tasks with Job aids only; schools do not develop or conduct training for these tasks. A Job aid provides step-by-step procedural guidance in performing a task, either totally or in part. Identifying tasks that lend themselves to Job aid development saves development costs and training time.

MOS TRAINING (MTP)

The MOS Training Plan (MTP) matrix shows all critical tasks for an MOS by subject area, duty position, and skill level. Included in the Soldier's Manual/Trainer's Guide (SM/TG), the matrix indicates tasks trained in units and tasks trained in residence. In the field, the MTP guides individual training conducted in the unit.

DESIGN

The products of analysis drive the design phase, ending in a blueprint of the training programs for future development.

SSI Regulation 350-20 prescribes policies and procedures for training design. Summarized requirements for the design process appear below.

EXISTING MATERIALS REVIEW

Existing materials include audio-visual, printed, or other materials that address tasks or subjects that school experts will train. The materials may or may not be instructional in nature. The existing materials review process includes two phases. The first phase identifies and collects existing materials and occurs at the outset of design. The second phase evaluates those materials to determine their applicability to the training under development. This phase occurs after schools write terminal and enabling learning objectives.

COURSE (SKILL LEVEL) TRAINING STRATEGY

The course or skill level training strategy is a "game plan." School experts develop this "working" document and update it throughout the entire design/development process. Many parts of the strategy at first contain guesses or estimates. As design and development proceed, school experts refine these parts of the management guide.

TARGET AUDIENCE DESCRIPTIONS

A description of the students to be trained, the target audience description provides writers, designers, developers and trainers the information they need to maximize training. In narrative or raw data form, the target audience description profiles the type of soldiers to be trained. Profile information includes (but is not limited to) the following items.

*Branch/MOS
    *Branch/MOS title
    *Requirements for position
        Grade or skill level
        Required training
        Required test scores
    *Soldier Characteristics
        Civilian education (average years)
        Military service or experience (average years)
        Age range or average age
        Sex ratio (% male, % female)
        Reading grade level
        Marital status (% married or single)
        Component distribution (RA, USAR, ARNG)
        Percent with English as a second language
        Interests

*Background Information
- Time in grade
- Time in duty position
- Additional Skill Identifiers
- Reenlistment rate
- Command opportunities (if applicable)

TERMINAL LEARNING OBJECTIVES (TLO)

TLO's form the foundation of our systematic approach to developing instruction. The first step in the design process, the TLO identifies the end product--what instructors expect the student to be able to do after instruction. The TLO becomes the basis for all further design and development efforts.

The TLO defines the action in terms of an action, conditions and standard. The student knows under what conditions an action must be performed and to what degree.

LEARNING ANALYSIS

The task analysis describes how a soldier on the Job should perform a task. The TLO describes how well a student in the school should perform after completing task training.

After school experts conduct the task analysis and write the TLO, they conduct a learning analysis describing what the student must learn to reach a desired performance. During the learning analysis, developers sequence the teaching of a task to improve learning. The end products of a learning analysis are lists of specific knowledge and skills that the student must acquire and any enabling learning objectives (ELOs). An ELO describes a practice exercise used to assess student mastery of enabling skills and knowledge's on portions of a task. The TLO describes a test used to assess terminal performance of an entire task.

LEARNING ACTIVITIES

After school experts write learning objectives, construct criterion tests and establish a learning sequence, they must determine the learning activities that ensure effective and efficient instruction directly related to task performance. They must choose a delivery system for the training by selecting instructional media and methods. These decisions impact the cost of developing, implementing and maintaining the training.

CRITERION TESTS

Criterion tests measure to what degree students have attained the objectives. Instructors measure student performance against prescribed standards (criteria). Each student must perform the same action, under the same conditions and to the same standards stated in the objective. Performance is measured as a “go” or “no go” against a prescribed criterion. SSI Regulation 350-22, Resident Student Measurement, describes policies and procedures concerning student testing and tests.

COURSE GRADING PLAN

The course grading plan specifies graduation requirements for a particular course and includes a list of all tests, test standards, etc. To prepare and obtain approval for a course grading plan, see SSI Reg 350-20. You must prepare AND publish a course grading plan for each course presented.

COURSE ADMINISTRATIVE DATA (CAD)

Course Administrative Data (CAD) comprises one of the required documents in the Training Requirements Analysis System (TRAS). When complete, the CAD document becomes the preface page in the Program of Instruction (POI) for the course. TRADOC uses CAD documents to develop student input requirements for new or revised courses and to establish course files in the Army Training Requirements and Resource System (ATRRS). In addition, it uses CAD to provide the US Army Recruiting Command (USAREC) with descriptions and prerequisites for initial entry training (IET) courses and to update information in the US Army Formal Schools Catalog.

Schools submit CAD 36 months prior to the beginning of the fiscal year in which the new or revised course will begin.

PROGRAM OF INSTRUCTION (POI)

A POI (another Training Requirements Analysis document) describes a formal resident course in terms of its purpose, prerequisites, content, instructional mode, length and required resources. It documents approval of course essentials and provides the basis for determining and procuring resources for course operation. Proponent school experts draft the POI near the end of the design phase. Collectively, the POI, Individual Training Plan (ITP) and Course Administration Data (CAD) constitute the proponent's concept to analyze, design, develop and implement individual training. Submit POIs 6-months prior to the training start date.

DEVELOPMENT

The development process produces collective and individual training and training materials (resident and nonresident) that permit soldiers to achieve learning objectives consistent with training program objectives. Based on the analysis and design phase results, the development phase ends with the production of a validated training program and validated training materials. Proponents validate training programs and materials using representative samples of the target population.

SSI Reg 350-21 governs policies and procedures for resident course development at the Soldier Support Institute, including the NCO Academy.

PRACTICE EXERCISE

A practice exercise helps the student to master and accomplish the learning objectives. Designed as a structured activity, the practice exercise allows the student to practice before being graded or evaluated. The format of the activity depends on the learning objective. The exercise should mirror the actual Job situation as much as possible. Simulations, scenarios and role-playing often take the place of “real world” Job conditions during training.

TRAINING AIDS

The developer focuses on the content, design, graphic development, production and evaluation of existing aids for training aids as instructional support materials. Agencies such as the Training Support Center (TSC) can provide assistance. Principal training aid types include audio only (e.g., records, discs and cassette tapes), visual only (e.g., slap-ons, posters, sand-tables, photographs, magnetic boards, overhead projectors with transparencies, games, chalkboard, Job aids and graphic training aids such as charts, diagrams, graphs, sketches, cartoons, maps and wallboards), and audio-visual (e.g., movies, video tapes, TV and computer projections, slide shows and computer simulations.)

COURSE HANDOUT

Handout materials update existing printed materials, or diagram/explain complex or voluminous information that students must refer to later.

LESSON PLAN

The lesson plan includes a cover sheet and a sequential outline of planned student and instructor activities. The outline includes copies and/or listings of supporting materials involved in training a task, partial task or subject.

Prepare a lesson plan in sufficient detail so that another instructor who has a basic knowledge of the subject could present the lesson on short notice. Incorporate a time distribution guide as well as stating when, where, how and what training aids are in the lesson plan.

TRADOC Reg 350-70 and SSI Reg 350-21 guides the preparations of the lesson plan and cover sheet development at SSI.

INSTRUCTIONAL MATERIALS VALIDATION

Validate prepared instructional materials by testing them on the target population in a “dry run,” to identify and correct any weaknesses in the materials before implementation. Once you identify deficiencies, revise and validate the materials. Continue this trial-revision-trial cycle until the 'students' meet the learning objectives. At this point, consider the materials valid.

COURSE MANAGEMENT GUIDE & STUDENT GUIDE

The Course Management Guide describes all the course materials, directions on how to implement these materials and information concerning how to conduct the course.

Experts draft these guides early in the development process, before developing instructional materials. If materials are implemented piecemeal later, the draft guides will help the user. Revise the guides as necessary before full course implementation.

After preparing the course management guide, draft a student guide. Include a purpose statement and use language easily understood by the student population.

COURSE VALIDATION PLAN

After developing a course using SAT procedures, you validate it to make sure that students receive both effective and efficient instruction.

Allow instructors to teach at least two (preferably three) iterations of a course before collecting sample data for feedback analysis. Revise the course to correct any weaknesses or errors in instruction.

Do not rely on a previous material validation for your course validation: other problems may exist. Carefully document both procedural and other problems with course materials. Using the POI times as a guide, establish actual training times during course validations. To validate a course, perform the actions described as follows.

1. Set a validation standard.
2. Instruct tasks as designed.
3. Administer tests as designed
4. Revise course materials using data from feedback sheets.

Directorate of Training Support (DOTS) and school personnel who implement the training and perform data collection share the job of validating a course.

After validation, the school accepts the primary responsibility for monitoring the quality of and revising training.

<u>The minimum essential requirements</u> for the development phase audit trail include a training program and training material, validation documentation, and approved training program and training materials.

IMPLEMENTATION

Implementation involves the separate but related functions of preparing for and conducting training. Prior to conducting training, instructors, staff, faculty and cadre must first learn their duty assignments. Instructors must attend an approved Staff and Faculty Development Training Course prior to teaching. SSI Regulation 350-24, Staff and Faculty Development Training, defines policies and procedures for training instructors.

The Small Group Instruction Course teaches trainers to facilitate learning in small groups.

When cadre, faculty and staff members complete training, the separate function of conducting training begins. Training enables soldiers to achieve the prescribed collective and individual training objectives, using validated training materials. Before graduating from training, soldiers must demonstrate proficiency by performing tasks under conditions and standards similar to those experienced on the Job they will perform in the unit. They must perform to a prescribed standard on critical tasks defined as essential to mission and duty performance during times of war and peace.

The objective of all training is to send a well-trained, competent soldier to a field unit. Unit level training continues, using FM 25-X series publications for guidance. Unit training allows soldiers to become team members so they can achieve and sustain proficiency in required tasks.

Integrating drills into training reflects a critical step in the implementation process. Drills bridge the gap between collective and individual training, producing a standardized implementation of training. Drills contain both leader and individual critical tasks, conditions and standards that are performed automatically in response to a specific action or situation.

Staff members maintain accurate training records for school trainers and their students. Civilian training documents become part of the soldier training record. In addition, training records kept by school personnel include training program changes, test results and entry-level skill records. These records help to support validation and evaluation of training.

The minimum essential requirements for the Implementation Phase of the SAT include Staff, Faculty, and Cadre training records, soldier and civilian training records and documentation of training modifications and rationale.

Systems Approach to Training Process
(SAT)

Phases	Procedures	Products
Evaluate	Conduct Internal Evaluation Conduct External Evaluation	A Validated Course External Evaluation Master Evaluation Plan Student Critiques
Analyze	Conduct Needs Analysis Write Job Background Description Develop Task Inventory Select Training Tasks Conduct Task Analysis Select Training Site Job Performance Aid Analysis Individual Training Plan (ITP)	Needs Analysis Job Background Description Training Task List Task Structure Analysis for each task (TSA) Site for Each Task Job Aid Analysis Plan Develop a Training Strategy
Design	Write Target Population Description Write Terminal Learning Objectives Write Enabling Learning Objectives Conduct Learning Analysis Write Course (Skill Level) Training Strategy Review Existing Materials, Phase I Specify Learning Objectives Sequence Objectives Construct Criterion Tests Prepare Course Grading Plan	Target Population Description Terminal Learning Objectives (TLO) Enabling Learning Objectives (ELO) Learning Analysis Course (Skill Level) Training Strategy Collected Existing Materials Tasks Learning Activities List Training Voids Lists Criterion Tests Course Grading Plan
Develop	Evaluate Existing Materials, Phase II Develop Training Materials Conduct Trials and Validations Prepare User Instructions	Evaluated Materials List Training Materials Validated Training Materials Course Management Guide
Implement	Train the Trainers Present the Instruction Make Distributed Training to the Field	Trained Students who have passed all criterion tests and can perform at the Apprentice Level of their upcoming jobs

NA-1

NEEDS ANALYSIS

OBJECTIVE:

Describe the concept and purpose of a Needs Analysis given TRADOC Regulation 350-70 and a variety of check lists. Description will indicate the responsible agency, triggering circumstances and outcomes of the Needs Analysis.

NEEDS ANALYSIS

Introduction

Training can be a solution to a problem. Remember the training development process is a scientific problem-solving process that begins with the identification of one or more problems. This problem identification process is typically referred to as a needs assessment/ analysis.

Note: Usually, a training needs assessment is done prior to the design phase.

Why do a needs assessment?

The purpose for doing a needs assessment/analysis is to identify performance problems and causes for which training *(in whole or in part)* could be a solution. Not all problems are solved with training! We have to study the problems and causes carefully and determine if there is a non-training solution to the problem that might be less costly and equally effective.

Many times, we train for the wrong reasons, like -

- "Management asked for it again."
- "Hey, everybody is doing it!"
- "Spend it or lose it."
- "The Japanese are developing expertise."
- "Show you care."
- "Fill up the classroom."

Focus of a needs assessment/ analysis

The focus of a needs assessment/analysis is expressed in terms of "outcomes" and in terms of the "means or the process to those outcomes." It identifies the "what is" and "what should be" in a particular situation (i.e., a need is expressed as the gap between the *way we would like things to be* and *the way they presently are)* as shown by the two examples (formulas) below.

Example 1: ***M.A.D.D. Formula***

Mastery Performance - Actual Performance = Discrepancy/ Deficiency

Example 2: ***R.A.N. Formula***

Required Performance - Actual Performance = Need

Data collection

We must first have a means for establishing mastery/required performance and also actual performance. The best way to define these performances is to gather data and analyze it.

> Note: In this course, we will not go to great lengths or depths in the instruction of how to collect and analyze data, as this would be another course in and of itself.

Some ways for collecting this data are provided below:

- Written requests for information
- Inspection of records, statistics, data
- Review of regulatory guidelines and SOPs
- Review of job descriptions/job standards
- Conduct of interviews with employees and supervisors
- Conduct of telephone surveys
- Conduct of self-administered or mailed questionnaires
- Observation of tasks being performed
- Tests or other measurement tools/instruments

Performance analysis

Performance analysis is conducted to determine into which area(s) a performance deficiency or discrepancy would fall (i.e., the major causes of a poor performance). These areas could be described as the following:

- Skill and knowledge
- Mental and physical capacity
- Standards, measurement and feedback
- Physical or work environment conditions
- Motivation and incentive
- Personal reasons (sickness or death, etc.)

There are many solutions to performance problems. The key is to find what is the specific cause of the problem(s) and next determine the appropriate solution or mix of solutions. Then see if training can fix (in whole or in part) the problem(s).

Table and checklist for performance analysis

On the next three pages you will find:

- a table identifying some major factors (causes) that affect poor performance with their appropriate solutions.

- a checklist (two-sided) to use (questions to ask) when performing a performance analysis.

Factors Affecting Poor Performance

Cause	Solution
1. Skills and Knowledge	• Provide/improve formal training • Provide remedial/refresher training • Provide practice/simulation • Provide job aids • Provide coaching/mentoring on the job
2. Mental and Physical Capacity	• Change personnel • Adjust job to fit individual's mental and physical capabilities
3. Standards, Measurement and Feedback	• Develop job description • Develop standards and measurements • Revise job description, standards and measurements • Publicize job description, standards and measurements • Provide/improve use of feedback
4. Physical and Work Environment Conditions	• Re-organize the work place/work flow • Upgrade materials, information • Re-design the job • Remove interference/distractions • Provide necessary tools and equipment • Ensure tools and equipment are operable • Ensure environment is conducive to work
5. Motivation and Incentive	• Provide/strengthen positive consequences • Remove/weaken negative consequences • Remove/weaken positive consequences for poor performance
6. Personal Reasons (sickness/death, etc.)	Ensure personnel are referred to appropriate medical, psychological, or religious agencies when symptoms/causes stem from: • physical/mental illness • death in family • violence in the workplace • divorce/separation • physical or sexual abuse

Performance Analysis Checklist

Skills and Knowledge	Yes	No
1. Did they ever perform the task properly?		
2. Is the task performed often enough to assure retention?		
3. Do they know the task is still expected of them?		
4. Is training provided?		
5. Is training effective?		
6. Is enough practice done during training?		
7. Could they perform properly immediately after training?		
8. Are job aids available?		
9. Are job aids effective?		
10. Does performance fail to improve with experience?		
11. Is the task procedure stable?		
12. Could they do it if their lives depended on it (w/o further training)?		

Mental and Physical Capacity

1. Do they have the mental capacity?		
2. Do they have the physical capacity?		
3. Do they have the prerequisites for training?		

Standards, Measurement, and Feedback

1. Do they know what to do?		
2. Do they know when to do it?		
3. Do their supervisors agree on what and when?		
4. Are there written standards?		
5. Do they know how they will be evaluated?		
6. Is performance measured?		
7. Are measurements based on task performance?		
8. Are measurements based on results rather than activities?		
9. Are task purposes measured?		
10. Are the measurements objective?		
11. Are the designers of the measurements qualified?		

Standards, Measurement, and Feedback

13. Is feedback given soon enough?		
14. Is feedback given often enough?		
15. Is feedback understandable?		
16. Is feedback tied to "controllable" performance?		
17. Is feedback specific?		
18. Is feedback accurate?		
19. Is feedback given by someone who matters?		
20. Is feedback given in a way they accept?		

Physical and Work Environment Conditions	YES	NO
1. Are task procedures clear and workable?		
2. Is the workplace physically organized?		
3. Is enough time available?		
4. Are tools and equipment available?		
5. Are tool and equipment operative?		
6. Is necessary information available?		
7. Is information accurate?		
8. Are distractions and interruptions minimized?		
9. Are policies and procedures flexible enough?		
10. Do they have enough authority?		
11. Can the job be done by one person?		
12. Is support available for peak periods?		

Motivation and Incentive		
1. Is the task seen to be worthwhile?		
2. Do they believe they can perform the task?		
3. Is there incentive for performing well?		
4. Do the incentives really matter to them?		
5. Is the incentive contingent upon good performance?		
6. Do they know the link between incentive and performance?		
7. Are incentives scheduled to prevent discouragement?		
8. Are all available incentives being used?		
9. Do they find the work interesting?		
10. Are there inner satisfactions for good performance?		
11. If incentives are mixed, is the balance positive?		
12. Is “punishment for good performance” prevented?		
13. Is “reward for good performance” prevented?		
14. Is there peer pressure for good performance?		
15 Is task unpleasantness or stress within acceptable levels?		
16. Does poor performance draw attention?		

Personal Reasons		
1. Does an excessive amount of absenteeism due to illness exists?		
2. Is there an excessive amount of sick leave taken?		
3. Is there an excessive amount of tardiness?		
4. Are there reports or indications of symptoms of depression?		
5. Are there reports or indications of symptoms of violence?		
6. Are there reports or indications of harassment?		

TRADOC Reg 350-70 gives the following criteria for Needs Analysis.

The Needs Analysis is the beginning of all revision or initiation of new training and training products. The Needs Analysis identifies critical training requirements to improve existing training or training products. It also identifies training requirements to meet future changes in mission, manning, equipment and doctrine. It is a minimum essential requirement before development of any training or training product.

The Needs Analysis is begun on receipt/identification of an actual or perceived performance discrepancy. This performance short fall could be in a collective or individual task or tasks. The signals that indicate that performance is below that desired are referred to as triggering circumstances. These are the cues to begin the Needs Analysis.

Triggering circumstances may indicate real time performance deficiencies resulting from internal or external evaluations. The triggering circumstance can also result from the use of models that explore assumptions of how the Army needs to prepare for the battlefields of the next century. Changing of doctrine or organizational structure to meet real time threats and budgetary restraints act as triggering circumstances.

The range of triggering circumstances must be continually reviewed. Many of these are not embedded within the school/proponent but act on them. Several areas that act as triggering circumstances outside the proponent purview are:

a. Common Core Training: Common core training results from decisions made by higher commands and senior officials, laws and regulations. It will result in an analysis of what is needed, where it is needed and the training products needed.

b. Concept Based Requirements System (CBRS): The CBRS is a process to analyze current and future war-fighting concepts. It may identify training solutions to performance deficiencies or non-training solutions (doctrine, leader development, organization, and materiel).

c. Doctrine Change: The Army changes its doctrine to acquire or maintain its fighting ability to win in view of the projected threat capabilities. When doctrine changes, it will result in the need to make change in training or to develop new training.

d. Law or Regulation Change: New or revised laws or regulations may result in a need to revise or create initial training requirements. This has been especially noted in the environmental arena.

TRADOC proponents, with assistance from the appropriate proponent school, are responsible for conducting the Needs Analysis. Reliance on proponent schools for the conduct and resources necessary is heavy due to the extensive time and effort that the analysis will require.

The Needs Analysis is an in-depth, detailed analysis of the performance deficiency. Preparing for a Needs Analysis requires detailed planning and preparation by all participants. The scope and depth of the analysis is determined by the proponent. This could entail a complete top down review of mission, collective task list, training strategies, and job analysis.

During the analysis the problem is isolated, its nature determined, and possible solutions are developed. Training and non-training solutions are considered.

The Needs Analysis results in recommendations for non-training or training solutions to eliminate the performance deficiencies or initiate new training. Recommendations for non-training improvements are forwarded to appropriate proponent. Recommendations for improvement or development of training or training products are submitted to the approval authority to obtain the necessary resources to develop and implement training. This is essential as the identification of deficiencies does not in itself resolve the problem. At this point, additional resources will be required to conduct further analysis; development; and produce the training and training products necessary to eliminate performance deficiencies or initiation of new training.

The Needs Analysis is complete with approval of training or training products or the recommendation of non-training solution(s) to the performance deficiency or initiation of new training.

The Needs Analysis is discussed in more detail in Chapter IV-I, TRADOC Regulation 350-70.

TI-1

Identify Goals/Tasks/Task Performance Steps

OBJECTIVE:

Identify goals, tasks, and task performance steps in accordance with Module TI-1.

CRITERION-REFERENCED TEST:

Correctly identify the statement that identifies goals, tasks, and task performance steps in accordance with Module TI-1.

IDENTIFY GOALS/TASKS/TASK PERFORMANCE STEPS

In the Needs Analysis, we determine specifically what we need to train. When analyzing or developing training for old or new areas, we must define exactly what it is and what comprises it.

In looking at performance of units and individuals, we use several terms to indicate actual and aspired performance. The more common are: Goals, Tasks, and Task Performance Steps. Most are familiar with these; however, to insure a common understanding, we will further define these. This is especially important as it enables us to define the limits and contents of the action, providing a means to evaluate their accomplishment.

Most have been exposed to the use of goals in their military experience and also in the civilian community. These are generally broad or abstract statements of expected performance or achievement. Most have been in a unit or section whose goal was to be the best or number 1 at something. In trying to determine what the goal consisted of, you may have encountered what Robert F. Mager referred to as a "fuzzy."

Some characteristics that help identify the nature of goals are:

a. Statement of a broad or abstract intent, state or condition. (Normally does not identify a specific action.)

b. Has no definite beginning or end.

c. Not normally directly observable or measurable.

d. Accomplished over a relatively long period of time.

e. Because it is so general and broad, no one single action or performance would indicate its achievement.

f. Examples of goal statements:

   TRADOC Instructor of the Year
   Best Divisional Motor Pool
   High Quality of Life for Soldiers
   Quality Health Care

g. Problems with goal statements lie in the inability to see or measure the level of achievement. It is hard to know when it starts or ends, as it is not possible to start and stop all the component elements at the same time. It is also difficult to determine specific indicators of success and what are acceptable levels. While difficult to measure the whole, components can be given values for evaluation purposes to provide benchmarks which can then be used to determine how well or if the goal was met.

Goals are not to be dismissed. They can be used to provide focus and channel action. They can be a source of pride and bonding among unit/section members committed to their accomplishment. They serve well, when the intent is to move the whole to higher levels of excellence and to challenge organizational members to higher planes of personal achievement.

Tasks are the more familiar means to identify a specific action or performance. A task is a clearly defined and measurable activity accomplished by individuals and organizations. It is the lowest behavioral level in a job or unit that is performed for its own sake. In “Preparing Instructional Objectives,” Mager stated that a task is a series of actions leading to a meaningful outcome.

Characteristics that are generally common to tasks are:

a. It is a specific action or performance.

b. Usually has a definite beginning and ending.

c. May support or be supported by other tasks.

d. Has only one action. (Therefore, it is described with a single verb.)

e. Is performed in a relatively short time. (However, there may be no time limit or there may be a specific time limit.)

f. It must be observable and measurable.

g. Examples of tasks are:

Write a Sermon	Complete a TDY Voucher
Replace a Generator	Repair a Broken Window
Employ a Claymore Mine	Perform PMCS
Prepare a Memorandum	Reconcile Vault Funds
Conduct a Face-to-Face Interview	Prepare a Task Analysis Report

h. The most common problem with task statements is the use of multiple verbs indicating several, rather than a single action. Conditions and standards are not precise enough to allow for evaluation of component performance.

There are about twelve different types/categories of tasks. These range from collective tasks performed by units, sections, squads, and crews to tasks performed by individuals. For our learning purposes, we will focus on the individual task. The individual task is the lowest behavioral level in a job or unit that is performed for its own sake. It should support a collective task. It usually supports another individual task. Tasks are the basic building blocks in training and evaluation of soldier/unit performance.

Task performance steps are the actions that units/individuals must perform to accomplish the task. Each step must be specific and detailed and contain only one action or unit of work. Task performance steps are components of the process/action. The number, sequencing and complexity of the task performance steps are dependent upon the task.

Characteristics that aid in identification of task performance steps are:

a. Supporting actions to accomplish a task.

b. Have no meaningful outcome in its own completion. (Has meaning only when performed as a component of a task.)

c. May or may not be sequential.

d. Examples of task performance steps are:

Number paragraphs	Remove hex bolt
Extract a parable	Verify Age
Identify references	Check C-27
Count currency	Enter SSN
Check oil level	Announce Reading

e. A common problem with task performance steps is confusing the performance step with the task. Another common problem is failure to detail performance steps sufficiently for an unskilled or untrained person to be able to do the task correctly.

In evaluating and developing training, it is important to understand the relationship, independence and interdependence of performance activities required to accomplish assigned missions. From the broad and general goal end state, we can derive focus and purpose. To determine how well it is being done or to train to do, we identify the specific and more clearly defined individual/collective tasks that must be trained to accomplish the goal. In order to measure and insure competent performance, we identify all the task performance steps that we need to complete the task.

In analyzing, developing and evaluating, it is essential that we properly identify and consider all actions in the proper performance area.

To practice your recognition of goals, tasks and task performance steps, complete the practice exercise.

PRACTICE EXERCISE

IDENTIFY GOAL/TASK/TASK PERFORMANCE STEP

In the blank space to the right of each statement, write in the correct activity.

1. Remove Engine ______________________________
2. Understand the Personnel System ______________________________
3. Improve spiritual awareness ______________________________
4. Check for spelling ______________________________
.
5. Conduct Performance Counseling ______________________________
6. Prepare DA Form (XXXX) ______________________________
7. Prepare Attendance Report ______________________________
8. Check for electrical conductivity ______________________________
9. Improve quality of entry-level force ______________________________
10. Account for inventory ______________________________
11. Gather tools/materials ______________________________
12. Prepare lesson plan. ______________________________
13. Troubleshoot brakes ______________________________
14. Conduct Baptism ______________________________
15. Improve education ______________________________

PRACTICE EXERCISE
SOLUTION

IDENTIFY GOAL/TASK/TASK PERFORMANCE STEP

In the blank space to the right of each statement, write in the correct activity.

1.	Remove Engine	TASK
2.	Understand the Personnel System	GOAL
3.	Improve spiritual awareness	GOAL
4.	Check for spelling	TASK STEP
5.	Conduct Performance Counseling	TASK
6.	Prepare DA Form (XXXX)	TASK
7.	Prepare Attendance Report	TASK
8.	Check for electrical conductivity	TASK STEP
9.	Improve quality of entry-level force	GOAL
10.	Account for inventory	TASK
11.	Gather tools/materials	TASK STEP
12.	Prepare lesson plan	TASK
13.	Trouble shoot brakes	TASK
14.	Conduct Baptism	TASK
15.	Improve education	GOAL

TAR

PREPARE TASK ANALYSIS REPORT

OBJECTIVE

Prepare a Task Analysis Report using the task assigned for your final 45-minute presentation. The Task Analysis Report must include a Terminal Learning Objective and Enabling Learning Objectives (if required). Your report must identify the following:

a. Sources and methods used for analysis of task.

b. Major task performance steps, sub-steps and sub-sub-steps (if required).

c. Skills and knowledges necessary to perform task performance step elements.

d. Skills and knowledges assumed to be possessed by the target population.

CRITERION TEST

Prepare a Task Analysis Report using the task assigned for your final 45-minute presentation, Target Population Audience Description, and appropriate blank forms and references. Task Analysis Report will include Terminal Learning Objective and Enabling Learning Objective (if required). Report will identify the major points described above in the format described in this module.

TASK ANALYSIS

A Task Analysis provides the information you will need to derive the learning activities that lead to satisfactory performance. You perform a Task Analysis whenever you need to train people to carry out a specific job or task.

An accurately completed Task Analysis tells us step by step exactly what a competent person does when performing the task. It also tells us how the person knows when to begin the task; what materials, equipment, references, etc., to use; and how to know when he or she has finished the task.

Task Analysis is probably the most critical step in the instructional design process. If a developer has not defined the content to include in the instructional package, there is little value in, or need for, designing an instructional strategy, producing appropriate media, or conducting an evaluation. A survey of training developers found that over 78% agreed that it was not possible to design good instruction without first conducting a task analysis. Unfortunately, only 38% of the training developers felt their clients (Commanders/Commandants) understood the purpose of a task analysis. The instructional design process depends on the concise definition of the content that is the object of the instructional materials. Many instructional training developers consider task analysis the most critical part of the instructional design process. The analysis solves three problems for the developer:

1. It defines the content required to solve the performance problem or alleviate a performance need. This step is crucial since most instructional training developers are usually working with a subject-matter expert (SME) but may be required to work with unfamiliar content.
2. Because the process forces the subject-matter expert (SME) to work through each individual step, subtle steps are more easily identified.
3. During this process, the training developer has the opportunity to view the content from the learner's perspective. Using this perspective, the training developer can often gain insight into appropriate teaching strategies.

Selecting the best or most appropriate analysis procedures depends on a number of factors, including the purpose for conducting the task analysis, the nature of the task or content, and the environment in which the task is performed.

The terminology associated with the topic and task analysis is often confusing. The instructional design literature frequently refers to the process of analyzing content as *task analysis.* Specific analysis procedures also go by a host of names. Some individuals refer to task analysis as a specific procedure for defining psychomotor skills, which leads to further confusion. In this training, we refer to *task analysis* as the collection of procedures for defining the content of an instructional unit, a lesson.

INPUT FOR TASK ANALYSIS

An analysis of the content required for instruction does not begin in a vacuum. It begins with the needs or goals derived from the definition of the instructional problem (the result of needs analysis). These needs or goals provide an initial definition of the breadth of the project and provide the developer a focus. For example, if you were designing a unit of instruction on cardiac care for medical doctors, would you start with emergency-room care, bypass surgery or rehabilitation of a patient who had suffered a heart attack? If you have properly defined the instructional problem, the problem statement and needs or goals will provide the initial direction and breadth of your analysis. Thus, a unit on cardiac care might focus only on rehabilitation as a result of the problem identification. A second input is from the learner analysis. An understanding of the learner's knowledge and background related to the topic helps the developer determine the beginning point for the analysis as well as the depth and breadth of analysis. The output of the analysis is the documentation of the content to include in the instructional materials. This output then serves as an input for developing instructional objectives.

Preparing to Conduct a Task Analysis

A task analysis can take many different forms. The methods and individuals involved will vary depending on the circumstances. Training developers most often work with a subject-matter expert, an individual who is an expert in the content area. The subject-matter expert (SME) is our link to the content. We rely on this individual (or individuals) to provide accurate, detailed information to use in developing the instructional unit. Our task as training developers is to help the SME elaborate on the content in a meaningful, sequential manner. The developer is responsible for obtaining a complete analysis, while the SME is responsible for providing accurate information and suggesting where gaps may exist in the original goals.

In military training settings, the instructor often serves as both the SME and training developer, an often difficult but necessary combination of responsibilities. The teacher/SME/developer is responsible for providing a global view ("Are all the steps and information defined?") as well as a microscopic view ("What result or condition is required before doing the next step?").

A Task Analysis provides the information that you will need to derive learning objectives. You perform a TASK ANALYSIS whenever you need to train people to carry out a specific job or task.

Task analysis may be defined as a process for identifying all the actions and decisions required to perform each task. It is the *"core" of* analysis. This process combines the information already obtained about the task along with the detailed following task performance specifications:

- task elements, sub-tasks or steps
- skills, knowledge and abilities
- conditions, references
- tools, supplies, equipment
- safety and environment factors/hazards
- cues
- standards
- performance measures

An accurately completed TASK ANALYSIS tells us step by step exactly what a competent person does when performing the task. It also tells us how the person knows when to begin the task; what *materials,* equipment, references, etc., to use; and how to know when he or she has finished the *task.*

TASK ANALYSIS PROCEDURES

How do you carry out a Task Analysis? There is actually no one way to conduct or record a task analysis; however, the following steps outline a general way to proceed:

NOTE: At USASSI, we record all information for the task analysis on the TASK ANALYSIS REPORT, FJ FORM 350-100-108.

QUESTIONS TO BE ANSWERED

Answering the following questions will enable you to correctly perform a task analysis for the purpose of developing adequate training.

How is the task accomplished?

What actions and decisions, and skills and knowledge are required to perform the task?

In what order must those work elements (steps) be performed?

Under what conditions must the task be performed?

What tools, equipment, supplies, references or other facilities are needed or required to perform the task?

What safety and environment factors/hazards are considered when performing the task or each element of the task?

What cues cause the job incumbent to begin or end the task in a particular manner?

To what standard or proficiency must the task be performed? (i.e., How well must he/she perform each task? What will one accept as acceptable performance?) Also, what are those behaviors, products and characteristics that one observes to determine if someone has performed the task correctly?

The best way to obtain answers to the questions above is to gather data and analyze it. Some ways for collecting this data are provided below.

- Inspection of records, statistics, data
- Review of regulatory guidelines and SOPs
- Review of job descriptions/job standards
- Conduct of personal interviews with employees and supervisors
- Conduct of telephone surveys
- Conduct of self-administered or mail questionnaires
- Observation of task being performed
- Test or other measurement tools/instruments

The output (end product) of a task analysis is a detailing of as much specific data as one can gather comprising the task performance. This detailing is used to produce soldier training publications (SM and OFS).

Step 1. Determine the type of task you are analyzing. Since tasks vary greatly in nature and complexity, you can use different techniques in their analysis. Tasks you encounter generally fall into one of the following categories:

- simple, straightforward tasks which people perform in only one way. Example: Put on a protective mask.
- branching procedural tasks which people perform in different ways. Such tasks involve a number of decision steps.
- soft-skilled tasks which have a great many variables. Tasks involving interpersonal relationships, judgment, decision-making and creativity are soft-skilled tasks. Example: Counsel a student with learning difficulties.

Step 2. Determine how best to analyze the task or obtain the task analysis data. This is done by:

- Observing others perform the task.
- Reviewing documents related to the job.
- Interviewing job performers.
- Performing the task yourself.
- Interviewing job supervisors.
- Consulting with Subject Matter Experts (SMEs).
- Using a combination of methods.

The following chart shows the basic methods for obtaining Task Analysis data, along with their advantages and disadvantages.

METHOD	ADVANTAGES	DISADVANTAGES	WHEN BEST USED
OBSERVE OTHERS PERFORM THE TASK	Permits direct observation of actual behavior. Usually more reliable. Allows direct observation of performance conditions. Allows analyst to probe performer about the decision-making process immediately. Allows analyst to see alternate ways of performing the task.	Analyst may concentrate too heavily on the visible task components. Analyst will miss task components which do not occur often.	Any task which has many visible behaviors, as opposed to thinking behaviors.

METHOD	ADVANTAGES	DISADVANTAGES	WHEN BEST USED
REVIEW EXISTING DOCUMENTS	Simplest of all methods. Does not require the time of others.	Quantity and quality of information depends on the availability of good documentation. Analyst can not always tell if the documentation is complete or accurate.	Always use when available. Supplement with other methods.
INTERVIEW PERFORMERS ON THE JOB	Can be done almost any time. Allows maximum probing for “thinking" behaviors. Allows analyst to ask about infrequent or unusual task components.	May be less reliable than direct observation. Interviewee may neglect task information that an analyst would notice during observation.	Any task which has many invisible beha-viors such as identifying causes of problems.
LEARN TO PERFORM THE TASK	Provides greatest familiarity with the task. Gives best access to "invisible" task components, such as decision making and reasoning process.	Can be very time consuming. May be impractical or dangerous with some tasks.	Routine tasks such as simple equipment operation. Tasks that can be learned quickly.
INTERVIEW SUPERVISORS OF JOB INCUMBENTS	May have the best perspective on good and bad ways to do the work from observation of many performers. Can help analyst by pointing out good and bad performers	Supervisor may have preconceived ideas about a task. May not actually know task as well as performers. May be super performer with unrealistic expectations.	To guide analyst’s observations and interviews of job incumbents. To supplement or review information obtained elsewhere.

METHOD	ADVANTAGES	DISADVANTAGES	WHEN BEST USED
CONSULT WITH SUBJECT MATTER EXPERTS (SMEs)	May have the broadest, most detailed information of all sources. Can often reconcile differences, or fill in the blank spaces left from other methods.	May insert task information that is "nice-to-know" back-ground, or theory - but not necessary or practical on the job.	To review or supplement information obtained from other methods.

Step 3. Determine the method you will use in recording task analysis data. The form used at USASSI is the TASK ANALYSIS REPORT (FJ Form 350-100-108-R). This form combines the simplicity of task detailing with the flexibility of flow-charting. You can use it to record the analysis of almost any task from the simplest to the most complex.

Step 4. Collect sources and materials needed to prepare a Task Analysis. Sources include: regulations, circulars, pamphlets, manuals, or people (such as subject matter experts, job incumbents, or job supervisors).

Step 5. Identify the cues that initiate task performance. It is important to identify as many initiating cues as possible to insure that you completely and accurately analyze the task. If you have more than one cue, list them in the most common sequence of occurrence, from most to least frequent. This information is entered in the far left-hand column as the first in the series of performance steps.

> *Cues* are the stimuli that cause the task to be performed. What we really mean by “doing a job right” is responding appropriately to the various cues found in the job situation.
>
> Example 1. For a wheeled vehicle mechanic, a flat tire on a vehicle would be a cue that should result in his changing or repairing the tire.
>
> Example 2. Certain cues not only “cause” a medical corpsman to begin the task of administering first aid to an injured person, but also determine how he performs the task. If the victim’s breathing had stopped, the trained corpsman would not begin first aid by splinting the victim’s leg.
>
> Example 3. Sometimes, the cue is a direct order or mandate.

Step 6. Identify each performance step (element) and decision step in the process. Record these steps in logical order. Use an outline format indicating steps, substeps, sub-substeps and sub-sub-substeps as necessary. This information is entered in the far left-hand column.

There are three reasons why we need to determine elements (steps/substeps) for a task.

1. Sufficient detail of how the task is performed is needed to provide to a task selection and a site selection board when determining criticality for training and site for training.

2. Sufficient detail of how the task is performed is needed to provide a solid base for training either through formal training or through use of job aids. The elements serve as a base for determining if job aids are preferred over formal training and also serve as the basis for designing those job aids.

3. Some tasks statements may look alike (with the same verb and noun) even though performed quite differently by different people. The elements are the ingredients which give a special flavor to the task at each different job level.

Step 7. Identify the conditions of the performance. Conditions include references, tools, equipment or other things a soldier needs to perform the task in the "real world." Write the conditions in the far right-hand column directly across from the step that needs them.

Conditions refer to job conditions that significantly influence task performance. Some major items that need to be considered are outline below.

Items to be Included	**Examples**
Tools and equipment used to perform the task	▪ Clean room overalls ▪ Lead-lined gloves ▪ A-7D aircraft ▪ Soldering iron
Special job aids and manuals	▪ Procedural checklists ▪ Technical manuals
Kind and amount of supervision and assistance normally available during task performance	▪ Job holder performs task completely independent of assistance from others ▪ Task performed under close supervision ▪ Task performed as a member of a team
Special physical demands of the task	▪ Crowded working conditions ▪ Unusual or prolonged physical effort ▪ Kneeling or squatting ▪ Unusually cramped positions
Environmental conditions that influence task completion	▪ Tropical environment ▪ Arctic environment ▪ Desert environment
Location of performance	▪ Air-conditioned building ▪ Outdoors in all weather conditions ▪ At night in total darkness ▪ Direct support maintenance van

Step 8. Identify terminal steps, indicators that signal the completion of the task as the last item in the far left-hand column. A simple task may have one terminal step, but a complex task may have many such indicators.

How do you know when you are done with your Task Analysis? You are finished when you have developed a written description of the *task* and the *steps* of that task as a competent person would perform it and when your Task Analysis answers the following questions:

1. What do competent people do when they perform this task?

2. When do they do it?

3. How do they do it?

4. How do they know that they are done?

5. What tools, references, materials, equipment, etc., do they use while performing the task?

After completing the necessary steps, you must review the analysis to insure that:

- You have covered all various possibilities that may occur in the task.

- You have recorded the performance in a logical and "real world" sequence.

- You have identified initiating cues and terminal steps. Performance conditions are complete.

Now that you have digested the Task Analysis procedures - why, when, and how - it is time to prepare a Task Analysis.

EXAMPLE TASK ANALYSIS

The following is our task analysis for making a peanut butter and jelly sandwich. (Rather than using “dominant” and “non-dominant hand,” we have used “right” and “left hand.”)

I. You are hungry and desire a peanut butter and jelly sandwich.
II. Place paper plate with top-side facing up directly in front of you.
III. Place two pieces of bread side-by-side on plate with top edge of each facing same direction. Visual Cue: Top edge of bread is usually round.
IV. Remove lid from jelly jar.
V. Grasp jelly jar with left hand and hold between thumb and fingers.
    A. Move jar 3 inches above and over slice of bread on right side of plate.
    B. Position so mouth of the jar is 1/3 of way between top and bottom of bread and approximately 6 inches above bread.
    C. Tilt mouth of jelly jar approximately 45º toward center of bread.
VI. Grasp knife handle in right hand so that top (dull, smooth, flat side) of blade is facing up.
    A. Place index finger on top edge of knife blade for control. Visual cue: One edge of knife may be rounded as opposed to straight. This edge is pointing down.
    B. Insert knife approximately 1 inch into jelly with index finger on edge of blade closest to ceiling.

1. Gently pull knife through jelly to accumulate approximately 1 tablespoon of jelly on tip.
2. Slowly twist knife clockwise so that flat part of blade with jelly is facing ceiling.
3. Gently remove knife from jar while keeping jelly on blade.
4. Set jar down with mouth up and out of way.
5. Place bread in palm of left hand.

C. Carefully maneuver knife to center of bread on right side without dropping jelly.
1. Turn knife blade over and gently brush jelly onto bread.
2. Working from center out, use knife blade to spread jelly over the bread, leaving a 1/8-inch border at each edge.
    a. Hold knife blade barely off the bread and at a 25° angle to bread to spread jelly.
3. Spread jelly evenly over piece of bread.
    a. Add additional jelly as needed to meet personal preferences.
4. Place bread back on plate in original position with jelly up.

VII. Move knife to second piece of bread.
A. Hold blade flat against piece of bread and gently wipe both sides of blade clean.
B. Set knife down on clean surface.

VIII. Replace lid on jelly jar and tighten.
A. Place jelly jar out of immediate workspace.

IX. Remove lid from peanut butter jar.
A. Grasp peanut butter jar in left hand grasping between thumb and fingers.
B. Position mouth of peanut butter jar approximately 1/3 of distance from top to bottom of second piece of bread, approximately 6 inches above bread.
C. Tilt mouth of peanut butter jar approximately 45° toward center of bread.

X. Grasp knife handle in right hand so that top, dull or smooth side of blade is facing up.
A. Place index finger on top edge of knife blade. Visual cue: One edge of knife may be rounded as opposed to straight. This edge is pointing down.
B. Insert knife approximately 1 inch into peanut butter with index finger on edge towards ceiling.
1. Gently pull knife through peanut butter to accumulate approximately 1 tablespoon of peanut butter on tip.
2. Slowly twist knife clockwise so that flat part of blade is facing ceiling.
3. Gently remove knife from jar while keeping peanut butter on blade.
4. Set jar down with mouth up and out of way.
5. Place bread in palm of left hand with jellied side facing up.

C. Carefully maneuver knife to center of bread without dropping peanut butter.
1. Turn knife blade over and gently brush peanut butter onto bread.
2. Working from center out, use knife blade to spread peanut butter gently on bread leaving a 1/8-inch border at each edge.
    a. Hold knife blade off of bread and at a 25° angle to bread to spread peanut butter.
3. Spread peanut butter evenly over piece of bread.
    a. Add additional peanut butter as needed to meet personal preferences.
    b. Gently scrape each side of knife blade on edge of bread to remove excess peanut butter from knife blade.
    c. Place bread on plate in original position.
4. Place knife in a clean spot.

D. Gently grasp crust at top edge of bread of peanut-buttered piece with fingers of left hand and crust of bottom edge of same piece with right hand.
1. Grasp only edge to avoid getting peanut butter on fingers.

E. Lift bread approximately 1.5 times width of bread above plate.
F. Move piece of bread directly over piece of bread with jelly.
G. Carefully rotate piece of bread with peanut butter so that peanut-buttered side is facing down. Visual cue: Clean side of bread is facing up.
H. Align two pieces of bread so that tops and right edges are aligned.
I. Slowly lower bread with peanut butter towards piece that's jellied so that all four corners align.
J. When two pieces of bread are barely touching, make any final adjustment in alignment.
K. Release hold on bread.
L. Gently pat top piece of bread to ensure adhesion of peanut butter and jelly.

XI. Place lid on peanut butter jar and tighten.
   A. Move jelly and peanut butter jars out of way.

XII. Determine how sandwich should be cut.
   A. To cut at angle from edge to edge
      1. Turn left corner of edge toward you at a 45° angle.
      2. Hold bread in position with gentle pressure from left hand on left corner.
      3. Grasp knife with right hand as before.
      4. Cut bread from top right corner to bottom left corner to create two right-angle triangles.
      5. Arrange two pieces into pleasing presentation on plate.
   B. To cut sandwich in half creating two equal rectangles
      1. Turn bread so that the longest side is parallel to your body.
      2. Gently hold bread into position with left hand by grasping top or bottom edge.
      3. Grasp knife in right hand as before.
      4. Select position halfway on longest edge on farthest side.
      5. Cut bread by drawing knife toward you.
   C. Arrange two pieces into pleasing presentation.
   D. Place knife in sink or dishwasher.

Learning Analysis

You know by now that a Task Analysis describes, Step-by-Step, how a particular task is performed by a competent worker on the job. What we need to know next is: exactly what does this student have to learn in order to be able to perform the task (meet the objective). We answer this question by conducting a learning analysis of the task, the next step in completing the Task Analysis Report.

You may be asking yourself, "Why do we need to do a Learning Analysis? We already know what the student has to learn. It is all right there in the Task Analysis, Step-by-Step." Well, this is not really true for several reasons:

- Even though the procedural steps for performing a task are listed in the left hand column of the Task Analysis Report, this analysis does not tell us what underlying skills and knowledge a student has to possess in order to perform each step.

- The Task Analysis does not tell us anything about which skills and knowledge are prerequisite to others. In other words, even though the sequence of steps on the Task Analysis Report is the proper order in which to perform the task, it may not be the best sequence in which to teach the task. The skills called for in step 15 of the Task Analysis may be prerequisite to those required by step 2. We cannot make any logical decisions about what to teach first until after we conduct the learning analysis.

A key element in developing effective training is determining the supporting skills and knowledge for tasks and learning objectives.

- Supporting skills are what the soldier must be able to do to perform the task.
- Supporting knowledge is what the soldier must know to perform the task.

  The two major steps in identifying required skills and knowledge are:

- Identify skills and knowledge for the tasks and learning objectives. Careful examination and identification of supporting skills and knowledge, sometimes referred to as "learning analysis", assists you in developing objectives at the level of detail needed to design efficient and effective training.

  To be effective, training content must --
  - Include skills and knowledge required for task performance.
  - Omit "nice to know" information not required for task performance.

- Construct a skill/knowledge matrix. The construction of the matrix is a systematic process of identifying, documenting and cataloging all essential skills and knowledge necessary to perform a given task. The visual representation allows you to examine similarities between them.

An example skills/knowledge matrix as associated with performance steps.

MATRIX OF PERFORMANCE STEPS TO SKILLS/KNOWLEDGE									
Performance Step	**Skills**				**Knowledge**				
	SK 1	SK 2	SK 3	SK 4	K 1	K 2	K 3	K 4	K 5
1	X	X			X		X		
2			X			X	X		
3		X					X		
4	X				X				X
5	X	X	X	X					

We examine each sub-substep (and each substep for which no sub-substeps were identified) and ask, “What skills and knowledge would a person have to possess in order to perform this substep/sub-substep?” These may be physical skills (run, type, etc), or mental skills. The following are common mental skills that we’re likely to uncover:

Common Skills and Knowledge

APPLY:	techniques of CPR rules of grammar counseling techniques bandage techniques for overcoming objectives
CLASSIFY:	categories of a budget types of offenses motives for joining the Army types of equipment types of correspondence
COMPARE:	Plan A with Plan B effectiveness of different teaching methods hard sell techniques with soft sell techniques Computer A with Computer B different combat tactics
DETECT:	errors of format/content safety violations unauthorized expenditures reason for malfunction of equipment drug abuse
DETERMINE:	price of menu items priorities of work assignments azimuth margins combat strategy

DISTINGUISH:	fact from opinion correct push-up from incorrect push-up Comment 1 from Comment 2 initial application from re-submission first degree burn from second degree burn
INTERPRET:	financial report policy/regulation classification markings editing symbols test results
RECALL:	definitions required documents to process a claim distribution procedure rights of a crime suspect vitamins contained in the basic food groups
RECOGNIZE:	symptoms of frostbite tools/equipment enemy aircraft different types of ammunition color codes of map

Obviously we have to use some judgement in determining how detailed to make this analysis. There are two considerations here:

- the nature of the task
- the abilities of the learner

As we mentioned earlier, if the task is very procedural (i.e., its performance is a series of clearly delineated steps) and its procedures have been clearly analyzed in the "STEPS" column, few skills and knowledge may need to be identified. If the task is primarily conceptual (i.e., simple procedures cannot be prescribed and the performance of the task rests on the learner's grasp of abstract principles) more supportive knowledge and skills may need to be derived.

In addition, we need to keep the general knowledge and ability level of our target population in mind. By weighing the information in the target population description against the complexity of the task, we should be able to determine the general level of detail we need to go into when listing skills and knowledge. For example, we should not have to list "read' and "write" as skills if our target population is AIT students.

The goal here is to uncover all those skills and knowledge essential to performing a task without getting bogged down in <u>unnecessary</u> detail considering our particular target population.

NOTE: In the process of determining skills and knowledge, you may discover that you have identified a separate task. For example, in analyzing the task, you would discover that one of the steps requires the performance of another identified task and would require its own learning analysis. Therefore, instead of repeating that entire analysis, you may simply reference it: (See Learning

Analysis for task title , task #). You may also reference applicable parts of the analyses, but do not carry this to extremes. Too many outside references will make the analysis difficult to use later on.

A couple points concerning referencing before we move on -

- Be certain that the reference is complete and accurate

- Be very careful in cross-referencing a task that has not yet been analyzed. Later, when you analyze the referenced task, you may discover that is does not sufficiently cover all the procedures contained in the first task.

In the next section, we will consider our target audience in determining how detailed we needed to get in listing skills and knowledge. Now we carry this a step further by examining each listed skill and knowledge one at a time and asking "Do the students in my target audience already possess this skill/knowledge?" If so, we draw a line through the item and write the words "Assumed Skill" or "Assumed Knowledge" in the "NOTES" column.

NOTE: Whether your students will possess a particular skill/knowledge at the time of training on the task may depend on how other tasks are sequenced within the course (i.e., training on tasks that precede the one you are analyzing may provide some of the skills and knowledge needed to perform this task). However, the decision to eliminate these skills and knowledge as "assumed" should not be made until a learning analysis has been completed for every task in the course and you have determined for sure how the tasks will be sequenced.

After lining out the assumed skills and knowledge, we end up with a list of items on which our students will need training if they are to perform the task. Our next job is to identify prerequisite relationships (if any) among these items. How do we do this? We examine each remaining (unlined) skill/knowledge and ask, "In order to teach someone this item, would I first have to teach him any of the other remaining skills or knowledge?" If such prerequisite relationships are identified, we record them by entering a brief explanation in the "NOTES" column.

CAUTION: Do not confuse the sequencing of these prerequisite skills and knowledge with the performance sequence of the task. Let's look at a simple example just to clarify the point:

Let us say that we have identified "perform long division" as a skill required for performance of an early step in a particular task. A later step might require "perform subtraction." Even though "subtraction" falls after "long division" in the performance of the task, "subtraction would have to precede "long division" in the learning sequence since one has to know how to subtract before he can perform long division. "Perform subtraction" is a prerequisite skill to "perform long division."

One last point before moving on to a practice exercise. Remember that when we made entries in the "STEPS" column, we included any necessary notes (safety cautions, explanations, etc.) in the same column immediately following the item to which they pertained. These notes dealt with the "real-world," job environment. Now that we have identified those skills and knowledge that will require training, we need to consider the learning environment and record in the "NOTES" column any of the following that are pertinent:

- safety cautions
- suggested activities or ways to teach *
- training constraints
- additional information or explanations

Do not spend a lot of time at this stage thinking about how a certain skill or knowledge will be trained. You will be making specific decisions on how to teach in the next phase of the design process. However, if an idea occurs to you here, jot it down for future consideration.

Throughout this section we will be using the term "instructional unit." An instructional unit is a grouping of interrelated task elements for instructional purposes.

At this stage in the game, we have analyzed our task in terms of:

- procedure — the steps (substeps, etc) involved in its performance and
- skills and knowledge — those items that have to be learned if the procedure is to be performed successfully.

Now, in this section, we will organize all this data by determining which grouping of these elements (i.e., instructional units) will provide for the most efficient and effective learning.

As before, the entry characteristics of the learner are critical here. What is effective and efficient for one group may not be for another. Thus, all decisions we make must be based on the question:

"What will serve these students best?" So ... with target population description in hand, let us proceed.

The first thing we do is to consider the task as a whole and ask, "Can this task be treated as only one instructional unit?" If we answer "yes," we are saying that instruction on the task will be uninterrupted by practice exercises. We are also implying that the learner will be presented with the entire task from the beginning of instruction. This could probably be done only with the simplest of tasks.

If the whole task can not be treated as one unit (which is usually the case), we next turn our attention to the major steps. We examine each step and determine if each of these could form a separate instructional unit. Keeping a step intact to form a unit is usually advisable if the level of complexity will permit it. As always, we must consider the learner. If the step is too complex to teach at one shot, we may need to divide it into 2 or more logical units (enabling learning objectives, ELO). (Sometimes there may be one sub-substep or one skill/knowledge that is complex enough to warrant its own unit). If the reverse is true, and the step is quite simple, we need to consider combining it with one or more other steps to form a unit.

Finally, we review our complete analysis one more time to see if there are enough “common elements” to justify distinct instructional units. By “common elements” we mean those procedures, skills or knowledge that appear in two or more steps. There are two approaches to the training of these elements that you should consider:

- The element may be learned when it first appears in the natural sequence of the task. When it reappears, the original learning is referred back to and reinforced.

- Separate instructional units are designed for the common elements.

The latter approach should be used only when the elements are so numerous and/or complex that the flow of learning the entire task would be interrupted unless these elements were learned first.

An example TAR with the steps and skills/knowledge columns completed.

Task Title: Determine Percent of Body Fat

PERFORMANCE STEPS/SUBSTEPS/ SUB-SUBSTEPS	SKILLS AND KNOWLEDGE	NOTES
1. Prepare subject for measuring.		
A. Collect all necessary materials.	- *Recall which devices are necessary for measuring (Lange Skinfold Caliper, Durnin-Womersley Table, HQDA Letter 40-83-7, tape measure, pen, worksheet, and subject.* (K) - *Identify devices used in measuring.* (K)	
B. Mark the subject on the four required sites.	- *Recall the four sites to be measured.* (K) - *Know the reasons for measuring only the right side.* (K)	
(1) Measure a point half way between the olecranon process and the tip of the acromion on the right arm.	- *Recall the anatomical landmarks on the body.* (K) - *Be able to correctly measure using a standard tape measure.* (S)	
(2) Mark the midpoint on the tricep.	- *Recall procedure for marking the tricep.* (K) - *Be able to correctly mark the midpoint of the tricep.* (S)	
(3) Measure a point half way between the origin and insertion of the right bicep.	- *Recall procedures for marking the bicep.* (K) - *Be able to correctly mark the midpoint of the bicep.* (S)	
(4) Mark the midpoint of the bicep.		
(5) Determine the location of the tip of the inferior angle of the right scapula.	- *Recognize the tip of the inferior angle of the scapula.* (S)	
(6) Mark the location of the tip of the scapula.	- *Recall procedures for marking the scapula.* (K) - *Be able to correctly mark the scapula.* (S)	
(7) Determine the location of a point just above the Iliac crest at the mid-axillary line on the right hip.	- *Locate the crest of the iliac.* (S) - *Locate the mid-axillary line on the right hip.* (S)	
(8) Mark the location above the iliac crest.	- *Recall procedures for marking the hip.* (K) - *Be able to correctly mark hip.* (S)	

PERFORMANCE STEPS/SUBSTEPS/ SUB-SUBSTEPS	SKILLS AND KNOWLEDGE	NOTES
2. Measure and record the thickness of all four skinfolds. (NOTE: Individual performing this task must be careful not to injure(bruise) the subject when using the Lange Skinfold Caliper).	- *Recognize Lange Skinfold Caliper.* (S) - *Understand the function of the caliper.* (K)	
A. Pick up skinfold of tricep.	- *Be able to correctly operate the Lange Skin-fold caliper.* (S)	
B. Apply skinfold caliper.	- *Recall the requirement to hold the caliper for 3 seconds before reading.* (K)	
C. Read caliper.	- *Be able to read caliper.* (S)	
D. Record measurement.	- *Locate the correct place on worksheet to enter measurements.* (K)	
E. Pick up skinfold of the bicep.	- *Recall procedures for picking up the skinfold of the tricep.* (K)	
F. Apply skinfold caliper.	- *Be able to correctly apply caliper to tricep skinfold.* (S)	
G. Read caliper.	- *Recall procedures for picking up the bicep skinfold.* (K)	
H. Record measurement.	- *Be able to correctly apply caliper to bicep skinfold.* (S)	
I. Pick up skinfold of the scapula.	- *Recall correct procedures for picking up the skin fold above the scapula.* (K)	
J. Apply skinfold caliper.	- *Be able to correctly apply caliper to skinfold above scapula.* (S)	
K. Read caliper.		
L. Record measurements.		
M. Pick up skinfold above the right hip.	- *Recall procedures for picking up the skinfold above the right hip.* (K)	
N. Apply skinfold caliper.	- *Be able to correctly apply the caliper to the skinfold above the hip.* (S)	
0. Read caliper.		
P. Record measurement.		
3. Check measurements for reliability.	- *Know what reliability of measurements means.* (K)	
A. Compare the measurements of each site to determine if they are within 10% of each other.	- *Be able to compare the measurements to check reliability*. (K) - *Recognize discrepancies over 10%.* (K)	
B. Remeasure any site to remove discrepancy.	- *Know what factors can influence the reliability of the measurements.* (K)	
C. Record new measurement.	- *Be able to replace inaccurate measurement with accurate measurement.* (K)	
4. *Find percent of body fat.*		
A. Determine average measurement of each site.	- *Be able to compute averages* (K*).*	

PERFORMANCE STEPS/SUBSTEPS/ SUB-SUBSTEPS	SKILLS AND KNOWLEDGE	NOTES
4. Find percent of body fat.		
A. Determine average measurement of each site.	- *Be able to compute averages.* (K)	
B. Determine sum of the averages of all sites.	- *Be able to add numbers.* (K)	
C. Determine age of the subject.	- *Know where to collect information about the subject's age.* (K) - *Be able to subtract numbers to determine age.* (K)	
D. Find percent of body fat using the Durnin-Womersley Table.	- *Recall procedures for reading a standard table.* (K) - *Be able to locate correct columns on Durnin-Womersley Table.* (K) - *Be able to read the Durnin-Womersley table.* (K)	
E. Record percent of body fat on worksheet.	- *Locate correct place on worksheet to record percent of body fat.* (K)	

TASK ANALYSIS REPORT
(Chapter VI, TRADOC Regulation 350-70)
Page ___ of ___ pages
DATE OF ANALYSIS

TASK TITLE

ANALYST:

TASK NUMBER:

CONDITIONS:

STANDARDS:

TERMINAL LEARNING OBJECTIVE:

ACTION:

CONDITIONS:

STANDARDS:

REFERENCES: (Include civilian publications if used.)

NUMBER	**TITLE (Spell out)**	**DATE**

FJ FORM 350-100-108R, APR 98
(ATSG-TSI)

Figure 1

TASK ANALYSIS REPORT CONTINUED
Page ___ of ___ pages

PERFORMANCE STEPS/SUBSTEPS/ SUB-SUBSTEPS (a, (1), (a)) •	SKILLS (S) AND KNOWLEDGES (K)	RESOURCES/ REFERENCES/NOTES

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(ATSG-TSI)

Figure 1 continued

Definitions:

Task. A clearly defined and measurable activity accomplished by individuals and organizations. It is the lowest behavioral level in a job or unit that is performed for its own sake. It is specific, usually has a definite beginning and ending and generally is performed in a relatively short time.

Performance Step. A discrete operation, movement or action comprises part of a task.

Performance sub-step. Subordinate operations, movements or actions that comprise and assist in the completion of the performance step.

Knowledge. Information or fact required to perform a skill or supported task.

Skill. The ability to perform a job-related activity that contributes to the effective performance of a task performance step.

Resources. Equipment, supplies, supervision or assistance needed to perform the step.

Conditions. The learning objective condition describes the training situation or environment under which the student must perform the learning action statement. It includes identification of materials, facilities and equipment the student must have to perform the objective.

Standard. A statement that establishes criteria for how well a task or learning objective must be performed. The standard specifies how well, completely or accurately a process must be performed or product produced.

Performance Steps. Write in outline form, beginning with a verb. Write these as if you were actually telling the learner what to do at each step. Since these indicate specifically what the soldier must do, list in the sequence of performance. These may be specified or in logical task flow. List all performance sub-steps necessary for the learner to be able to accomplish the task.

Safety/Hazard Cautions. If the performance steps warrant, include additional safety/hazard cautions at the appropriate point of application.

Skills/Knowledges. Initially when completing a Task Analysis Report, list all performance steps. Then edit to add the skills/knowledges the learner would have to possess to be able to perform the performance step. (As you become more familiar with the task and task analysis, this can be done at the same time.)

References. References to paragraph level should be made for each performance step. This allows for cross-referencing actions and quick review on changes to directives establishing the task.

Figure 1 continued

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(ATSG-TSI)

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TP

PREPARE A TARGET AUDIENCE DESCRIPTION

OBJECTIVE:

Write a Target Audience Description (TAD) of the students expected to attend the course you will develop/instruct.

Use the following headings when preparing your Target Audience Description:

1. Position Requirements
2. Military/Civilian Experience and Training
3. Physical Characteristics
4. Anticipated Attitudes
5. Interests in Life

All headings must be addressed.

CRITERION-REFERENCED TEST:

Write a Target Audience Description (TAD) of students you expect to attend the course you are developing or instructing.

Use the following headings to write your Target Audience Description:

1. Position Requirements
2. Military/Civilian Experience and Training
3. Physical Characteristics
4. Anticipated Attitudes
5. Interests in Life

You must address all of the above five headings in your Target Audience Description.

PREPARE A TARGET AUDIENCE DESCRIPTION

During the design phase of the Systems Approach to Training, we make several decisions that affect how we plan to teach our course. Training developers plan course objectives, tests, media, methods and practice exercises during this phase. However, before we start writing instructional materials, we must consider the students we will be teaching. The term *target audience* refers to the group of students we will be teaching. A target audience description is an accurate profile of the "average" person who will be attending the course we develop.

A target audience description lists the characteristics of the class. It includes items such as age range of the students, percent of males and females, educational background, abilities and interests; and previous experience. It answers the question "What is the background of the typical student who attends this course?" A target audience description tells us what a group of students have in common. A sample TAD for the Staff and Faculty Development Training Course begins on page TP-7 of this module.

The Systems Approach to Training emphasizes that every student should be able to achieve a prescribed level of competence. Therefore, the training we develop must match the background of the students. Problems will occur if we overestimate or underestimate the ability of the students. If we overestimate students' abilities, the students will not have the necessary prerequisite skills to learn the material. If we underestimate students' abilities, we may develop instruction that the students do not need.

An accurate target audience description is a very useful training development tool. It helps training developers:

(1) Design instruction that begins at the right level of complexity or difficulty.

(2) Select practice activities, examples, materials, training methods and media that are likely to be effective.

(3) Set the training pace. It is easier to decide how much material can be covered in a given period of time or how much practice and review time will be needed.

(4) Reduce training on subjects that soldiers already know, thus improving training efficiency.

(5) Prepare instruction that will motivate soldiers and create and fulfill the right expectations.

There is no such thing as one single target audience description that applies to all soldiers. Target audiences vary from course to course. Each officer and enlisted specialty has different entry-level prerequisites. The description of an artillery cannoneer trainee will be different from that of a computer programmer trainee. It is important to keep in mind exactly the audience being described.

As we write about the characteristics of the "typical students," we often uncover new insights about their abilities, training and experience that may influence the way we design the instruction. By listing accurate characteristics in a TAD, we know what the students are really like, not how we would like them to be. When we initially write a target audience description, we are forced to make some assumptions. We assume that most, if not all, of the students will have the necessary prerequisite knowledge and skills. We may have to revise the TAD if, once we meet the students, we find their backgrounds do not match our expectations.

Research has shown that the characteristics of a given target audience will gradually shift over a period of time. Hence today's soldiers are somewhat different from last year's soldiers, and next year's soldiers will be slightly different from today's. Training developers update the TAD periodically to reflect both changes in technology and changes in soldiers' characteristics. Periodic updates ensure a clear understanding of the soldiers who will use the training products.

When writing a target audience description, remember that the TAD deals with the students' <u>entry-level</u>. We need to describe the skills, knowledge and attitudes they possess at the time they report for training. The designer bases the start point of the course upon what the students already know and can do. In establishing an entry-level description, designers must use their best judgment to determine the exact level of instruction to begin a course. Later, they may modify the TAD using compiled data on actual attendees. If students continually show mastery of skills that are part of the course, the designer should move to eliminate that training requirement since it is obviously a waste of student time. If, on the other hand, the course tests indicate that students do <u>not</u> possess the minimum prerequisite knowledge and skills needed, the designer should incorporate those skills into the training.

The actual training must bridge the gap between entry-level assumptions and reality. Remember that this entry-level description is of the <u>expected</u> student. You may modify the TAD once you have compiled data on <u>actual attendees</u>.

The following heading may be used to prepare a target audience description:

1. <u>POSITION REQUIREMENTS</u>:

   <u>Grade or skill level of the target audience</u>. What is the lowest and highest rank of the students to be trained?

   <u>Time in grade/Experience in the Specialty/Time in Service</u>. Approximately how many years have the students been in the US Army? Are they beginners or have they had on-the-job experience or other related training?

When working on materials for staff sergeants in the Army with an average active duty of 11 years service and 4 years in grade, the designer may draw certain conclusion as to what they have already done and seen. Personnel records contain this type of information and may be used as a reference.

When describing the initial entry soldier, you must look at two items. First, do a records screen to determine what percentage of personnel has any civilian related experience. Second, interview or have the target audience compile a survey describing its job-related experiences. Since most service schools train their proponent Military Occupation Specialty (MOS), many personnel are usually present for training and thus available to the designer as an information source.

Prerequisite skills and knowledges. You will address two major items here: (1) reading grade level and (2) applicable battery test scores. Reading grade levels are available through results of the General Technical Test. (See page TP-9 for a sample Reading Grade Levels for MOS/skill level at the Soldier Support Institute.) There may or may not be applicable battery test scores related to the course you are designing. Remember that battery scores are indicators of probable success and are not guarantees of success in and of themselves.

2. MILITARY/CIVILIAN EXPERIENCE AND TRAINING

Job related experience. Do the students have previous job experience related to the course? Students may have acquired job-related experience within the military and/or civilian sector.

Component Distribution. What percent of the students are Regular Army? Army Reserve? Army National Guard?

Education Level. What type of education have the students had? Are they college graduates, high school graduates or non-high school graduates? The education level will make a difference in how you present your classes, the instructional materials you use, and the vocabulary you use.

For an existing specialty, you can obtain the education level from individual personnel records. You may choose to take a random sample of the files and compute an average education level. For a proposed specialty, you will have to indicate the recommended education level. One approach would be to determine an average education level for similar existing specialties and then assume the education level would be the same for the proposed specialty. This approach will require monitoring and revision as necessary.

You may also use field surveys to determine required education levels. You may find that the existing average education level is either too high or too low and that the actual requirement is much different.

Percent of Soldiers with English as a Second Language

One method of collecting this data is to survey a limited number of classes, then project that figure to cover the entire MOS. Another method is to survey by mail, sending questionnaires to the commanders/supervisors of the MOS holders and ask the commanders for this data.

3. PHYSICAL CHARACTERISTICS/ATTRIBUTES

Age. What are the ages of the students? First, decide exactly whom you are trying to describe. Under normal circumstances, you will probably be analyzing either a specific skill level with one MOS or a grade level in an officer specialty. Where do you get information on age? You can use personnel records (remember the Privacy Act), request the information on any surveys that are done for the analysis, or ask the soldier.

Gender. What is the gender of the students? When describing the number of males vs. females in a working (active/current) MOS, you simply list the percentage of each in the population. That information is available through the PERSCOM. For a new MOS, a definition of the physical characteristics necessary to perform the job must be addressed.

Physical Characteristics. Consider the physical characteristics of your students. If your class is physically tiring as in physical training courses, you may need different teaching techniques for rested students attending class in the mornings and tired students attending your course later in the day. Are students living at home or are they away from home? You may expect some will be bleary-eyed from nights on the town.

4. ANTICIPATED ATTITUDES

Motivation. What do my students count as success? What are their rewards and need gratifiers? Is peer recognition important to them; do they need verbal praise? If you know what the students consider rewarding, you may be able to use these rewards to motivate them. Successful completion of your course may mean a promotion, recognition on the job or simply the personal gratification of furthering their education.

Expectations. What attitudes can I expect from my students? Are they eager to succeed or do they feel the course is a waste of time? Students who have chosen to take a course will have different attitudes from those who are taking it to fill a quota. Instructors in particular should be aware of these different attitudes in order to deal with them. How you manage students and the interest you show may be helpful in dealing with negative attitudes.

5. INTERESTS IN LIFE

What do the students like to do on their own time? What do they do when nobody's compelling them to do something? We are not looking for specific hobbies for every person, but we are looking for the general trends and patterns.

If possible, begin each statement with an "action verb," i.e., play basketball, paint pictures, watch TV, jog, etc.

This category is difficult to construct. You will need to keep working to find out the student interests. Write them down and ask yourself what examples you might give or what learning experiences you might provide to fit in with your students own interests and experiences.

The target audience description needs to be updated periodically since characteristics of the students will shift gradually over time. It's easier to update the TAD if you keep compiled data on actual attendees.

The target audience description for the Staff and Faculty Development Training Course beginning on page TP-7 is just one example of how to capture the information. There is no standardized format for a TAD. Some designers use a narrative format. Some include other types of information about students such as reenlistment rate or Additional Skill Identifiers. You may include any information you believe is relevant to your course. Remember, the purpose of a TAD is to get the best possible "fit" between the course and the students. Use your best judgment to get information that will help you plan a successful course.

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TARGET AUDIENCE DESCRIPTION
FOR TRAINING IN
STAFF AND FACULTY DEVELOPMENT TRAINING COURSE
(SFDTC)

POSITION REQUIREMENTS

E-5 through E-9 for Enlisted Personnel
O-1 through O-5 for Officer Personnel
GS-7 through GS-13 for Civilian Personnel

Military time in Service: 1 year to 18 years.

Civilian time on job: New to 18 years; most civilians are new in their particular job.

Most are instructors/developers.

Military have had experience within their Military Occupational Specialty.

Some are working in a new area.

Most enlisted personnel are at least skill level 3.

Reading grade level highly varied – typically ranges from 7 to 14.

MILITARY/CIVILIAN EXPERIENCE AND TRAINING

Civilian educational background ranges from GED/high school to graduate Ph. D.

Average about 10 years of military experience, typically in personnel administration, finance, recruiting and retention, religious, or mechanic fields.

Some have had previous training/experience as military instructors.

Some civilians have no military experience/training.

Some enlisted personnel have attended the Advanced Noncommissioned Officers Course (ANCOC).

Many officers have attended the Officer's Advanced Course for their branch. Some have attended the Command and General Staff College.

About 1% of soldiers with English as a second language.

Some attending college at night.

Some civilians have teaching experience and are certified as instructors.

PHYSICAL CHARACTERISTICS/ATTRIBUTES

60% enlisted personnel
30% officers
10% civilians

90% male
10% female

Age range from 24-52 years old.

Usually in adequate physical condition because of participation in Physical Training and sports.

ANTICIPATED ATTITUDES

Apprehensive/insecure about new assignment, yet challenged.

Concerned over settling family, housing, learning way around post.

Unfamiliar with organization structure/mission of SSI, Chaplain School and Wheeled Vehicle Mechanics School, and of their own assigned office, branch, department, etc.

Confused as to what a "systems approach to training" means.

Skeptical that Staff and Faculty training is relevant to their upcoming jobs.

Doubtful that Staff and Faculty Training has much to offer them if they've had previous instructor training and/or experience.

Somewhat resentful of mandatory attendance at the course and evaluation by civilians.

Reluctant to change.

INTERESTS IN LIFE

Travel

Participate in sports (bowling, hunting, fishing, softball, soccer, jogging, racquetball, etc.)

Attend community functions involving school, church, clubs.

Participate in family activities (picnics, camping, movies, projects with children).

Socialize with peers.

Need to be gratified by advancement/promotion.

TARGET READING GRADE LEVELS (RGL)
For Proponent MOS & SL
Based on Conversion of ST Scores
Through FY-90

MOS	SL1	SL2	SL3	SL4	SL5	3-CHAR MOR
71C	11.1	11.1	11.5	--	--	11.3
71D	11.3	11.4	11.6	11.7	11.8	11.5
71E	--	11.7	11.3	11.7	11.9	11.6
71L	10.1	10.5	11.0	11.5	11.7	10.5
71M	10.4	10.7	11.3	11.6	11.8	10.7
73C	10.45	10.8	11.4	11.7	--	10.8
73D	11.3	11.5	11.7	11.8	--	11.5
73Z	--	--	--	--	12.0	12.0
75B	10.1	10.5	10.8	--	--	10.45
75C	10.3	10.8	11.3	--	--	10.45
75D	10.3	10.7	11.0	--	--	10.45
75E	10.3	10.8	11.3	--	--	10.45
75F	10.8	11.0	11.0	--	--	10.8
75Z	--	--	--	11.5	11.8	11.6
79	--	--	--	--	11.5	11.5
02B	11.0	11.5	11.6	11.9	--	11.4
02C	11.0	11.5	12.0	12.0	--	11.6
02D	11.6	11.5	12.1	12.15	--	11.8
02E	11.5	11.4	11.7	11.6	--	11.6
02F	11.5	11.5	11.8	11.9	--	11.7
02G	11.0	11.6	11.9	12.15	--	11.6
02H	11.5	11.6	12.0	11.9	--	11.7
02J	11.3	11.5	11.6	11.8	--	11.5
02K	11.3	11.6	11.8	12.15	--	11.7
02L	11.1	11.3	11.5	11.7	--	11.3
02M	11.0	11.5	11.1	11.7	--	11.4
02N	11.5	11.4	12.0	12.4	--	11.7
02S	--	11.7	11.8	12.3	12.15	12.1
02T	11.4	11.4	11.5	12.15	--	11.5
02U	11.3	11.4	11.8	12.15	--	11.6
02Z	--	--	--	--	12.0	12.0
79R		11.3	11.3	11.5	11.6	11.5
79S	--	--	--	--	--	--
79T	--	--	--	--	--	--

*Reliable information on 79S & 79T MOSs is not available at this time.

This is a questionnaire that could be used to determine the characteristics of your target audience.

Audience Profile

Where are you assigned? ____________________________________

Position: ____

How long have you been assigned to this position? ____________

Age: ________

Sex(please circle): Male Female

Rank: ________

PMOS: ____________ SMOS: _____________

Branch: _____________

AOC: ____________ Secondary AOC: ______________

Martial Status(please circle): Single Married Divorced Widowed Separated

Dependent Children: (number) _____

Ages of Daughters: _______________

Ages of Sons: _____________________

Previous Position: ____________________________

Number of years in this position: ____

Have you previously been awarded an instructor identifier? ___ If yes, year awarded: ______

Place a check mark by the highest level of education you have completed.

Grade School
Middle School
High School
Vocational School (Associate degree)
College (undergraduate)
Graduate School
Post Graduate School
Doctorate level

Place a check mark by the military education completed.

AIT	OBC
PLDC	OAC
BNCOC	WOBC
ANCOC	WOAC
DRILL SGT	CAS3
FSC	CGSC
SMC	

List other military specialty courses completed.

What do you like to do in your spare time (hobbies, interests, etc.)?

What is your favorite music style?

RAP
Rock
Country
Jazz
Classical
Big Band
Easy Listening
Gospel (Spiritual)
Other (please list): ____________________________________

List your favorite television shows:

List your favorite magazines:

How would you rate your own computer abilities?

No experience
Poor
Weak
Fair
Good
Excellent

Which of the following applications do you use on a regular basis?

None
Games
Educational
Finance
Word Processing
Spread Sheet
Data base
Graphics
Other (please list): ___________________________________

Do you work with computers at your home? Yes No

Do you use a computer at work? Yes No

On average, how many hours per week do you spend on a computer?

None
Less than 3
3-5 hours
5-7 hours
7-15 hours
More than 15 hours

What do you like MOST about your job?

What do you like LEAST about your job?

How important is training to you?

Very Important
Somewhat Important
Occasionally Important
Seldom Important
Total Waste of Time

As an instructor, what do you anticipate to be your greatest challenge?

As a training developer, what do you anticipate to be your greatest challenge?

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IM-1

REVIEW EXISTING MATERIAL

OBJECTIVE:

Given an approved target audience description (TP-1), TLO's from O-2, ILOs from TAR-1, and instructional materials* secured from your department/division/school, review the materials for suitability and appropriateness IAW Existing Material Review Checklist, and the questions of this module. Be able to justify your responses.

*NOTE: Instructional material(s) may include:

1. A lesson plan
2. Module
3. Soldiers' Manual
4. Field Manual
5. Concept Paper
6. Survey
7. Visual material – slides, tapes, vu-graphs, etc.
8. Staff Study
9. Regulations

REVIEW EXISTING MATERIAL

Developing instructional materials is both time-consuming and costly. Therefore, it is vital to consider the usefulness of existing materials before committing time and money to the development of new materials.

At this time, consider what steps have occurred prior to this block in the SAT process. This should give you a frame of reference for this module. In the analysis phase, you have already analyzed existing courses in terms of what should be taught. At the onset of the design phase, you should have identified and collected existing materials.

NOTE: This collection of materials has not been evaluated at this point – merely identified as a possible source. You should consider this as the first phase of the procedure – review existing material(s).

Before you begin the second phase in the review existing material process, you will have developed or have access to:

1. Learning Objectives.
2. A description of student entry behavior (target audience description).
3. A task analysis to include interim learning objectives.
4. Learning activities.
5. An appropriate management plan and delivery system.

You will also have conducted research to identify programs and materials that may be applicable. Do NOT overlook materials from other service schools, civilian institutions, other armed services and other government agencies.

After accomplishing these prerequisites, you will begin the actual task of evaluating existing materials. The checklist on review existing material should be reviewed at this time. (See page IM-1-4.)

Basically, the review and selection procedure consists of evaluating promising instructional materials to determine if they are appropriate to the objectives, target audience, learning guidelines, management plan and delivery system selected in previous steps of the process. A perfect match will probably not be found, but materials may be located that only require minor modification(s).

Several questions need to be answered when reviewing existing materials.

1. Does the material explain the concept(s) or skill(s) adequately?

   To answer this question review the objective(s) for which you think the material may be relevant. Scan the material to see whether it presents the topics described by the objective(s). If it does, the material has potential to be used as is or to be reconfigured. If the material seems to have gaps in the explanation, you may consider rejection or find an alternate way to fill the gaps. Augment the gaps either with a resource that fills in the holes, with a discussion or demonstration or with material you prepare yourself.

2. Is the language used in the material understood by the students?

   You will need to review the material with your target audience in mind. Learning should be a "successful" experience, not a frustrating one. To ensure against frustration – you must match entering skills with sophistication of materials, based upon a thorough analysis of your target audience.

3. Are examples used understandable and relevant for the student?

   Here again you will need to refer to your target audience description. The more the examples fit the target audience, the more useful the materials will be.

4. What skills and or concepts are not relevant?

   This is an easy problem to overcome. Simply delete all irrelevant material that is not pertinent to the objective. Nice to know information may be "overkill" from the student's point of view.

5. Does the material provide adequate practice?

   Lack of practice is probably the most frequent deficiency of instructional materials. Look over the materials to see if practice is offered. If not, you will have to prepare practice exercises. Remember, without practice in the important skills, the student is not likely to develop those skills to the desired level.

SSI Regulation 350-20 gives specific guidelines to observe during the review of existing material(s).

1. Do not modify objectives to fit existing materials.

2. Keep in mind any constraints identified earlier, especially if they dictate mode or medium.

3. It is often cheaper to develop a new TV tape, film, slide show, etc., than to modify an old one. Also, it is easier to delete material from an old tape, etc. than to add new material which could interrupt the flow or transition.

4. Keep track of all materials reviewed.

5. Be thorough the first time, eliminating extra time and money later on.

6. Don't feel that everything that has been done before is useless. Take the approach that all existing materials are useful until proven otherwise.

7. Before modifying materials, make sure there is a long-time use for them. If yours is a short-term, non-critical course, you may consider using the selected materials just as they are.

8. Consider the physical conditions of the materials. Find out if they have been modified before. Few non-print materials can bear more than one round of changes without losing their continuity. Printed materials can be rewritten without too much trouble.

9. You should consult a media expert for technical aspects of material modification. The more "exotic" the medium, the more expensive the alteration.

10. If the existing materials have been validated, the validation data should be reviewed.

There is no cut-and-dried way to review materials. The enclosed checklist will be a beneficial tool to use when conducting a review of existing materials.

EXISTING MATERIAL REVIEW CHECKLIST

	YES	NO
1. Have you reviewed the task analysis and Objectives carefully?	___	___
2. Do you know what you are looking for?	___	___

<u>SOURCES</u>

Did you:

	YES	NO
1. Contact the appropriate department at the Institute and ask them to supply their existing materials?	___	___
2. Check with the ITRO representative to obtain a POC from other service schools?	___	___
3. Obtain the correspondence course/sub-course for your subject?	___	___
4. Check the library for materials stored there?	___	___

<u>VALIDATION DATA</u>

	YES	NO
1. Have the materials been validated?	___	___
2. If the materials were validated, were they validated on a target audience which is similar to yours?	___	___

CONDUCT THE REVIEW

To determine if existing materials can be used as is, the answers to the following questions must all be YES.

	YES	NO
1. Do the constraints you identified earlier permit the use of the materials?	___	___
2. Are the materials suitable for the entry characteristics of the students?	___	___
3. Do the materials have an introduction that lists the purpose, objectives and required materials?	___	___
4. Are student directions clear and accurate?	___	___
5. Are the materials technically correct?	___	___
6. Is appropriate practice provided?	___	___
7. Is there a means whereby the student either tests himself or is tested on his performance?	___	___
8. Is emphasis on performing the task other than on theory, background, etc?	___	___
9. Do the materials cover only what your task and task analysis say should be covered?	___	___

If the answer to any of the questions above is NO, then you must consider whether or not the materials can be modified and used.

These questions might guide you.

1. Can you add an introduction, practical exercise, etc., easily without destroying the materials?	___	___
2. Can portions that are not technically accurate be altered easily and effectively?	___	___
3. Can portions of the materials be deleted without rendering the materials useless?	___	___
4. Will the material be useful if placed in a different mode, e.g., can a lecture be placed on TV tape? Can an ACCP lesson be altered for group instruction?	___	___
5. Can portions of materials be used as references, supplements, etc.?	___	___

If the answers to the above five questions are all NO, then you'll have to discard the materials and either look elsewhere or design your own.

The checklist you just reviewed is somewhat general in nature since it only requires a simple YES/NO response.

When you review existing material that you obtained from your department, you must be able to justify your answer. In other words, be able to explain your reasoning for each YES/NO response.

Also, refer to page IM-1-5 in the module and answer the five questions, again explaining your YES/NO response.

Remember! Our goal is quality instruction, not perfection the first time around. Our intent is not to hold up good instruction.

In many cases, outside constraints (milestones, manning, etc.) may require us to approve a product that could stand improvement. When this happens, we should record the "problems" and pass them on to the product developers so they can be addressed when time and resources allow.

Now that you've digested the basics – let's practice what you have learned.

Let's assume that you have responsibility for a course – EFFECTIVE COMMUNICATION. The following objective has been developed.

<u>OBJECTIVE</u>

Given a series of scenarios, identify the obstacle(s) that hinder or impede interpersonal communication. All obstacles must be addressed for each scenario.

How to proceed?

1. Read/review the material on the next page that was collected for possible use for suitability in your course.

2. Keep in mind your own target audience you developed in TP-1.

3. Answer <u>all</u> appropriate questions on the Existing Material Review Checklist and justify your YES/NO responses. These are located in the module (pages IM-1-4 and 5).

4. Answer <u>all</u> questions listed on page IM-1-5 and justify your YES/NO responses.

5. After completing all steps, be prepared to defend your position to a group leader who will critique this exercise.

When your practice exercise has been critiqued, and any problems you encountered have been addressed – you are ready for the criterion test.

A Sample of Existing Material

SAY WHAT YOU MEAN

FOUR OBSTACLES IMPEDE INTERPERSONAL COMMUNICATION

By 1LT Chris Bishop

Almost everyone who reads this article has bought a car at one time or another. Most people decide before they buy a car to read very closely the purchase and sales agreement before they sign on the dotted line. Yet, in the pressure and excitement of the purchase, the resolution is broken. After all, one look at the phrases in that sales agreement and anyone would back track a little. Phrases like "seller's rights upon default of the buyer," and "rights of evaluation of trade at the time of delivery," or "vendor's liens," can only result in a scratch of the head and a stroke of the pen.

When all goes right and there is satisfaction with the deal, the terms are quickly forgotten. In fact, many people regard the complicated verbiage in a binding agreement as pure legal gobbledygook. Even though we recognize the binding nature of these agreements, seldom does the average buyer take the time to evaluate the exact meaning of the printed word. If we have so little regard for this important permanent, specific terminology, think how little we must have for the transitory, even fleeting, spoken word.

Yet, in the Army today, the spoken word remains an important element of both official and unofficial communication channels. Leaders talk.

Communication is accurately represented as a cyclical process. The critical instant in that process is that certain one billionth of a second when the receiver gains insight and resolves self-direction out of the message.

Most of us realize this fact, but fail to consider it often enough to make our communication completely efficient. I specifically refer to four constantly recurring semantic problems. These four problems show up in finance shops, in officer's clubs, in computer rooms, and on the golf courses. These four problems impede communication because they keep the listener from finding the ideas within himself. In short, these four obstacles to communication hurt the mental environment in which the receiver of interpersonal communication operates.

The first obstacle to communication addressed by this article is really a numbers problem. It has to do with too much or too little. Lacking a more stirring phrase, I'll call it "lack of clarity of speech."

The reason this was referred to as a numbers problem is that lack of clarity in speech is mostly caused by either verbosity or terseness. Verbosity, of course, is using too many words to express an idea. We do it all the time. The best example of verbosity that I have run across, however, did not concern a soldier. It had to do with a New York City plumber who had great success cleaning out clogged drain plugs using hydrochloric acid. So he wrote to the National Bureau of Standards in Washington, DC to share his discovery. The bureau's reply was, "The efficiency of hydrochloric acid is indisputable, but the corrosive residue is incompatible to the metallic permanence." The plumber wrote back that he was glad the bureau agreed with him. Alarmed, the bureau sent him a second letter: "We cannot assume responsibility for the production of toxic, obnoxious residues from the use of hydrochloric acid, and suggest that you use some alternative procedure." By return mail the plumber explained that he was very happy that the government thought the idea was a good one. In desperation, someone in the bureau wrote the plumber in plain English, "Don't use hydrochloric acid. It eats the hell out of the pipes." With this last clear statement, the correspondence ended.

There are, perhaps, a few other things wrong with the messages sent by the bureau besides the sheer number of words used to express the simple ideas. The example does show how a person can be inundated with verbiage and miss the idea completely. This happens often in everyone's office. Sometimes a subordinate fails in accomplishing a small administrative mission because of the shroud of complexity covering its original explanation.

The reaction of the subordinate to verbosity can be only one of two possibilities. First, he can become totally lost and confused and mentally try to hack his way through the wordy jungle. Second, he can sense where his boss is going after the first few words and must necessarily go off on some mental tangent to keep from being bored to tears. Notice that in neither instance is he discerning the mission and analyzing his function therein.

Then there is the opposite, the other extreme. From my experience, terseness is just as much a problem as verbosity. Terseness stems, usually from an assumption of too much knowledge. More clearly, the leader thinks the subordinate knows more about the subject than he does, so the leader doesn't say enough about it. One example this calls to mind occurred in the civilian world.

An elderly lady was flying from New York to San Francisco. It was her first jet flight. After she had fastened her seatbelt, a mini-skirted stewardess passed out chewing gum. The elderly woman asked the stewardess, "What is the gum for?" The stewardess replied, "It's for your ears." The lady had a smooth flight to the west coast. As she debarked at her destination the stewardess sweetly inquired, "Did you have a pleasant flight?" The old woman glared and said, "Oh, delightful. But I should think a big airline like this could find something a whole lot less sticky for our ears."

The second major obstacle to communication is the "failure to recognize that words affect behavior." We all know that certain words affect behavior directly. When someone says, "Please empty the garbage, darling," that's what we do. But we do not realize that less obvious commands occur more often than these. A drastic example may prove useful: a guest approached a pretty hostess in Florida as the dinner party was breaking up. The guest asked, "What was the entrée served this evening?" The hostess replied, "You had the privilege of eating rattlesnake steak." At that moment, the guest had the privilege of seeing her dinner for the second time.

Obviously, the words spoken by the charming hostess affected the behavior of her guest. I'm sure, however, that the hostess didn't realize that she would get such a violent reaction. And so it is all around us. Leaders do not realize that they are affecting the behavior and certainly the attitudes of their subordinates by the words they use.

To understand more fully the impact that words have on subordinate behavior, we should discuss literal meaning versus associative meaning. The literal meaning of a word is usually the original meaning, the dictionary definition. This other associative meaning has to do with the thoughts or images that word conjures up in addition to the literal meaning. It is a word's connotation. For example, the word "Kremlin" refers literally to a group of buildings, yet the associative meaning of this term is limitless. Most often the words that get leaders into trouble are ones with these vast associative meanings.

I wish I had the space to list the 100 worst words in our interpersonal communication. For the sake of time, I'll name only a few:

Lifer
Christmas help
Nigger
Jew
Commie
Adolph Hitler

The point is that leaders ought to take time to consider the words they use daily and see if any of them "turn off" their subordinates. One obvious class of words to question would be profanity. Many leaders today think they have to be profane to build rapport with their subordinates. Nothing could be further from the truth. In fact, I've never seen a really great leader, save perhaps Patton, who used profanity habitually. Any truly masterful leader can communicate without using it.

The third roadblock to verbal communication is "failure to differentiate between fact and opinion." What I mean by this is that leaders often take their opinions and express them as <u>the fact</u>. This leads to problems in today's Army because the leader is no longer considered as the only authority. Subordinates are more than willing to express their own opinions as facts. When the leader does so, disagreement and quibbling over insignificant discrepancies in experience may occur, overtly perhaps, and certainly mentally. Insight and practical applications of past experiences take a back seat to a daily battle between the subordinate and that "I can't believe how dumb he is" leader.

Most often this problem arises from a leader's tendency to state his opinions as absolutes. Here is an example: Napoleon Boasch and B. A. Foulball were two criminals in England in the early 1950s. They were wanted for questioning in a number of sophisticated burglaries which had been carried off without leaving a clue behind. Police were relatively certain that these two were the culprits, but were unable to even find them. Even if they did, a conviction would have been impossible due to lack of sufficient evidence. Meanwhile Boasch and Foulball were in fact planning their next job, a silver robbery from one of the most elegant residences on London's east side. On a cold November night, police were alerted to the already completed burglary in which more than $60,000 in silverware and ornaments was stolen. Luckily at last, there was evidence. Police discovered a thumbprint on the outside of a window, identified as Foulball's. A freshly painted wall from which a candleholder had been stolen bore an index print from Foulball's hand also. Finally, a drawer in the master dining room was unmistakably marked with a palm print that also belonged to Foulball. The police proudly announced to the newspapers they had their man.

At this point, would you be willing to state, as fact, that Boasch and Foulball committed the crime? Would you be willing to state that Foulball committed the crime? Would you be willing to say that at least at some time Foulball was in that house?

Police later captured Boasch, who confessed the burglary. He also confessed under interrogation to the murder of Foulball, having killed him in an argument on the night before the robbery. He had cut off Foulball's hand and caused the prints to draw attention away from himself.

If my little example worked, you say what leaders do all the time. I would caution leaders, should they state something as a fact, to insure by research that the statement is not merely opinion. Opinions are valuable, but they should be qualified as opinion to avoid disagreement and poor rapport.

The fourth and final obstacle to communication discussed here is the "failure to recognize that words mean different things."

The average leader uses about 2500 words in the English language. These 2500 words have more than 14,000 different meanings, according to Webster. As if that wasn't bad enough, the number of meanings is increased significantly by the abbreviations and jargon unique to the Army. Add further the abbreviations and slang you use around your office, and the problem is magnified – especially when there's a new person around.

Largely, the problem of selecting words that will convey the meaning a leader wishes is one of "audience analysis." The leader must give careful consideration to the word choices he makes. If a noted geologist, speaking to an eminent group of his peers described moon rock as being craggy, warm and not too heavy, as rocks go, his audience would conclude that he was strange in addition to being unworthy of his notoriety. The description would have served admirably for a first grade class.

Any parent realizes that children interpret words differently than do adults. We need only listen to the preschooler who recites, "Our Father, who are in heaven, Harold be thy name." Or the kid in New York who says, "Lead us not into Penn Station."

The point from all this is that many times words aren't meaning the same to subordinates as they are to leaders. The solution to this problem, like most problems, comes about easily and naturally, once the leader recognizes it, and makes the effort to correct his word choice to something consistent with "audience analysis."

As I see it, we have four big problems to interpersonal communication today. You see, it's a lot harder to say what you mean, than to mean what you say.

ALC–1

CONCEPTS OF ADULT LEARNING

OBJECTIVE:

List at least three errors and three corresponding corrective actions for each of the four cases. The errors and corrective actions listed should be a consensus of the group and compatible with adult learning theory.

CRITERION-REFERENCED TEST:

List at least three errors the instructor made and three recommendations for instructor improvement for each of the four case studies. Be able to justify the errors and recommendations for improvement according to the adult learning concepts.

CONCEPTS OF ADULT LEARNING

As instructors, you must have a basic understanding of how people learn. As instructors of adults, it is important to understand how the adult student is different from a young student. You will then be able to apply these concepts to your teaching.

What do you think the word "learning" means? It is a common, everyday term in education, but one that is difficult to define. We "learn" to drive. We "learn" to read and write. We "learn" right from wrong. We also "learn" habits. How can "learning" apply to all of these?

The experts themselves are not in complete agreement about a definition of learning. For our purposes, we will define learning as a change in behavior that can be seen and measured. As instructors, we want our students to be able to do something after our instruction that they could not do before. Also, we want to have measurable standards to determine if what we are teaching has indeed been learned.

There have been many attempts to classify all of the different types of things that we learn. Again, the experts do not all agree on a single way to do this. One of the common classifications is to divide learning into three parts, called "domains." These are:

- The cognitive domain
- The psychomotor domain
- The affective domain

Actually, all three domains come into play in any learning situation. For example, in teaching the task "Type a Letter," the student learns how to type (skill), and what goes into the letter (knowledge). At the same time, the student is forming attitudes about if he likes or dislikes this task. The attitudes he forms will in turn affect how well he learns the task initially and how well he performs the task later on the job.

The three domains are described in more detail below.

COGNITIVE DOMAIN

The cognitive domain is divided into six categories. The higher the category number, the higher the level of difficulty.

Category 1. Knowledge

This category deals with remembering information. When we require students to recall facts, definitions and terms, we are teaching at the lowest level of this domain. Also included here are remembering rules (e.g. grammar rules), procedures (e.g. the steps of administering CPR), and concepts (e.g. remembering what 4 C's of leadership mean).

Category 2. Comprehension

The next level of the cognitive domain deals with being able to understand and interpret information. For example, if a student could explain in his own words what "courage" means, that is a higher level of learning than remembering that courage and commitment are included in the four "C's" of Leadership. Being able to interpret a graph or a political cartoon are examples of comprehension. Asking students to explain why something is so, to compare and contrast ideas, to give examples, or to define a term in his own words are checks of comprehension.

Category 3. Application

At this level of learning the student knows when and how to solve a problem. Actually performing CPR is more difficult than telling what happens at each step of the process. Correctly completing a form is a higher level of knowledge than telling what goes on each line. Application requires a person to correctly put ideas into practice. Telling how to do a task correctly is not as high a level of learning as actually performing the task correctly.

Category 4. Analysis

At this level, a student can break down a situation or event into all its different parts. He can then describe how the different parts affect each other. For example, an automobile mechanic can figure out what the problem is with your car. He understands all the different things that make cars run and how they relate to each other. A skilled recruiter can analyze why a new recruiter is not making mission. A doctor analyzes illness by understanding the different systems and parts of the body and how they affect each other. You were required to use analytical skills when you wrote a task analysis.

Category 5. Synthesis

Where analysis requires the ability to break something down into its different parts, synthesis requires the ability to put something together. When you perform your Learning Analysis, you "synthesize" several task steps into major categories. An architect who designs a unique building is synthesizing what he has learned. He is putting together the elements of what goes into a building in a new and different way. Putting together a plan involves synthesis. Preparing an effective lesson plan, a sales promotion plan, or an employee incentive plan all require synthesis. A musician who comes up with a new version of an old song is synthesizing. Synthesis is a more difficult mental skill than analysis.

Category 6. Evaluation

Evaluation is the most difficult skill within the cognitive domain. A person would have to master all of the other levels within a content area in order to effectively evaluate it. Evaluation applies to both products and processes. A skilled evaluator can set standards for judging, quality and quantity. Sometimes evaluation involves applying standards that have already been set. A skilled evaluator is familiar with the highest possible standards in the field. For example, knowing how to establish a mission for a recruiter is an evaluation skill because it means knowing what is possible. Establishing a mission is really setting a standard for evaluation. Setting performance standards in a job and then judging how well they have been met is an evaluation skill. Reviewing proposals, plans, or policies before they are put into effect is another example of an evaluative skill.

LEARNING CONCEPTS RELATED TO THE COGNITIVE DOMAIN

As instructors, we present a lot of information to our students. You have probably attended a lecture in which as many as 20 different points were made. As you know, it can be difficult to absorb and retain a large amount of information in a short period of time. Yet there is little point in acquiring information if it is soon to be forgotten. Research has shown that students who are presented with a large number of teaching points will only remember about 6 after two days have passed. But, if the same teaching points are reviewed, the number students remember can be doubled. Instructors can help students remember material by applying the following learning:

LEARNING CONCEPTS to help students remember:

- Emphasize key points.

  Keep your lessons restricted to what the student must know. Do not spend a great deal of time on trivial points. Do not go off on tangents. Point out to the students what is critical for them to remember. Use training aids to help the students identify important points.

- Use examples that mean something to your students.

  Examples must be relevant to your target audience. It is important to key material to what the students already know.

- Review frequently.

  Reviews do not need to be lengthy in order to be effective. A general rule of thumb is to review and summarize after about each twenty minutes of instruction. Your final summary should be a review of the key points contained in the lesson. Reviews should also take place throughout the course itself.

- Organize your material so that it is easy to follow.

  Some instructors develop handouts that students can use as outlines for note-taking. Another technique is to use diagrams or charts to help students remember.

The order in which we present facts and ideas to students affects how well they will learn.

Part of a teacher's work in planning a lesson is deciding which points to cover first, second, third and so on. The way we sequence instruction can make learning easier or harder for our students. Of course, we don't want to confuse our students and make something more difficult than it has to be. There are basic guidelines that relate to sequencing instruction. The type of subject you are teaching will determine which guideline to follow. These guidelines are described below.

1. Simple-to-Complex Sequence. This involves teaching the easier aspects of a subject before teaching the more difficult aspects. This guideline should be used when the subject you're teaching "snowballs." For example, in learning arithmetic, we teach students how to add before we teach them how to multiply. They cannot multiply if they don't know how to add. In teaching someone how to type, we would teach where the letters are located on the keyboard before we teach which fingers should be used to strike the different letters. The simple-to-complex sequence is used when one subject or skill becomes a stepping-stone to learning another.

2. General-to-Specific Sequence. This guideline is used when we want to give a big picture before teaching all the details. For example, if you were teaching someone how to complete a form that was divided into 4 main sections, it would be helpful to talk about the overall purpose of each section before discussing the individual items that go into each section. If you have a subject that can be divided into categories or classifications that are important to understand, then you should follow the general-to-specific sequence. Subjects that emphasize concepts, such as leadership or Air-Land Battle Doctrine, lend themselves to a general-to-specific sequence. Course overviews are another example of using a general-to-specific sequence.

3. Concrete-to-Abstract Sequence. This guideline is used when (1) students have no background in a subject and (2) are likely to have a hard time picturing in their minds what you are talking about. For example, it would be hard to explain the rules of soccer to someone who has never seen a soccer game in his life. Sometimes, actual physical observation is necessary before ideas will make sense. We would not want to start talking about how to use a new piece of equipment to a class who has never seen it in action. Demonstrations and role-plays are often used in a concrete-to-abstract sequence. For example, the idea of "determining an applicant's motive for wanting to join the Army" is more likely to "hit home" if a student can see this done in a role-play.

4. Chronological Sequence. This guideline is easy to use; it simply means putting events in order of what happened first, second, third and so on. This guideline is used when we want to show how one event caused or affected another event. Teaching history is the most common use of the chronological sequence. However, it can also be used to teach a variety of management courses where decisions are made based upon past experiences. For example, in teaching time management we might list events of a typical workday to show how one (such as attending a meeting in the morning) affected another (not meeting a suspense in the afternoon). Some resourcing and budget-related tasks are taught using the chronological sequence. A budget we are working under today might be the result of a projection we made three years ago. So it becomes important to emphasize the relationship of past events to present events, and present events to future events.

It is important to note that you can use different sequencing guidelines within the same lesson plan. In the example of "determine applicant's motive for wanting to join the Army," we would probably follow the role play (concrete-to-abstract) with a discussion of the basic concepts involved (general-to-specific).

PSYCHOMOTOR DOMAIN

This domain is not as detailed as the knowledge and affective domains. However, its four levels provide guidance for teaching physical or "hands on" skills.

1. OBSERVATION. The lowest level of teaching someone to do something is to have them watch you do it. You would point out each step of the process. For example, you might show the student how to don a protective mask.

2. IMITATION. At the next level, you would have the student try to perform the task. You would "walk him through" donning the mask. You would make sure all of the steps were being done correctly and in the right order.

3. PRACTICE. The student would then be told to practice until he can do this smoothly and without having to stop to think about each step.

4. ADAPTION. At the highest level of learning in the skill domain, the student will use the skill correctly in the real world environment.

LEARNING CONCEPTS RELATED TO THE PSYCHOMOTOR DOMAIN

Skill is an organized physical and mental activity. A skilled person can perform a task smoothly and with coordination. There is almost a rhythm to his/her actions. They perform with speed and accuracy. They also can react quickly to a situation. We have all observed a skilled athlete or a skilled typist.

A person who is unskilled at a particular task is not smooth and coordinated with the task. Also, the performance is inconsistent. Perhaps sometimes the task will be performed successfully, but this cannot be counted on. An unskilled person does not have the speed and accuracy that a skilled person has. He also does not have the quick reaction time. You might picture a person beginning the learn to drive as an example of someone unskilled at a task.

Developing skills takes a great deal of time and effort. To effectively teach a skill, you must break down the instruction into three phases.

1. The knowledge phase. The first (and shortest) step in teaching a skill is to provide the information the student needs to know.

LEARNING CONCEPTS related to the Knowledge Phase:

- Tell what to expect. You should provide a "talk through" of the basic steps involved. Any tips you can think of to make the task easier should also be given. (For example, you might tell the beginning driver to always watch what is happening a block ahead or where he is in the traffic.) Any common mistakes that beginners make should be pointed out.

- Give Safety Precautions. You should also give the reasons for the safety precautions.

- Describe the Standards. The students need to know exactly what is expected of them and how they will be evaluated. A clear standard will also help them gauge their own performance as they progress and improve their skill.

2. Demonstration and Practice Phase. Once the students have the necessary background information, they need to see a competent person perform the task. In this way they have a basis for imitating the skill. They then need to practice and get feedback about how well they are doing. They could practice performing the skill incorrectly. This phase may last from a few hours to several months, depending on the complexity of the skill involved.

LEARNING CONCEPTS related to Demonstration and Practice

- To be effective, practice needs to be spaced out. In other words, it is more effective to practice a skill for one hour a day over a five-day period than it is to practice one day for five hours. The reason for this is that students tend to get tired and less alert when you “lump’ too much practice at once. If you are teaching a very easy task, it is not as critical to space out the practice sessions.

- Give specific feedback. It is not very helpful to the student if he is simply told he is not doing something correctly. You need to analyze the error and point out what he needs to do differently to correct the error. For example, a student learning to be a recruiter might be told what he could have said to overcome an objection and not simply that he did a poor job of overcoming an objection of the prospect.

The other side of feedback is telling the student when he does something well. A simple “that is right!” or “good” will keep the student informed as to how he is doing and motivate him to keep on trying. If you are teaching a skill that is difficult to learn, it is a good idea to praise a student’s “little successes.” It is important to praise progress even if the skill has not been completely mastered.

- Give immediate feedback. Feedback is most effective when given immediately. Otherwise, the student might not clearly remember exactly what he did at the time. Do not give feedback while the task is being performed. You can break a person’s concentration.

3. The automatic phase. Once a student has correctly mastered the steps of the task, he needs time to increase speed and accuracy. Sometimes this may be accomplished through independent practice. An example would be practicing one’s typing. However, if the student still needs feedback, supervised practice will be necessary. An example would be a pilot not yet ready for his first solo flight.

LEARNING CONCEPTS related to the Automatic Phase:

Include enough time for independent practice when planning a lesson or course.

AFFECTIVE DOMAIN

The affective domain deals with how students form attitudes and values. In an ideal situation, the student will feel that the subject has personal meaning for him. He will then begin to value the subject. Positive values will influence his behavior. For example, if he values the subject, he will put forth effort in mastering it. He may even incorporate the values he forms about the subject into his way of life. For example, a student who is studying about leadership may strive to become a leader. A student studying about physical fitness will incorporate fitness into his lifestyle if he comes to value it. The levels of the affective domain are described below.

1. Receiving. At this level, the student has not yet formed a positive or negative attitude and is willing to at least pay attention to what is being presented.

2. Responding. At this level the student will cooperate with the instructor's plans. He might contribute to the class discussion or volunteer to answer questions. If any rules have been established he will comply with them. If this level intensifies, he will begin to enjoy the class.

3. Valuing. In this category the student begins to believe that the subject has some worth. If this category develops further, he will become committed to the value. He might try to convince others about the usefulness of an idea or point of view. Finally, the student's behavior will reflect the value.

4. Organization. As the student forms values at Level 3, he needs to organize them and rank them. Many situations in life require choosing one value over another. For example, an adult student might value education, but might also value spending time with his family. If he had to choose between attending his child's baseball game or studying for a test, his overall value system would determine this decision.

5. Characterization by a Value or Value Concept. The highest level of the affective domain affects values in two ways: First, the value system is firm. Decisions based upon the value system usually are not hard to make because the individual truly believes he is doing the right thing. Second, the person's decisions are consistent. We form a conscience at this level. We avoid doing certain things because we truly believe they are wrong. If we truly believe, for example, that stealing is wrong, then we would not steal even if we knew there was no way we could be caught. Furthermore, we would not decide to steal once in a while. We would consistently avoid stealing.

LEARNING CONCEPTS related to Attitude Domain:

Attitudes are basically likes and dislikes we feel toward an object, idea, person or situation. They are a specific preference for or against something. Attitudes influence behavior. A student who dislikes a class may put out minimal effort or choose not to participate in class discussions. As an instructor, you will be mainly concerned with the student's attitudes toward the subject you are teaching. However, it is the behavior of your students that will give you clues about their attitudes. For example, discipline problems in the classroom are often the result of a negative attitude. The negative attitude could be about the course, about the instructor, or even about the requirement of having to take the course. Some basic concepts for encouraging positive attitudes are listed below.

- Have a highly respected person open the course. This tends to set a positive tone.

- Avoid unpleasant circumstances within the course. Boredom, frustration and embarrassment, etc. often result in a negative attitude about the subject being taught.

- Recognize good work. Sincere compliments, praise and acknowledging someone's expertise go a long way in creating positive attitudes.

THE ADULT LEARNER

The module on Target Audience Description includes student attitudes as something to consider when designing instruction. Some basic ideas of adult education can help explain certain attitudes that adult students are likely to have. These typical attitudes suggest some basic concepts to use when dealing with adult students.

1. Need for independence. One of the key aspects of maturing is that we move away from dependence. We think for ourselves and make our own decisions. We assume many responsibilities and control what we will do and when we will do it. Therefore, it feels unnatural and uncomfortable to be put in a situation where someone else has control over us. In some classroom situations, adult students have been treated as if they were children. This of course does not foster very positive attitudes.

LEARNING CONCEPTS related to Need for Independence

- Allow students input into the course. This can be achieved through use of discussion methods, practice exercises that use small work groups to solve problems, and allowing the group to make some decisions.

- Treat adults as adults. Avoid "talking down" to students, embarrassing students or otherwise creating situations in which adults feel they are being treated as children.

2. An adult's Self-concept is based upon his experiences. Adults think of themselves in terms of what they have done. To a child, experience is something that happens to him. But, to an adult, experience is who he is. Therefore, to not recognize his experience or to de-emphasize its importance is the same as rejecting the adult as a person.

LEARNING CONCEPTS related to Adult's Self-concept

- Plan for a high level of student participation. Adults will learn more when they feel their experiences are being used. They need to connect the class with their own personal experiences.

- Emphasize the practical application of the subject. When possible, have students tell of their personal experiences or problems related to the subject.

3. Time Perspective. As children, we tend to think of education as helping to prepare us for the future. As adults, we want to learn something we can use immediately.

LEARNING CONCEPTS related to Time Perspective

Use a problem-solving design. In what current situations can I use this? Try to anticipate the real world conditions and problems the students will face upon completion of their training and address these specifically. Bring in former graduates to share "war stories" if possible. Use projects that approach the subject from the point of view of solving a problem. Point out several different situations in which the concepts you are teaching would apply.

4. Readiness to Learn. Is it important to me? Adults usually approach any learning situation with specific expectations in mind. A person who is starting a new job is eager to learn what will be expected of him, where he will be working, and whom he can go to for guidance. These are topics he is "ready" to learn.

LEARNING CONCEPTS related to Readiness to Learn

- Ask students what specific expectations they have and make sure you address their concerns.

- After you have taught the course several times, incorporate common expectations into the training. Plan to address issues and concerns typical of your target audience.

TLO

TERMINAL LEARNING OBJECTVE

OBJECTIVE:

Write a Terminal Learning Objective (TLO), for your Task 1 (your final 45-minute presentation using your approved task analysis report [TRP]).

The objective must contain:

* An action statement (what the student must do).
* Conditions under which the action will be performed.
* Standards (criteria) against which the action will be measured.

The objective must also be applicable to the learning and testing environment.

CRITERION-REFERENCE TEST:

Write a Terminal Learning Objective that matches the criteria listed above using your approved Task Analysis Report from module TAR.

EXTRACT

TRADOC Regulation 350-70

VI-6-6. Learning Objective (LO) Descriptive Details

Description a. A learning objective is a statement describing student performance required to demonstrate competency in the material being taught. This behavior must be performed under specific conditions to prescribed standard. Training objectives reflect task performance and supporting skills/knowledge to the highest possible level of fidelity. LO components may or may not be worded the same as task component statements (task title, condition, and standard). LOs are written in terms of student performance, NOT instructor performance. LOs focus training development on what needs to be trained and focus student learning on what needs to be learned. They are performance oriented and

- Are derived from task performance specifications.
- Have three parts: ACTION, CONDITION, and STANDARD.

Note: Fundamental to training development is the translation of the task selected for formal training into **LOs. DO NOT** minimize the importance of this step or the significance of the difference between tasks and objectives; LOs and tasks are NOT synonymous terms.

EXTRACT

TRADOC Regulation 350-70

Action	The action Statement – • Describes exactly what the student must be able to do after completing a specific part of the training. • Is performance oriented. ***Note:*** We should train as we fight. Training in the field and on equipment is the preferred training method. • Should be observable, measureable , and expresses behavior that is concrete and overt as possible. • Begin with an action verb. ***Note:*** (See Appendix D, Standard Verb List.)

RECOGNIZING A GOOD OBJECTIVE

In our systematic approach to developing instruction, we make some assumptions about what instruction is for and how we go about it. We assume, that in selecting the means by which to change the student, we can do a better job if we state precisely what we will accept as evidence of competence in the student.

Learning objectives describe what a student will be able to do when he or she has been trained in the desired way. The instructor and the student use learning objectives to eliminate confusion about what is expected. The instructor uses objectives to evaluate the student's performance and to evaluate the instruction.

Once defined, objectives become the basis for the design and implementation of the training. The objectives describe what we want the student to do at the end of training. Everything else focuses on how to best get him/her there. Tests simply measure whether or not the student has met the objectives. Instructional materials have one purpose: to enable the student to reach the learning objectives as measured by performance tests.

As you have seen, we have an objective for this part of your course. In essence, it says that you have to write a well-stated objective. Before you can write a well stated objective, you must first be able to recognize a well-stated objective. The first part of this module is about how to recognize well-stated objectives.

*** What are Terminal Learning Objectives (TLO's)?**

TLOs are statements of what the student is expected to be able to do after going through training on a particular task. A TLO is derived from a task selected for training and comes directly from the Task Analysis Report (TAR).

A well stated Terminal Learning Objective (TLO) has three characteristics.

1. Actions - What the student is expected to do to show proficiency.

2. Conditions - What the student will have to work with.

3. Standards - How well the student must perform.

Now, let's take a closer look at each of these characteristics.

TLO ACTION STATEMENT

1-1 Identifying Action Statements

Action Statement Guidelines

a. An action statement describes what the soldier will do in the training environment. The three action statement parts are

- Action verb - Describes the action being done.
- Object - Identifies what is being acted on.
- Qualifier - Limits the scope of the action or object.

NOTE: If the action specified in the task title can be performed in the training environment, the task title is the action statement for the TLO.

1-2 Check Action Verbs

Action Verb Guidelines

a. Since an action statement covers a single coherent operation or process --

- Identify the single major action with a single verb. (Ask yourself why the action is performed.)
- Write an action statement as if you are telling the soldier to perform the required action. (This is the second person singular verb form.)
- Use only verbs that are appropriate to the training situation. (Appendix D of TRADOC Regulation 350-70 and the USASSI supplement provides a representative list.)

Characteristics

b. The action verb is one way you can ensure the action statement displays task characteristics. The following table covers the characteristics --

An action statement verb is --	**It --**	**Example**
a very specific action.	• identifies the action being performed. • tells clearly what the soldier is to do. • consists of only <u>one</u> verb.	"*Apply Fluoride Gel Using the Tray Method.*"
directly observable or produces an observable product.	has an action or product that you can see.	"*Adjust Indirect Fire.*"
measurable.	has an action or product that you can measure.	"*Prepare Nuclear Vulnerability Analysis of Friendly Troop Dispositions.*"
performed for its own sake.	• covers a complete process. • is not just a step.	"*Camouflage Your Defensive Position.*"

Characteristics c. The <u>object</u> of the action verb identifies what is being acted upon. The following table presents:

An action statement object is	**It --**	**Example**
directly observable.	can be seen.	*"Prepare the Intelligence Estimate."*
measurable.	can be measured or the action can be measured.	*"Develop a Survival Plan."*
produced or performed in a relatively short time.	often limits the scope of the action.	*"Prepare a Letter of Condolence."*

ACTION:

Obviously, we cannot tell whether a student has met the standards of an objective unless he/she does something that we can observe (see or hear) and measure. In other words, the student must do something as a result of his/her training in order for us to know whether our instruction has been effective.

Because we are trying at this point to specify observable behavior, we choose an action verb that communicates accurately what the response requires. Therefore we must abandon such meaningless statements as:

> "The student will <u>know</u> Ohm's Law."
> "The student will <u>understand</u> decimals."
> "The student will <u>become familiar with</u> the finance office."

Having abandoned such terminology, we must choose action verbs that specify what the student must do as observable, measurable activity.

INSTEAD OF THIS:	**WE MUST WRITE LIKE THIS**
Know Ohm's Law	Solve problems to determine voltage.
Understand decimals	Multiply decimal numbers.
Become familiar with the operations of a finance office.	Describe the operations of a finance office.

Unfortunately, individuals interpret words differently. The best statement is one that leaves as little as possible open to misinterpretation.

Consider the following examples of words in this light.

WORDS OPEN TO MANY INTERPRETATIONS	WORDS OPEN TO FEWER INTERPRETATIONS
To know	To write
To understand	To recite
To really understand	To differentiate
To appreciate	To state
To grasp the significance of	To construct
To enjoy	To align
To believe	To assemble
To have faith in	To measure
To be familiar with	To describe

Turn to the handout packet and locate the section containing the practice exercises for this module. Complete practice exercises 1, 2, and 3 on your own time.

QUALIFY BEHAVIOR.

In order to write an accurate specification of observable behavior, sometimes it is necessary to qualify the stated behavior to answer such questions as:

> "What kind of performance?" "What method?"
> "What is included in the total performance?"

For example, the unqualified behavior "develop a film" might lead to such questions as:

> By what method (manual or automatic) must the student develop the film? Exactly what is included in this behavior? Must the student unload and reload the cassette as part of the task? Must the student identify the film?

It would then be necessary to qualify the statement of behavior as stated in the following example:

> Develop a film by the manual method, to include unloading and reloading of cassettes and identifying the film.

The same qualification is sometimes necessary when the observable behavior requires the student to demonstrate mastery of a knowledge.

> Example: Define architectural terms.

This statement specifies observable behavior to a certain extent, but it should be written so that there is no doubt as to which terms are involved. It could be improved by writing it as:

Define the following architectural terms:

vault

flying buttress

bay

underpitch

1-3 Check Objects

Object Guidelines

a. The action statement object --

- Identifies --
  - •• What the action is performed on.
  - •• What is produced as a result of the action.
- Is either --
  - •• A single noun.
  - •• A noun phrase made up of a noun and its adjective(s).
- Is always identified by its official military name.
- Does **NOT** include jargon or acronyms.

Characteristics

b. The object of the action verb identifies what is being acted upon. The following table presents:

An action statement object is --	**It --**	**Example**
directly observable.	can be seen.	"*Prepare the Intelligence Estimate.*"
measurable.	can be measured or the action can be measured.	*"Develop a Survival Plan."*
produced or performed in a relatively short time.	often limits the scope of the action.	"*Prepare a Letter of Condolence.*"

1-4 Check Qualifiers

Qualifier Guidelines

a.   A qualifier can improve an action statement. It --

- Can limit scope of the action and distinguish it from similar or related actions.

- Is not always necessary. If the action verb or object is specific enough, either can successfully limit the scope of the action without using a qualifier.
- Does **NOT** include jargon or acronyms.

Characteristics b. The following table shows how qualifiers restrict the scope of the action statement --

An action statement qualifier limits the --	**It --**	**Example**
action or product using a prepositional phrase.	• modifies either the action verb or the object of the action statement. • uses the prepositions: "to," "on," "with," and "of."	"*Perform Return Receipt Inspection of the M454 Atomic Projectile.*"
action using a verb phrase, generally to specify the methodology to use.	Add "ing" to a verb, such as "use" to form "using," and give it an object, such as "project management software," you have a verb phrase.	"*Prepare a Work Breakdown Schedule Using Project Management Software.*"

ACTIONS TO DESCRIBE MENTAL SKILLS

The action described in the objective must allow the test writer to prepare proper items to measure it. Clearly, objectives that call for one type of behavior and tests that require another type of behavior are not acceptable. One of the purposes in writing a TLO is to let the student know exactly what you expect of him/her. If the test asks the student to do something else, then we haven't played fair. We have also defeated our purpose. A few extra minutes spent in writing good "testable" objectives at this point will make life easier when you start writing the lesson plan.

DEVELOPING TLOs WHEN TRAINING MENTAL SKILLS.

Criterion-referenced instruction differs from traditional instruction in that you test and score the student against the standard of the objective. The TLO must indicate the desired student competency as a result of the training on a task.

For hands-on performance tasks, writing the objective is fairly easy. Give the student the equipment and references to perform the task to a published standard that is derived from actual on-the-job requirements. A problem often arises when we are training mental skills (knowledge, attitudes, and comprehension).

The test usually consists of questions to determine whether or not the student can recall facts, put theory into practice, apply procedures, or make decisions when he/she is on the job. The student answers questions to indicate his or her knowledge. Rarely, however, is the program designed to train a student to "answer questions." Therefore, "answer questions" will not be the behavior stated in the objective. The behavior must be what the student is expected to do or recall as a result of training. Often, if we, as the instructor/developer, ask the question “Why are we training this?” we will find that the answer to the question is usually the performance that should be stated in the objective. The next question should be “What can I have the student do to indicate he/she is trained?”

MAIN INTENT vs. INDICATOR BEHAVIOR.

The performance, stated in an objective can describe either the main intent of the objective or it can describe an indicator behavior. The main intent is the performance that tells you what the objective is mainly about. It is the reason you write the objective. It is the skill the learner is to develop.

EXAMPLE - MAIN INTENT.

The student will perform a lobotomy on the dog using all necessary supplies and equipment and a dog of any breed, in accordance with the procedures outlined in The Modern Surgeon.

The performance mentioned in the above objective is “performing a lobotomy.” What is the main intent of this objective? What is it mainly about? It is, of course, about being able to perform a lobotomy. There is no reason to suspect otherwise. This is the skill you expect the learner to develop.

EXAMPLE - INDICATOR BEHAVIOR.

Given illustrations of domestic and enemy ships, the student will circle the enemy ships without error.

The performance mentioned in the objective is “circling,” but is this the skill that we expect the learner to develop? Is this the main intent of the objective? Certainly not. This is what it says, but can you imagine evaluating the student on his/her circle drawing ability? The objective does not say so, but the main intent here is: Discriminate (recognize, tell the difference between) domestic ships and enemy ships. We would never say something like, “Yes, student, you can tell the difference between domestic and enemy ships, but you did a sloppy job of circling, so you get a NO GO.” The circling is merely an indicator of the main intent.

BEHAVIOR:

As you may have noticed, indicator behaviors are always observable (capable of being seen or heard).

EXAMPLES:

circle	label
mark	arrange
place	list
color	point
check	state
underline	tell

The main intent performances, however, may or may not be directly observable. Often they are internal, mental skills.

EXAMPLES

OBSERVABLE	NOT DIRECTLY OBSERVABLE
draw	recognize
operate	recall
skate	differentiate
sing	discriminate
copy	distinguish
construct	classify
type	conclude

*There is nothing wrong with having an objective that states only the indicator behavior and not the main intent, as long as the main intent is clear.

*There is nothing wrong with having an objective that states the main intent, as long as the main intent is observable.

*If the objective states only the main intent and that intent is not observable (mental, internal, cognitive), add a suitable indicator behavior before test items are matched.

Turn to the handout packet and locate the section containing the practice exercise for this module. Complete practice exercise 4 on your own time.

1-5 Summary

An action statement specifies what the soldier is going to do in the training environment. An action statement has three parts:

- An action verb describes the action being done. It --
  - Is always in the second person, singular verb form.
  - Is a single verb identifying the single major action.
  - Uses only appropriate verbs that are suitable for the training situation.
- The object identifies what is being acted on. It --
  - Is either a single noun or a noun phrase made up of a noun and its adjective(s).
  - Is identified by its official military name.
  - Does **NOT** include jargon or acronyms.
- The qualifier limits the scope of the action or the object. It --
  - Is not always necessary.
  - Restricts the action or product using a prepositional phrase or action using a verb or adverb phrase.
  - Distinguishes the action from similar or related actions.

EXTRACT

TRADOC Regulation 350-70

Condition	The condition statement – • Reflects training conditions and identifies anything that has pertinent influence upon performance of the objective, including environment, equipment, manuals, assistance, or supervision required. • Is written **to training conditions, not actual wartime conditions.** • Should relate to the action only. • Should approximate projected operational environments to the closest extend possible. ***Note:*** The condition statement can be written in paragraph or bullet format.

TLO CONDITIONS

2-1 A TLO Conditions Statement

Conditions Statement Guidelines

a. A TLO conditions statement --

- Describes the training (wartime job performance) conditions under which the task is performed.
- Expands on the information in the action statement by providing the information about the required action --
  - When.
  - Why.
  - Where.
  - What resources are needed.

Parts of a Conditions Statement

b. A conditions statement has two parts --

- Cue - A signal that alerts the soldier when to start the required action.
- Descriptive data — Information identifying —
  - Purpose (why).
  - Location (where).
  - What resources are required to perform the required action.

Functions of a Conditions Statement

c. The conditions statement performs the following three functions --

- Sets the stage for performing the required action.
- Controls the boundaries for performance.
- Includes all pertinent influences on performance.

2-2 Check that the TLO Conditions Statement Sets the Stage for Performing the Required Action

---

Set the Stage

a. A conditions statement fulfills the same function for the action statement that stage directions do for a play --

- Stage directions tell a performer --
  - When to come on stage.
  - What the setting is.
  - What props to use.
- A conditions statement does the same for the soldier by specifying the --
  - Cue.
  - Physical Setting.
  - Resources.

Cue Guidelines

b. A cue is a signal to the soldier to begin to perform the required action. If the cue is not evident from the analysis data on hand --

Review --	Identify cues from --
organizational diagrams	actions performed by outside units.
mission analysis	collective tasks.
threat information and other available data	the data.

Physical Setting Guidelines

c. The physical setting is the training environment of performance. The amount of detail provided varies based on the effect that the setting has on performance.

- Identify the training performance setting.
- Remember not all critical tasks are performed on the battlefield or during wartime.

- Specify how an NBC environment effects task performance. The hazardous environment and the mission oriented protective posture (MOPP) gear can affect
  - How the task is performed.
  - How fast the task is performed.
  - If the task can be performed.

- Do not --
  - Simply use a phrase like "in a training/classroom environment."
  - Describe every possible situation in which the action can be performed.
  - Make the setting too generic.
  - Make the setting too specific.
- Take into consideration factors that affect the amount of information needed about the setting --
  - Mobility of the soldier --
  - Multiple performance sites --

If task is performed in --	**Describe --**	
	what	**how**
a number of locations	general area	little detail
	immediate area	more detail
several locations	both locations	with same amount of detail

Resources Guidelines

d. Resources have a major impact on how the soldier performs the required action. Identify --

Resource	Description		*Example*
Personnel	**In tasks --**	**Identify --**	*You capture an enemy*
	that are supervisory	personnel supervised.	*prisoner of war with an*
	requiring supervision	supervisor.	*identification card,*
	requiring assistance	assistant.	*enemy map, helmet and*
	involving others	the personnel.	*gas mask. You have a capture tag, a captured enemy equipment tag, a pencil, and a blank sport report in SALUTE format.*
Tools and Equipment	• Use complete official nomenclature. • Include training aids and items actually used. • Do not indicate quantities. • Refer to tools using the following logic:		*You have FM 3-5, a contaminated unit, M11 or M13 decontamination apparatus, and decomtaminates. You*
	If tools and equipment are --	**List --**	*are in MOPP4 and chemical*
	normally part of the toolkit	the toolkit.	*decontamination support is available.*
	not normally part of the toolkit	them separately.	
Materials and Supplies	Include such things as shop rags, pencils, paper, lubricating oils, etc.		*You have: power plant, safe clearance tags, DA Form 2404, pencil, wiping cloth.*

Resource	Description	Example
Job Aids	• Include: technical & field manuals, checklists, worksheets, troubleshooting diagrams, etc. • Minimize the need for recall. • Can significantly improve speed and accuracy.	*You have received a DA Form 2404 requesting repair of a portable x-ray*

Resource	Description	Example
	• Are not listed in conditions statement unless actually used during task performance.	*unit. Given DA Form 2409, TB Med 7, TB 38-750-2, manufacturer's service literature ...*

2-3 Check that the TLO Conditions Statement Controls the Action Statement Boundaries

Control Boundaries

a. Limit the scope of the action only to the extent necessary to accurately reflect the requirements of the required action. You can --

Control the action boundary by --	Example --
specifying amount of time available to perform the action.	*...You will initiate an OPSEC prior to implementation of offensive operations...*
stating the position (level of responsibility) of the performer.	*You are a platoon sergeant ...*
specifying the performer's level of supervision.	*The supply sergeant tells you ...*
providing a very specific description of the training site.	*... in an environmentally controlled laboratory or a calibration van.*

Exceptions

b. There are two exceptions to only describing the normal training/task site. If --

- There is a major safety hazard involved when performing the action in a specific location.
- The criticality of the required action for mission accomplishment justifies performing the action in an unusual location.

2-4 Check that the Task Conditions Statement Identifies Pertinent Influences

Pertinent Influences

a. The important word is "pertinent." It means to have a clear decisive relevance to the matter in hand. Anything that significantly constrains or facilitates performance is a pertinent influence. Possible pertinent influences include --

- The physical training environment.
- The amount of supervision and assistance available.
- The environmental conditions.

When finalizing conditions statements --

- Keep a clear view of the action and the factors that can affect performance.
- Do not include information that is not pertinent (i.e., nice-to-know) in the conditions statement.

2-4 Check that the Task Conditions Statement Identifies Pertinent Influences (Continued)

Pertinent Influence Guidelines

b. When identifying pertinent influences keep the following guidelines in mind --

<table>
<tr><th>Characteristics</th><th colspan="2">Description</th><th>Example</th></tr>
<tr><td>Physical Training/Work Site</td><td colspan="2">• Has probably the greatest influence.
• Factors include --
  • A crowded, cramped, noisy, or hazardous work area.
  • Enemy presence.
  • A nuclear, biological, or chemical environment.</td><td>Capture by the enemy is imminent. Escape and evasion with all critical equipment is impossible due to vehicle damage ...</td></tr>
<tr><td>Supervision and Assistance</td><td colspan="2">• Address supervision only when supervision is required to coordinate timeliness of task performance, or is required to prevent incorrect task performance because it could cause serious injury or loss of life.
• Identify situations where the performer has assistance in performing the task.</td><td>Given one M5 timer set to a specified time, M96 firing device, ... and squad leader present.</td></tr>
<tr><td rowspan="4">Environmental Conditions</td><td>If it affects --</td><td>Identify --</td><td>Example</td></tr>
<tr><td>how the task is performed</td><td>the condition and its effect.</td><td>In extreme cold, use different solvents on weapons.</td></tr>
<tr><td>the task standards</td><td>the condition.</td><td>Some tasks take longer in MOPP gear.</td></tr>
<tr><td>whether or not the task can be performed</td><td>situations in which it cannot be performed.</td><td>Electronic equipment cannot be repaired during electrical storms.</td></tr>
</table>

2-5 Additional examples of condition statements

Conditions describe exactly what the student will be given to work with. Conditions are those things a student must have in order to perform the action. An instructional module or a block of instruction is a training method and is not a condition. If the student can perform without the instruction, he or she is no less competent. Therefore, never list the training method as the condition in the objective. Remember we are interested in describing the end result of instruction not what the student has to do to get there.

Sometimes when the test for the objective consists of only questions, the developer wants to train to total recall. “Without reference” or “from memory” are used as the condition when the student does not need anything in order to perform. If he is given schematics, job aids, lists, illustrations, or situations that are used in order to perform, these will be the conditions. Table 1 lists types of conditions you should consider and gives underlined examples of each.

The table on the following page contains some additional examples that illustrate the condition portion of a TLO.

CONDITIONS	
TYPE	EXAMPLE
Equipment	The student will construct a birdhouse using a hammer, an electrical drill with a 1 1/2' bit, a jigsaw, a square and all necessary supplies and references.
Supplies	The student will bake a cake using flour, eggs, sugar, baking soda, milk, salt, butter, and cocoa and all necessary equipment.
Environment	The student will field strip an M16A1 rifle under conditions of total darkness.
References	The student will compute the hypotenuse of the triangle using a square root table and a triangle.
Limitations	The student will recite the Ten Commandments from memory.
Situations, problems, contingencies	The student will, solve the equation. using a linear algebraic equation with one unknown.
Signals, Symbols, Formulas	The student will compute the area of the square using the formula for the area of a square.

EQUIPMENT:

Many times objectives will have more than one type of condition.

EXAMPLE:

> The student will construct a bird house using a hammer, an electrical drill with a 1 1/2' bit, a jigsaw, a square,(EQUIPMENT), a 4' X 4' sheet of 1/4' plywood, No. 4 finishing nails, a tube of glue, 1 quart of white paint, a tube of water preservative (SUPPLIES), and a set of plans (REFERENCE).

ENVIRONMENT:

When you write your conditions, you must consider them in respect to the learning environment. Do not impose conditions on your students that you cannot simulate in the school, office, field, or wherever you will be teaching the objective.

EXAMPLE:

> Stop the bleeding on a person who is bleeding profusely from a stab wound in the chest, using all necessary supplies and equipment in accordance with the procedures in AR 356-10.

You will probably have to accept a simulation here. Bleeding people are very expensive and hard to find every time you conduct a class.

EXAMPLE:

> The student will perform the procedures to stop bleeding on a mannequin with a simulated chest wound and all necessary supplies and equipment, in accordance with AR 356-10.

EXAMPLE:

> The student will defuse a live bomb within 5 minutes.

This implies that you will give the student a live bomb to defuse. Even if you had enough live bombs to give out to all of the students, we doubt that you have the money to pay the insurance premiums to cover yourself and the students in the likelihood that they do not satisfactorily complete the objective. You can, however, give the students a replica of a live bomb and have them go through the same procedure they would use if they were actually defusing a live one.

EXAMPLE:

> The student will defuse a simulated live bomb within 5 minutes.

<u>EQUIPMENT</u>:

One important condition that applies to performance objectives is the equipment the student must use. Here are some rules which govern the description of equipment as conditions.

* If the student is being trained in a particular block of instruction to work with one type of equipment (electric typewriter) then the condition of the objective must accurately describe the type of equipment he/she will use for that objective.

EXAMPLE: 'Using a typewriter....' is not specific when both manual and electric typewriters are taught and used in the course. The TLO must specify which kind, manual or electric.

* If the student will use simulated equipment instead of actual equipment the condition must so state.

OTHER CONDITIONS:

There are some tasks which the student might not be required to perform from memory. In fact, for some tasks, it is desirable that he/she does not perform from memory. Consider this example: One of the duties of a medical service specialist is to check immunization records and give the required immunization. Immunizations are prescribed by regulation according to various personnel categories and geographical areas. The best approach for this training would be to train the student to do this by following the regulation as a guide. The objective, therefore, would include the following conditions:

* Using AMR 161-13

If the student is not provided any references and must recall specific knowledge, then “from memory” or “without references” is a condition in that it implies the student will not have any “givens.”

> NOTE: If the action is one that would normally require a pencil and paper (such as “add fractions” or “write a paragraph”), then pencil and paper are not needed as conditions.

2-6 Summary

Review The TLO conditions statement --

- Describes the training (wartime job performance) conditions under which the required action is performed.
- Expands on the information in the action statement by identifying --
  - When.
  - Where.
  - Why.
  - What resources the soldier has or needs to perform the action.
- Sets the stage for performance by specifying --
  - Cue -- The stimulus that causes the soldier to begin to perform the action.
  - Physical setting -- The site or situation in which the action is performed.
  - Resources -- The personnel, equipment, materials and supplies, and job aids required.
- Controls the boundaries for performance by --
  - Specifying the amount of time available.
  - Stating the performer's level of responsibility or supervision.
  - Specifying the performance site.
- Identifies pertinent influences that affect performance including --
  - Physical work/training environment.
  - Amount of supervision or assistance available to perform the required action.
  - Environmental conditions.

EXTRACT

TRADOC Regulation 350-70

Standard(s)	The standard statement may have multiple criteria. These can be written in paragraph or bullet format. The statement must reflect standards that – • Are observable and provide criteria for measuring objective performance, which will be influenced by training conditions. • Describe the performance level students must achieve to satisfactory complete the **training.** ***Note:*** The learning objective standard and task standard may be different, but all training should **prepare** the soldier **to perform to task performance standard.** • Minimize subjectivity during student evaluation.

TLO STANDARDS

3-1 A TLO Standards Statement

Definition a. A TLO standards statement specifies the requirements for performance in the how well, completely, or accurately a product must be produced, a process must be performed, or both.

Types of Standards

b. There are three types of task standards --

Type	Describes requirements in terms of --	Example
Product	the product produced by the task.	*Develop a unit marksmanship program that results in attainment and sustainment of weapons proficiency, reflects the priorities of the unit's combat mission and Standards of Training Commission requirements, and is tailored to available resources.*
Process	the process followed to perform the task.	*Locate and mark all mines and tripwires within a 1-meter-wide path without causing detonation*.
Combination	both the product and process.	*Ensure selected site is appropriate for the mission, the protection of your unit, and the capabilities and limitations of the equipment used. Select the site by analyzing expected enemy AAs, METT-T factors, your unit's AOs and AIs.*

Standards Selections Guidelines

c. Deciding which type(s) of standard(s) is (are) appropriate for each TLO is a major decision. Here are the guidelines to follow --

When TLO performance produces --	Describe the standard(s) in terms of --
a product	that product.
a process	the process.
both product and process	both the product and the process.

Parts of a Standard

d. A standards statement is made up of two parts --

- A verb phrase -- Identifies what the standard will evaluate (i.e., the process the soldier performs, the product produced, or both).
- The performance criteria -- Identifies the parameters for successful performance.

3-2 Criteria by Which Performance is Evaluated

Standards Criteria

a. TLO standards statements --

- Indicate the criteria by which TLO performance is being evaluated.
- Use the jobholder's language.
- Begin with a very specific action verb.
- Cover the entire TLO (i.e., all applicable standards are identified).

Guidelines to Identify Criteria

b. The criteria for evaluating TLO performance are --

Type of Standard	Type of Criteria	Example
Product	Accuracy, tolerances, completeness, format, clarity, number of errors and quantity.	*Select site ensuring these site criteria are met: easily secured; near routes, but not crossroads or prominent terrain features; cover and concealment provided; sloping to the rear; space required to disperse the CP; and ability to communicate.*
Process	Sequence, completeness, accuracy, and speed of performance.	*Install the Claymore facing the center of mass of a kill zone. Perform circuit test and install firing wire and blasting cap.*

Combined product and process	Accuracy, tolerances, completeness, format, clarity, number of errors, quantity, sequence, and speed of performance.	*Prepare combat orders IAW the five-paragraph OPORD format through an analysis of the OPORD or OPLAN from a higher headquarters. The intent of the immediate commander and of the commander two levels up must be clear. Extract the mission of the unit and all specified and implied tasks from the commander's OPORD. Develop and analyze at least two courses of action. Order must be well thought out, detailed but concise, and understandable at all levels. Once the order is formalized, coordinate with higher, adjacent, and supporting units.*

Guidelines for Selecting Criteria

c. The following table defines and provides examples of the various types of criteria for evaluating TLO performance --

To Evaluate --	Identify --	Example
Accuracy	The ratio between the correct response, incorrect response and total response. Use 100% in life threatening situations only. Can be used with other standards.	*Identify 50 percent of enemy soldiers and vehicles within field of view using proper surveillance techniques.*
Tolerance	The acceptable amount of deviation, or margin of error. "Within" is often used. Can be used with other standards.	*Plot target information within plus or minus 100 meters.*
Completeness	How thoroughly the action is performed or what characteristics the product must display. This type usually includes some form of the word "include" or the word "must." Often used with other standards.	*Ensure the reconnaissance team performs all tasks assigned to it including the detection, identification, and marking of all contamination at the site.*

To Evaluate -	Identify --	Example
Format	The product produced (often a report) conforms with the approved form for that type of product. Often used with other standards.	*Transmit information to the receiving authority in size, activity, location, unit, time, and equipment (SALUTE) format via radio, wire, cable, or written message.*
Clarity	The required criteria are clearly stated. The developer must clearly state what	*Ensure: The map is classified properly. The color and military*

To Evaluate -	Identify --	Example
	constitutes clarity in the task. Often used with other standards.	*symbols comply with standard Army requirements. ... Correct date-time group is posted under the symbol (of actual sighting, not when message was received).*
Number of errors	The upper limit to the number of things wrong that the soldier can do. This is often expressed as, "with no more than X errors." Often used with other standards.	*Engage each of the three targets scoring three of four hits within six minutes. (The acceptable number of errors is one.)*
Quantity	The number of products produced per time period. Can be used with other standards.	*Type 40 words a minute.*
Sequence	The order in which actions must be performed. Use this measure only when the order of performance is critical to successful performance. Often used with other standards.	*Determine the target location within 250 meters. Make the initial call for fire within 3 mins. after the target identification. Send adjustments within 30 sec. after each round impacts. Enter the fire-for-effect phase using no more than six rounds in adjustments (initial plus five). Fire for effect must be within 50 meters of the target using successive or hasty bracketing procedures (or creeping fire if danger close).*
Speed of performance	How fast the required action must be performed. Often used with other standards.	*Operate the VINSON TSEC/KY-57 with appropriate set in secure and non-secure modes within 30 minutes.*

3-3 Standard Statement Format Requirements

Format Requirements a. Each standards statement must meet certain format requirements. They are –

Requirement	Description	Example
Objective	Does not allow distortion by personal feelings, prejudice, or interpretation.	*Declinate the M2 firing circle to an accuracy of 1 mil.*
Observable	● Can be easily seen, or ● Produces a product that can be examined visually.	*Draw a sector sketch as close to scale as possible that shows: a. The platoon sector. b. The squad positions (as applicable). c. Dragon*

		and machine gun positions with primary sectors of fire. ..... k. The unit designation and the date-time group.
Measurable	Evaluates performance in terms of the product produced, the process performed, or a combination of both.	*Take a ridge count in accordance with the finger print identification system (FIS) standards and identify the correct number of ridges that occur between the core and delta of each print within plus or minus two counts.*
Valid	● Covers the entire TLO. ● Measures criteria that is critical for task performance.	*Locate to within plus or minus 100 meters. Report all targets in your scan sector to the support element.*
Reliable	Identifies criteria all successful task performers will meet each time they perform the required action.	*Prepare the radar set for a radar mission within 8 minutes. Orient the radar set within plus or minus 50 mils.*
Discriminating	● Provides sufficient information to separate performers and non-performers. ● Identifies the criteria for successful performance of that unique action. ● Applies to the task performer only.	*Report the information to the receiving authority in SALUTE format via radio, wire, cable, or written message with a messenger within 5 minutes after observation with six out of six S-A-L-U-T-E items correctly identified.*

4-3 Standard Statement Format Requirements (Continued)

Requirement	Description	Example
Comprehensive	• Identifies -- •• Critical intermediate and final products in product standards. •• Critical steps for process standards. •• Both for combination standards. • Covers the entire TLO, consolidating the total result of the performance steps. •• If alternative criteria is presented, states whether or not all or some number of requirements must be met. •• Addresses effect of MOPP gear if appropriate. • Does **NOT** refer to a regulation or manual for the criteria. • Limits requirements to the scope of the conditions statement and the performance steps.	*Complete NBC 1 reports with all heading information and mandatory line items (B, D, H, and C or F). Include all other available data. Ensure each report is in correct format. Submit completed NBC 1 reports to next higher headquarters. There is no change in standards if this task is performed in mission oriented protective posture (MOPP).*
Usable	Reflects reasonable and realistic expectations for the soldier performing the action including -- • Requiring 100 percent accuracy only when necessary. • Addressing only actions the individual performer can control. • Clearly stating the actions required and the criteria for each required action. • Staying within the scope established by the action and conditions statement.	*Estimate the range to each target with no more than a 20-percent error (+ or -).*

4-4 Some addition guidelines for writing standard statements:

Standards are a very important part of every objective. They tell the student how well he/she must perform the action required by the objective. They tell the instructor how to tell the difference between a student who is competent in the objective and one who is not competent.

The standards should communicate to the student how he/she will be judged satisfactory or unsatisfactory. Sometimes "without error" is the only acceptable standard. The task is so critical that nothing short of total competency is acceptable. Sometimes "without error," *is* unrealistic. We would judge him/her competent even if the person makes minor errors. However, be careful of this, because quality as well as quantity must be considered. If the questions sample several knowledge areas, the student could fail all questions in one area, indicating a critical lack of knowledge, and still be rated satisfactory. Nor can the objective state "To get a GO you must answer questions 1,5,9, and 10 correctly." That is telling him/her which ones we consider unimportant. (By the way, if the other questions are unimportant, why include them?) The objective could say "With no more than one error on each phase, part, module, component, or function (whatever is applicable)." If all questions are of equal value, the objective could state "With no more than _______errors."

The standards you set should reflect the level of proficiency needed to convince you that the task has been learned to an acceptable degree.

1. Degree of Accuracy. When the student's performance can be graded numerically, a degree of accuracy may be determined. Here are some examples.

a. The student will label the bones of the skeletal system, on an unlabeled diagram. Label at least 185 of the 206 bones correctly.

b. The student will construct a tick mark at coordinates 35370 41600 on a 1:25,000 map. Location must be within + 20M.

c. The student will match each example with the correct principle on a list of teaching-learning examples and a list of programmed instruction principles. Match at least 18 of the 22 examples correctly.

2. Process Measures. When steps of a task are performed in a certain sequence, then correct sequence may be a standard. For example:

The student will prepare the whitxit for operation using TM 9-000-XXX-I0, an external power source, and a whitzit. All steps must be performed in sequence, and none may be omitted.

3. Quality of Finished Product. When the student's performance results in a finished product, then the standard can be based on the quality of the product. For example:

The student will process a film by the manual method using darkroom equipment, and unprocessed film. This will include unloading and reloading of cassette, identification of film, and the processed film must be free of blemishes.

4. Content of Finished Product. For certain performances, such as a written project, the evaluation may be based on content of the finished product. Here is an example:

The student will write a TLO using a task analysis. The TLO must contain action, conditions, and standards.

5. Time Limits. For some tasks time may be an additional standard of acceptable performance. Only use time when it is critical to task performance.

An example of this would be: replace the master brake cylinder in 25 minutes. If it is not completed in 25 minutes what happens? Nothing!

Compare with "put on a protective mask in 9 seconds." Are there serious consequences if the task is not accomplished in 9 seconds? Yes!! Most gasses can kill or maim in 10 seconds.

The point is that the arbitrary use of time can be costly. It may cause an otherwise competent performer to fail the test, or it may add unnecessarily to training time.

6. Without Error. For some tasks the performance must be error free. Here is one example:

Given an operational FADAC and a five-line meteorological message, enter the message into the FADAC without error.

The following phrases are examples of adequately stated standards:

Within 2 minutes.	The exact technique of . . . . .
Without error.	Accurate to the nearest 10th
To a tolerance of within 10 meters.	Each of the five principles . . . .
With the prescribed format	All of the following:
At least five out of seven . . .	Accurate to two significant figures . . .

When you use 5 out of 7, 8 out of 10, be sure all items are of equal value; otherwise, what if the two missed were the most critical two of the task?

It is easy to see why standards are needed, but it is not as easy to set them. Frequently, they must be set arbitrarily at first. Later, after test items have been constructed and tried out, it may become obvious that you need to raise or lower the standards.

To determine how high to set the standards for a particular objective, ask yourself and (subject matter experts) these questions:

1. How critical is the training objective to job performance? What are the consequences of inadequate performance?

EXAMPLE: If the task is critical to life and death, such as an appendectomy, then the standard should be without error.

2. Will the jobholder have time to consult references or seek other help when he has to perform the task, or is immediate action required?

EXAMPLE: If the task was "Eject from an Aircraft," chances are that there would be little time for the pilot to ask how to do the task or to consult a manual on ejection. In this case, maintain a high standard.

3. Will supervisory personnel be available to review the job-holder's work?

EXAMPLE: In the personnel field the task "Prepare a Casualty Report" is critical. Improper preparation could result in the wrong spouse being notified of a soldier's death. HOWEVER, the preparer's supervisor reviews all casualty reports before they are sent out, so the criticality of the task is reduced.

4. Is on-the-job training or other forms of practice available before the job-holder performs at maximum capacity?

EXAMPLE: In most cases YES is the answer to this question. There are very few tasks that cannot be practiced on the Job. Therefore, it is not critical that the job-holder perform the task at maximum level upon entry. In other cases the answer is NO. A task such as "Find the Cause of Computer Malfunction," must be performed at the maximum level immediately. Computer time is critical and expensive. Commands cannot afford unnecessary "downtime" to allow students on-the-job-training practice in diagnosing problems. Therefore, they must be able to do their job immediately upon entry.

Even after you have answered these questions, you must still objectively set standards. These questions are only a guide. They will help you substantiate your reasons for setting a particular standard.

The point is that standards must be set on an individual task by task basis. We must consider the "real world" situation in which each task will eventually be performed. What will be expected of the students regarding the task when they get to their jobs? What will it take to convince us that they have learned the task when they get to meet those expectations? We need to come as close as we can to the "real world" standards without going overboard. Remember that unnecessarily high standards will resu1t in unnecessarily extended training time and the loss of otherwise qualified students who are unable to attain those standards.

Turn to the handout packet and locate the section containing the practice exercise for this module. Complete practice exercises 5 and 6 on your own time.

1-4 Summary

Review

a. A TLO standards statement specifies the criteria for performance by indicating how well, completely, or accurately a product must be produced, a process must be performed, or both, in a training environment. A standards statement --

- Is made up of two parts.
  - •• Action verb phrase.
  - •• Performance criteria.
- Is one of three types.
  - •• Product.
  - •• Process.
  - •• Combination of product and process.
- Indicates the criteria on which the required action is being evaluated.
- Uses the jobholder's language.
- Begins with a very specific action verb.
- Covers the entire TLO (i.e., all applicable standards identified).
- Uses the following --
  - •• Accuracy (The ratio between the correct response, incorrect response and total response.)
  - •• Tolerance (The acceptable amount of deviation, or margin of error.)
  - •• Completeness (How thoroughly the action is performed or what characteristics the product must display.)
  - •• Format (The product produced (often a report) conforms with the approved form for that type of product.)
  - •• Clarity (The required criteria is clearly stated.)
  - •• Number of errors (The upper limit to the number of things wrong that the soldier can do.)
  - •• Quantity (The number of products produced per time period.)
  - •• Sequence (The order in which actions must be performed.)
  - •• Speed of performance (How fast a task must be performed.)
- Does **NOT** use another document for criteria.
- Meets the following format requirements --
  - •• Objective.
  - •• Observable.
  - •• Measurable.
  - •• Valid.
  - •• Reliable.
  - •• Comprehensive.
  - •• Discriminating.
  - •• Usable.

In the previous pages you learned what an objective is, a little bit about why objectives are important, and how to tell good objectives from poor objectives. Now it is time for you to write your own terminal learning objective (TLO).

Remember, a TLO is a statement describing a performance expected at the end of instruction. Terminal learning objectives should have all of the characteristics listed below:

1. Objectives must be statements of student behavior (action) which can be accepted as evidence that the intended outcome has occurred.

2. The behavior must describe specifically all outcomes that will demonstrate that learning has occurred.

3. The student behavior called for must be capable of observation (being seen or heard) and evaluation within the learning and testing environment.

4. The objective must be stated in learner rather than teacher terms, i.e., the action the student will perform rather than what the teacher will say or do.

5. There must be a standard against which the student behavior will be measured. It must be fully specified.

6. The statement of the conditions under which the student behavior will occur must be fully specified.

The following table is a quick review of how to write the three parts of an objective

HOW TO WRITE THE THREE PARTS OF AN OBJECTIVE

TO WRITE ACTION:	TO WRITE CONDITIONS:	TO WRITE STANDARDS:
Specify what the student does.	Specify what the student is actually given to work with.	Specify output (or outcome) and how well it is to be done.
TYPES OF ACTION VERBS THAT ARE:	**TYPES OF CONDITIONS:**	**TYPES OF STANDARDS:**
• Observable (capable of being seen or heard) • Measurable • Verifiable • Reliable (not prone to varying interpretation)	• Equipment • Supplies • Environment • References • Limitations • Situations, problems, contingencies • Signals, symbols formulas	• Degree of accuracy • Process measures • Quality of finished product • Content of finished product • Without error • Time Limits

Use the following check list to verify the action statement that you have written meets the required criteria.

Action Statement Checklist

VERIFY EACH ACTION STATEMENT MEETS THE FOLLOWING REQUIREMENTS:	YES	NO
1. Does the action statement:		
a. Begin with an action verb?		
b. Identify the object of the action?		
c. Qualify the action? (not mandatory)		
d. Is it a very specific action?		
e. Is it directly observable or produces an observable product?		
2. Does the action verb meet the following requirements:		
a. Is it a single verb?		
b. Is it in the second person singular verb form?		
c. Is it an appropriate verb for the training environment?		
3. Is the object a noun or noun phrase?		
a. Is it measurable?		
b. Is it performed for its own sake?		
c. Does it use official Army terminology (no jargon or acronyms)?		
d. Is it directly observable?		
e. Is it measurable?		
f. Is a product produced or process performed in a relatively short period of time?		
4. Does the action statement qualifier (if present) meet the following requirements:		
a. Does it use official Army terminology (no jargon or acronyms)?		
b. Does it limit the task to a specific action or product?		
c. Does it limit the action so it is performed in a relatively short period of time?		

Use the following check list to verify the condition statement that you have written meets the required criteria.

TLO Conditions Statement Checklist

VERIFY THAT EACH CONDITIONS STATEMENT MEETS THE FOLLOWING REQUIREMENTS:	YES	NO
1. Sets the stage for performance of the required action:		
a. Cues action performance?		
b. Describes the physical setting?		
(1) Is it a training/job performance setting?		
(2) Does it specify how an NBC environment affects the action?		
(3) Are all references to training environment included in the conditions statement?		
c. Identifies all the resources required?		
(1) Lists personnel requirements?		
(2) Uses official, complete nomenclature?		
(3) Lists only those items required to perform the action?		
(4) Does include training aids?		
(5) Does not indicate quantities required?		
2. Controls the boundaries for performance, if required:		
a. Establishes the level of responsibility or level of supervision?		
b. Provides specific description of the training/performance site?		
3. Includes all pertinent influences upon performance including:		
a. Physical training/work environment?		
b. Supervision and assistance?		
c. Environmental conditions?		

Use the following check list to verify the standard statement that you have written meets the required criteria.

TLO Standards Statement Checklist

VERIFY EACH TLO STANDARDS STATEMENT MEETS THE FOLLOWING REQUIREMENTS:	**YES**	**NO**
1. Indicates the criteria on which TLO performance is being evaluated?		
2. Uses the jobholder's language?		
3. Begins with a very specific action verb?		
4. Covers the entire TLO?		
5. Uses the appropriate type of standards statement:		
a. When the action produces a product, describes the criteria in terms of the product?		
b. When the action does not produce a product, describes the TLO criteria in terms of the process?		
c. When the action produces a product and the process is important, describes the criteria in terms of both the product and process?		
6. Is it objective (not distorted by personal feelings, prejudice, or interpretation)?		
7. Is it observable?		
8. Is it measurable; do-		
a. Product standards measure accuracy, tolerance, completeness, format, clarity, number of errors, and quantity?		
b. Process standards measure sequence, accuracy, completeness, and speed of performance?		
c. Combination standards measure both product and process?		
9. Is it valid in that it uses criteria critical for the action statement performance?		
10. Is it reliable (all performers will meet the criteria each time performed)?		
11. Is it discriminating; does it --		
a. Provide sufficient information to separate performers and non-performers?		
b. Identify criteria for successful performance of that action?		
c. Apply to the performer only?		

Task Standards Checklist (Continued)

VERIFY EACH TLO STANDARDS STATEMENT MEETS THE FOLLOWING REQUIREMENTS:	YES	NO
12. Is it comprehensive; does it --		
a. Identify critical intermediate and final products and/or critical steps?		
b. Identify alternative criteria requirements when appropriate?		
c. Address the effect of special conditions (e.g., MOPP)?		
d. Limit the requirements to the scope of the conditions and performance steps?		
13. Is it usable; does it reflect reasonable and realistic expectations for the soldier performing the expected action including --		
a. Requiring 100 percent accuracy only when necessary?		
b. Addressing only actions the performer can control?		
c. Clearly stating the actions required and the criteria for each required action?		
d. Staying within the scope of the action and condition statements?		
14. It does NOT refer the performer to another document for criteria?		

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Appendix D:

Standard Verb List

The verbs in Sections I-III are the approved verbs for **task titles**. They also provide a partial source of verbs for **learning objectives** and **task performance steps**. The use of standard, well-defined verbs provides clarity, prevents duplicate work, and aids in providing quality training. Standardized verbs ---

- Promote clarity. Allows analysts, task selection boards, trainers, and soldiers to understand what the task statement means. This is particularly important since ---
  - The person who analyzes the task may not be the person who developed the task statement.
  - Task selection boards usually make their decisions based on the task statement, before the conditions and standards are fully developed.
- Prevent duplication.

  It is possible to write the same task many different ways, some so differently that it is almost impossible to tell if it is the same task. If you use standard verbs, it is simple to group tasks by verb and see if you have duplication.
- Promote application of sound training principles.

  There are many words which may appear to be action verbs, but which don't actually refer to an observable action (such as 'know', 'understand,' 'appreciate,' and so on.) By using standard verbs, you will avoid these words and produce sound, observable tasks.

Note: Sections I-III provide a partial source of verbs for use in task titles and learning objectives. Individual schools may have branch-unique terminology in addition to these lists. Submit additions to Commander, TRADOC, ATTN: ATTG-CD, Fort Monroe, VA 23651-5000.

Section I

STANDARD VERBS

Note: Those verbs marked with an asterisk (*) in Section I, should be used with caution. For a fuller explanation, see Section II, VERBS TO BE USED WITH CAUTION.

***Achieve** To attain a desired end.

Adjust
1. To correct the actions of a distant unit.
   Example: Adjust Indirect Fire.
2. To bring parts of instruments into a truer or more effective relative position or setting.

***Administer** To manage or supervise the execution, use, or conduct of a relatively structured activity.

Advise To counsel or recommend.

Alert To make aware of.

Align To place parts in the proper position to one another.

Allocate To apportion for a specific purpose or to particular persons or things.

Ambush
1. To attack (by surprise) a moving force with a stationary force.
2. To conduct a surprise attack on another aircraft.
   Example: Ambush Hostile Aircraft.

***Analyze** To separate a whole into its constituents with a view to its examination and interpretation.

Annotate To make or furnish critical or explanatory notes or comments.

***Apply**
1. To put on.
   Example: Apply Base Coat of Paint.
2. To use practically.
3. To concentrate.

Approve To give formal or official sanction.

Assault To carry out the close combat phase of an attack.
Note: See also FM 101-5-1.

Assemble
1. To fit the parts of an item together.
   Note: Usually said of a machine.
2. To bring together.
   Note: Usually said of an organization or group.

***Assess**
1. To determine the importance, size, or value of.
2. To fix the amount of.

Assign
1. To give responsibility.
   Note: For the execution of a task.
2. To place under the control of.
   Example: Assign Replacements to Units.

Assist To give aid by participating in a task.

Attack To operate against offensively.
Example: Attack Under Conditions of Limited Visibility.

Authenticate 1. To verify identity in response to a challenge.
Note: See Challenge.
2. To verify the authenticity of.

Breach 1. To break through.
Note: As an enemy position.
2. To secure passage through.
Note: Usually said of an obstacle.

Brief To give information or final precise instructions.

Calculate To ascertain by computation.

Camouflage Concealing of personnel, equipment, and facilities.

Challenge To order to prove identity.

Change To make different in some particular.

***Check** To inspect for satisfactory condition, accuracy, safety, or performance.

Clear 1. To make secure by searching and eliminating enemy resistance.
Examples: Clear a Trench Line.
Clear a Building.
2. To make safe by following a prescribed procedure for unloading.
Example: Clear a M16A2 Rifle.
3. To render operable by overcoming a temporary condition.
Example: Clear a Stoppage in a M60 Machine Gun.

Close 1. To move into combat range of an enemy force.
Example: Close With the Enemy.
2. To arrive at a designated position.
3. To move in such a manner as to present passage through.

Collate To bring parts together to form a whole.
Note: Usually said of information or intelligence.

Collect 1. To gather or exact from a number of persons or sources.
Note: Usually said of information.
2. To bring together in a group.

Combine To join two or more things such as units, or chemical substances into one.

Communicate To convey knowledge of or information about; to make known

***Compare** To examine the character or qualities of, especially in order to discover resemblances or differences.
Example: Compare Courses of Action.

Complete To bring to an end and especially into a perfected state.

Comply To act in accordance with orders, regulations, policy, etc.

Compute To determine, especially by mathematical means.

***Conduct** To direct or control, lead, or guide.

Confirm To validate.

Connect 1. To join.
2. To fasten together.

Consolidate 1. To organize or reorganize, bringing separate parts together into one whole.
2. To secure or complete an action.
Example: Consolidate the Objective.

Construct To build.

Control 1. To exercise restraining or direct influence over.
2. To regulate.
3. To dominate.

Coordinate To bring into a common action, movement, or condition.

Correct To alter or adjust so as to bring to some standard or required condition.

Correlate To present or set forth so as to show relationship.

***Counsel** Advise or provide guidance.

Counter To act in opposition to; nullify.

Cover To afford protection or security to.
Note: See also FM 101-5-1.

Cross To pass over or through.

Cross-check To check from various angles or sources to determine validity or accuracy.

Debrief To obtain an oral report on an action or mission immediately afterwards.
Example: Debrief Reconnaissance Patrol.

Decontaminate To cleanse or remove chemical or radiological contamination.

Defend To ward off an actual or threatened action
Note: See also FM 101-5-1.

***Define** 1. To determine the limits and nature.
2. To state the meaning of.

Delay To slow the advance of an enemy force without becoming decisively engaged.
Note: See also FM 1015-1.

Deliver To send to an intended target or destination.

***Demonstrate** 1. To feign an action for the purposes of deceiving an enemy.
2. To show by reasoning.
3. To show the operation or working of.
4. To explain by using examples, experiments, or action.

Deploy 1. To spread out, utilize, or arrange, especially tactically.
2. To position for use.

Designate 1. To indicate and set apart for a specific purpose, office, or duty.
2. To select.
Note: Usually said of a target.

Destroy 1. To render unusable and unrepairable.
Example: Destroy Disabled Vehicles.
2. To render combat ineffective.
Example: Destroy Attacking Force.

Detect To discover.

Determine 1. To settle or decide by choice of alternatives or possibilities.
2. To fix precisely.

Develop To set forth or make clear by degrees or in detail.

Direct 1. To regulate the activities or course by acting through subordinate leaders.
2. To control through suggestions and guidelines.

Disassemble To take apart, usually for the purposes of cleaning or repair.

Disconnect To sever the connection between.

Disengage 1. To release or break contact with.
Example: Disengage the Drive Shaft.
2. To terminate combat.
Example: Disengage from Enemy Force.

Dismantle To render inoperable by taking apart.
Note: See Disassemble.

Dispatch To send away with promptness or speed, especially on official business.

Displace To leave one position and occupy another.

Disseminate To disperse throughout.
Note: Usually refers to orders, information, and similar matters.

Distribute To give out or deliver, especially to members of a group.

Draft To draw the preliminary sketch, version, or plan of.

***Effect** To cause the desired result or outcome.
Note: See Achieve.

Emplace To put in a prepared position.
Example: Emplace the Howitzer.

Employ To make use of, usually in the role of a leader or commander.

Encrypt Encipher, encode.

Enforce To see that the provisions. (of an order or regulation) are carried out effectively.

Engage 1. To intermesh or interlock.
Note: Usually refers to machinery.
2. To fight.
Note: See also FM 101-5-1.

***Ensure** 1. To make certain.
2. To guarantee.

Enter To come in.

Erect To build or set up.
Example: Erect OE-254 Antenna.

Establish 1. To bring into existence.
2. To introduce as a permanent entity or procedure.

Evacuate To move from an area, usually for the purpose of treatment, repair, or prevention of capture.

Evade To avoid.

***Evaluate** To determine the significance or worth of, usually by careful appraisal and study.

Exchange To part with for a substitute.

Extend 1. To increase the scope, meaning, or application of.
2. To elongate or to increase the size.
Example: Extend the Legs of the Tripod.

Extract 1. To remove from an area, usually for combat purposes.
Example: Extract a Ranger Team Under Fire.
2. To select and copy out or cite.

Finalize To put in final or finished form: to give final approval to.
Example: Finalize Operations Order.

Fire To discharge a weapon.

Format To produce a document or electronic report in a specified form or style.

Formulate To put into a systematized statement or expression.

Forward To send onward.

Fuel To provide with fuel.

Ground To connect electrically with a ground.

Guard 1. To protect by physical security means.
2. To prevent from escaping by physical security means.
3. To protect by accepting combat.
Example: Guard a Flank.
Note: See also FM 101-5-1.

Harden To protect passively by providing or increasing resistance to projectiles and similar threats.

Hover To hold a flying aircraft relatively motionless.

***Identify** 1. To determine critical or necessary conditions or other factors.
Example: Identify all Specified and Implied Missions.
2. To determine the specific model of an item.
Example: Identify Threat Armored Vehicles.
3. To ascertain the origin, nature, or definitive characteristics of.

Implement To give practical effect to and ensure of actual fulfillment by concrete measures.

Infiltrate To move by small groups, usually clandestinely.

Inform To make known.

Input To provide information to or to enter information into a system.

***Inspect** To examine officially.

Install To put in an indicated place, condition, or status.

Integrate To form, coordinate, or blend into a functioning or unified whole.

Interpret To present or delineate the meaning of.
Example: Interpreting for Russian and English Speakers.

Issue To give out.
Example: Issue the Operations Order.

Land To bring an aircraft to earth.

Launch To send an aircraft or missile into the air.
Note: See Take Off.
Note: Launch usually refers to unmanned vehicles; however, launch may also mean a collective act of sending a manned aircraft aloft.
Example: Launch Aircraft from Flight Deck.

Lay To point a weapon in a precise direction.
Example: Lay the 60mm Mortar.

Lead
1. To go at the head.
Example: Lead a Convoy.
2. To exercise direct, low-level control.
Example: Lead Search Party.

Level
1. To make even or uniform.
2. To apportion equally.

Load
1. To insert ammunition into a weapon or launcher.
2. To place in or on a means of conveyance.

Locate To determine or set the position of.

Log To enter details of or about an event in a log.

Maintain To preserve, fix, or keep in good repair.

Make To create or cause to happen.

***Manage**
1. To handle or direct with a degree of skill or specialized knowledge.
2. To exercise executive, administrative, and supervisory direction.

Modify To make minor changes in/to.

***Monitor** To watch, observe, or check, especially for a special purpose.
Example: Monitor Enemy Radio Traffic.

Motivate To provide with an incentive.

Move To proceed from one point to another.

***Name**
1. To designate or mention by name.
2. To appoint.
3. To identify by giving the right name.
4. To give a name.

Navigate Determine and follow a course.

Notify To inform, to warn, to make known, or to make notice of.

Observe To watch carefully.

Obtain To gain or attain.
Note: Usually by planned action or effort.

Occupy To reside or control.
Example: Occupy a Battle Position.

Open
1. To make ready for business.
Example: Open a Forward Area Rearming and Refueling Point (FARP).
2. To make available for entry or passage.

Operate
1. To cause a piece of equipment to function.
2. To perform a function.

***Orchestrate**
1. To compose/arrange music
2. To organize, manage, or arrange.

Order To command a specific action to be executed.

Organize To arrange by systematic planning and united support.

Orient To point or look in a specific direction.
Example: Orient Weapons on Assigned Sector.

***Oversee** To watch over and direct

Pack To place in a container for transportation or storage.

Patrol To conduct security or offensive operations with small, specially tailored groups.
Example: Patrol the Gaps Between Units.

***Perform** To carry out an action or pattern of behavior.

Place Put in proper position or location.
Note: "Position" or "locate" are usually better choices.

Plan
1. To devise or project.
2. To formulate a systematic scheme or program of action.

Plot To mark or note on a map, chart, or graph.

Police
1. To provide protective or police services.
2. To make clean and put in order.

Position To put in place; to set.

Post
1. To make transfer entries.
2. To position at a certain site.
Example: Post the Guard.

Predict Foretell on the basis of observation, experience, or scientific reason.

Prepare
1. To put together.
Example: Prepare Launcher for Firing.
2. To combine elements and produce a product.
Example: Prepare a Meal.
3. To make ready.
Example: Prepare to Continue the Attack.
4. To make other persons or things ready.
Example: Prepare a Battle Position.

Prevent To keep from occurring or recurring.
Example: Prevent Cold Weather Injuries.

***Prioritize** To put in order or rank.
Note: Especially for the purpose of allocating resources.

Process To initiate a series of actions or operations leading to a particular end.
Example: Process a Request for Transfer.

Produce To develop or create.

Project To plan, calculate, or estimate for the future.
Example: Project Ammunition Expenditures.

Protect To shield from destruction; safeguard.

Provide To supply or make available.

Publish To produce for distribution.
Example: Publish the Duty Roster.

Range To determine the distance.
Note: Usually to a target.

Reach To arrive at a location.

React To respond, usually to an emergency situation with a limited choice of actions.
Example: React to Engine Failure in Flight.

Read To examine carefully so as to understand.

Realign To reorganize or make new groupings.

Reassess To redetermine the extent or value.

Recall To bring back to another location.

Receive To acquire from someone else.
Example: Receive Patients.

***Recognize** To determine the category of an item.
Learning Objective Example: Recognize Threat Armor Vehicles.

Recommend To endorse as worthy, fit, competent, exceptional, etc.

Reconnoiter To obtain information by visual observation or other methods.
Note: Reconnoiter usually implies a physical movement to the area to be observed.

Record
1. To set down as a means of preserving information.
2. To document.
3. To mechanically or electronically save information.

Recover To extract damaged or disabled equipment and move to a location for repair.

Redistribute To reallocate, usually in response to uneven consumption or usage.
Example: Redistribute Ammunition.

Reduce
1. To diminish in size, amount, extent, or number.
2. To render operable by following a prescribed procedure to eliminate a malfunction.
   Example: Reduce a Stoppage in a M249 Squad Automatic Weapon.
3. To render ineffective by partially dismantling.
   Example: Reduce an Obstacle.

Reestablish To establish again, usually in response to a combat loss or damage.
Example: Reestablish Communications.

Reexamine To examine again.

Release
1. To let go.
2. To set free from configuration or condition.

Relieve
1. To replace.
   Example: Relieve a Company in Place.
2. To reduce or eliminate pressure on.
   Example: Relieve an Encircled Unit.

Relocate Establish or lay out in a new place.

Remove
1. To take away or displace.
2. To dismiss.
3. To eliminate, kill, or destroy.

Reorganize To organize again, usually as a result of combat damage or loss.

Repair To restore to serviceable condition.

Replace To substitute a new or workable item or person.

Replenish To fill again.

Report
1. To present an account officially.
2. To formally or regularly carry back and repeat to another.
3. To provide information on ongoing activities.
   Example: Report Initial Enemy Contact.

Request
1. To ask for.
2. To ask someone to do something.

Resolve To reduce by analysis.

Restate To state again or in another way.

Resume To begin again.

Return To restore to a former or proper place.

***Review** To go over for the purpose of determining correctness or currency.

Revise To correct or improve.
Note: Usually applied to a plan or document.

Rotate To cause to turn about an axis or center.

Schedule To appoint, assign, or designate for a fixed time.

Secure
1. To make safe.
2. To fix tightly.
3. To make immobile.

Select To choose from among others to meet specific standards or criteria.

Send To dispatch.

Set To adjust a device to a desired position, to make ready for future action.

Set up To erect or position components.

Sort To examine and place into categories.

Splint To support or restrict.

Stand to To increase security by coming to full alertness, with all weapons manned and ready.
Note: Derived from the phrase "Stand to Arms."

State To declare or set forth; a condition.
Example: Suppress Enemy Air Defenses.

Stockpile To accumulate supplies for use.
Example: Stockpile Ammunition on a Battle Position.

Store To stock or deposit.
Note: Store implies protecting from deterioration or pilferage.

Strike
1. To attack.
2. To disassemble.
   Example: Strike a Tent.

Submit To send forward for approval.

Supervise
1. To oversee.
2. To critically watch, motivate and direct the activities of subordinates.

Support To aid or help.
Note: Usually refers to collective tasks. See FM 101-5-1.
Example: Support by Fire.

Suppress To actively prevent, usually by firing on.

Sweep To move through and search an area.

Take charge To assume control or command.

Take off To send an aircraft into the air.
Note: Usually said of a manned aircraft.
Note: See Launch.

Task To assign responsibility.

Template To estimate or predict enemy dispositions or actions by applying known enemy doctrine.

Test To examine to prove the value or ascertain the nature of something.

Track
1. To keep a moving target within the sight reticle.
   Example: Track Target with M47 Dragon Medium Antiarmor Weapon.
2. To follow by means of marks or scent.

Train To make proficient by instruction and practice.

Translate To express in more comprehensible term, or in a different language.

Transmit To send over a communications net.

Transport To carry from one place to another; convey.

Treat To care for medically.

Triage To assess patients' physical condition to determine treatment priority.

Troubleshoot To locate the source of trouble in equipment, systems, or operations.

Tune To put on the proper setting or frequency.
Note: As a radio.

Turn To change the direction or orientation of something.

Update To bring up to date or make current.

Validate To substantiate accuracy by comparison or investigation.

Verify To confirm or establish the accuracy or truth of something.

War game To conduct comparisons of options under a war time scenario.
Example: War Game Courses of Action.

Wear To bear or have on the person; to carry on the person.

Zero To set a sight to enable a firearm to shoot a target.

Section II

VERBS TO BE USED WITH CAUTION FOR TASK TITLES AND TLOs.

These verbs should be used with care. Some are only variants of the verb 'Do,' and don't convey any special meaning. Their overuse defeats the purpose of standardized verbs and results in vague, "fuzzy" task statements.

Other verbs in this list are often used for procedural step in the performance of the task. When selecting a verb for a task title:
1. Choose a verb you think is appropriate.
2. Give yourself the "why" test, i.e., ask "Why would someone perform this task?"
3. Determine if the answer to the "why" test is truly "to perform the entire task as written" **or** "to perform a task step." Your answer will indicate ---
   a. You selected the correct verb for the task title;
   b. You need to change the task verb; **or**
   c. You really have a task step.

Other verbs are most often used to define enabling objectives. For example, when teaching a student to repair an item of equipment, the instructor might require the student to LIST, NAME, or IDENTIFY the component parts of the item.

Achieve This verb implies you are going to measure the product (or quality), not the process. A common mistake is to use the verb "achieve" and then to use standards that represent steps in the task rather than the quality of the outcome.

Administer The use of this verb should be restricted to fairly mechanical or structured activities or to medical activities. It is not a synonym for 'Manage.'

Analyze One usually analyzes something in order to accomplish a real task.

Apply The use of "Apply" often leads to unobservable or unmeasurable task statements.
Improper Use Example:
Apply the Principles of War.

Assess Difficult to observe or measure. Usually the analyst would be better off stating what the individual has to do in order to assess something.

Check Checking is usually done as part of supervision or verification.

Compare The answer to the "why" test may indicate the "compare" statement is really a task step and not a task.

Conduct The verb 'Conduct' should be used ONLY when a more precise verb does not exist or when the use of a more precise verb would result in an unusually clumsy construction.
Example 1 of Proper Use:
Conduct a Deliberate Attack.
Example 1 of Improper Use:
Attack Deliberately.
Note: **"**Attack" is the proper verb in the above task statement --- that's what you're going to do --- but the construction is so clumsy that in this case it is preferable to use "Conduct."
Example 2 of Proper Use:
Suppress Enemy Fires
Example 2 of Improper Use:
Conduct Suppression Operations

CAUTION: The verb "Conduct" (as well as "Perform" and other verbs that simply mean 'Do') is often used to mask a serious error --- using more than one verb in a task statement.

Counsel This has the connotation of simply providing general information. The verbs "advise" and "recommend" are usually what is really meant and indicate "action."

Define Use of this verb often indicates an enabling objective that would be used in a classroom setting, not the task itself.
Example Of Improper Use:
Define the Purpose of a Front End Analysis.

Demonstrate Like "define", "demonstrate" is usually indicative of an enabling objective.
Example Of Improper Use:
Demonstrate an understanding of Front End Analysis by defining the Purpose of a Front End Analysis.

Effect Similar in meaning to "achieve" but more vague.

Ensure Difficult to observe or measure. Usually the analyst would be better off stating what the individual or unit has to do in order to ensure something happens or doesn't happen.

Evaluate Usually indicates a step or enabling objective.

Identify May indicate a step or enabling objective.
Example Of Improper Task Title:
Identify the Parts of the M16A2 Rifle.

Inspect Usually indicates a step or enabling objective.

Manage Difficult to observe or measure. Usually the analyst would be better off stating what the individual has to do in order to manage something. Since management is a complex set of skills, a task that uses the verb "manage" should be closely examined. It will often be found to be so broad that it must be split into several more well-defined tasks.

Monitor Usually indicates a step or enabling objective.

Name Nearly always indicates an enabling objective.

Orchestrate
1. To compose/arrange music
2. To organize, manage, or arrange.

Oversee To watch over and direct.

Perform "Perform", like "conduct", is simply another way of saying "do."

Prioritize Usually indicates a step or enabling objective.

Recognize "Recognize" may be very appropriate for a learning objective, but caution must be used if it is used in a task title as the resulting statement may really be a task step.
Example: Recognize friendly aircraft" may be a step in the task "Report enemy aircraft."

Review Usually indicates a step or enabling objective.

Section III

VERBS TO USE WITH CAUTION FOR ENABLING LEARNING OBJECTIVES OR LEARNING ACTIVITIES

Describe
- Usually indicates an enabling objective.
- Not an action verb.

Discuss
- Usually indicates an enabling objective or a learning activity.
- Not an action verb.

Elucidate
- Not measurable or observable.
- Not an action verb.

Explain
- Usually indicates an enabling objective.
- Not an action verb.

List
- Usually indicates an enabling objective.
- Not an action verb.

Section IV

VERBS WITH SIMILAR DEFINITIONS

Administer, Manage
"Administer" refers to relatively structured activities, while "manage" refers to broader activities requiring great depth of knowledge and experience. A clerk may administer the unit's publications. An executive or senior officer manages weapons procurement.

Assist, Support
"**Support**" usually indicates a collective task, while "**assist**" usually indicates an individual task.
Assist: An assistant participates in the action with the principal actor.
Illustration: The loader assists the gunner.
Support: Implies a different kind of activity than the primary activity.
Illustration: The Maintenance Company supports the Brigade.

Decide, Determine
Decide: Refers to arriving at a conclusion and to pronounce that decision.

Determine: To settle or decide by choice of alternatives or possibilities and to fix precisely.

Disassemble, Dismantle
Disassemble implies taking apart for the purpose of repairing or cleaning.

Dismantling implies taking apart on a relatively long term basis to render inoperable.

Lead, Command

"Lead" implies to go ahead, or to control the activities of a small group.

"Command" is a legal status, which includes not only direction, but also disciplinary authority.

Operate, Employ

"Operate" is to turn on, control, and turn off a piece of equipment.
"Employ" is to ensure that the equipment is used to further the mission of the organization.
Illustration: SP4 Jones operates the radio. CPT Smith employs the communications system.

Recognize, Identify

"Recognize" implies a less stringent standard than "identify". A soldier may recognize a threat vehicle by a characteristic that is common to many different threat vehicles (for example, the boat-shaped nose on most Soviet-designed personnel carriers). In order to identify the vehicle, he would have to determine the model (for example, a BMP-80).

Section V

VERBS NOT TO USE

Appreciate
- Not measurable or observable.
- Not an action verb.

Become aware of
- Not measurable or observable.
- Not an action verb.

Be familiar with
- Not measurable or observable.
- Not an action verb.

Believe
- Not measurable or observable.
- Not an action verb.

Clarify Usually indicates an enabling objective.

Consider
- Rarely observable.
- Not an action verb.

Enjoy
- Not measurable or observable.
- Not an action verb.

Execute Vague. Another version of 'Do.

Know
- Not measurable or observable.
- Not an action verb.

Relate
- Usually indicates an enabling objective.
- Not an action verb.

Summarize
- Not an action verb.

Synthesize
- Not measurable or observable.
- Not an action verb.

Understand
- Not measurable or observable.
- Not an action verb.

Use Vague. Another version of 'Do.'

Utilize Vague. Another version of 'Do.'

ADDITIONAL VERBS

The following list is in addition to the list appearing in TRADOC Reg 350-70, Appendix D. This list is provided to further assist in the verb selection process.

Accept
1. to receive (something offered) gladly; take willingly.
2. to receive as adequate or satisfactory
3. to admit to a group or place.
4. to be favorably disposed toward.
5. to regard as usual, proper, or right.
6. to bear up under resignedly or patiently..
7. to answer affirmatively.
8. to be able to hold (something applied or inserted).
9. to consent to pay, as by a signed agreement.

Accomplish
1. to succeed in doing; to bring to pass
2. to reach the end of; to complete; finish.

Act
1. The process of doing or performing something.
2. to behave like or pose as.
3. to carry out an action; do something.

Adapt to adjust to a specified use or situation.

Adopt
1. to select and bring into a new relationship.
2. to take and follow(a course of action, for example) by choice or assent.

Advance
1. to move or bring forward in position.
2. to raise in rank; promote.

Aid to help, assist.

Aim to direct a weapon.

Allot to distribute by lot, apportion.

Alter to change or make different; modify

Appeal to make an earnest or urgent request

Arm
1. to equip with weapons.
2. to prepare for detonation.

Arrange
1. to put into deliberate order or relation; dispose.
2. to plan or prepare for.

Balance
1. to reach or achieve a state or position between extremes
2. to compute the difference between debits and credits

Bracket
1. to classify or group together.
2. to fire beyond and short of (a target) in order to determine range.

Build
1. to form by combining materials or parts.
2. to give form to according to a definite plan or process.
3. to establish and strengthen.

Calibrate
1. to check, adjust, or systematically standardize the graduations of a quantitative measuring instrument.
2. to determine the caliber o (a tube).

Catalog to list in a catalogue

Charge
1. to place a burden on; entrust with a duty, responsibility, task, or obligation.
2. to place an order or injunction upon, command
3. to instruct, warn, or urge authoritatively
4. to blame, accuse, or impute something to. Often used with *with.*
5. to load (a gun or other firearm).
6. to fill (any substance) with another substance

Choose to select from a number of possible alternatives; decide upon and pick out.

Cite
1. to quote as an authority or example.
2. to mention or bring forward as support, illustration, or proof.
3. to commend (a unit or individual in the armed forces) in orders, for meritorious action.
4. to summon before a court of law.
5. to call to action; rouse.

Command
1. to direct with authority; give order to.
2. to have control or authority over; rule.

Compose
1. to make or create by putting together parts or elements.
2. to create or produce (a literary or musical piece).
3. to arrange aesthetically or artistically.
4. to set type.

Conclude
1. to bring to an end; close; finish.
2. to come to an agreement or settlement; settle finally: *conclude a peace treaty.*
3. to reach a decision or form an opinion about, infer or deduce.
4. to determine; decide; resolve.
5. to form a final judgment; come to a decision or an agreement.

Construct to form by assembling parts; build; erect.

Contrast to set in opposition in order to show or emphasize differences

Control
1. to exercise authority or dominating influence over; direct; regulate.
2. to hold in restraint; to check.
3. to verify or regulate(a scientific experiment) by conducting a parallel experiment or by comparing with some other standard.

Copy
1. to make a copy or copies of; transcribe; reproduce
2. to follow as a model or pattern; imitate

Decipher 1. to read or interpret (something ambiguous, obscure, or illegible).
2. to convert from a code or cipher to plain text; decode.

Decode to convert from code into plain text.

Delete to strike out or cancel; omit.

Delineate 1. to draw or trace the outline of; sketch out.
2. to represent pictorially, depict
3. to depict in words or gestures; portray

Derive 1. to obtain or receive from a source.
2. to arrive at by reasoning; deduce; infer.
3. to trace the origin or development of (a word, for example)

Detonate to cause to explode.

Diagram 1. to plan, sketch, draw, or outline, not necessarily representational, designed to demonstrate or explain something or clarify a relationship existing between the part of a whole
2. to indicate or represent by or as if be a diagram.

Differentiate 1. to constitute the difference in or between; serve to make a distinctions between.
2. to perceive or show the difference in or between; discriminate; distinguish.
3. to develop differences in by alteration of modification.

Disarm 1. to deprive of weapons; divest of arms.
2. to deprive of the means of attack or defense; render helpless of harmless.
3. to overcome or allay the suspicion, hostility, or antagonism of; win the confidence of.

Disclose 1. to expose to view, as by removing a cover; uncover.
2. to make known; divulge.

Discharge 1. to relieve of a burden or of contents; unload.
2. to unload or empty)contents).
3. to release, as from confinement or duty.
4. to dismiss from employment.
5. to send or pour forth, emit.
6. to shot or fire (a projectile or weapon).
7. to perform the obligations or demands of (an office, duty, or task).
8. to acquit oneself of (a debt or promise); comply with the terms of.
9. *Law* to release (a defendant, for example).
10. *Law* to set aside; dismiss; annul.

Discriminate 1. to make a clear distinction; distinguish; differentiate.
2. to act on the basis of prejudice.

Dispense 1. to deal out or distribute in parts or portions.
2. to prepare or give out (medicines).
3. to administer (laws, for example).
4. to exempt or release, as from duty or religious obligation.

Display 1. to hold up to view; make visible; expose; exhibit.
2. to make manifest or noticeable; show evidence of
3. to exhibit ostentatiously prominently; show off; parade; flaunt.
4. to spread out; unfurl

Divide 1. to separate into parts, section, groups, or branches.
2. to separate into opposing factions; disunite
3. to apportion among a number.
4. to apportion among a number.

Document 1. to furnish with a document or documents.
2. to support (an assertion or claim, for example) with evidence or decisive information.
3. to support (statement in a book, for example) with written references or citations; annotate.

Drill 1. to make a hole in (a hard material) with a drill.
2. to instruct thoroughly and by repetition in a skill or procedure.
3. to infuse knowledge of or skill by repetitious instruction.

Encipher to put (a message) into cipher.

Encode to put (a message) into code.

Envelop 1. to enclose or encase with or as if with a covering or wrapping.
2. to serve as a covering or wrapping for.
3. to surround; encircle.

Establish 1. to make firm or secure; fix in a stable condition.
2. to settle securely in a position or condition; install.
3. to cause to be recognized and accepted without question.
4. to originate on a firm, lasting basis; to found.
5. to create a state institution of (a church or religion).
6. to introduce as a permanent entity; promulgate
7. to prove the validity or truth of.

Execute 1. to carry out; put into effect.
2. to perform; do.
3. to carry out in accordance with a prescribed design.
4. to make valid; legalize, as by signing and sealing.
5. to perform or carry out what is required by.

Exercise 1. to put into play or operation; enploy.
2. to bring to bear; exert.
3. to subject to forms of practice or exertion in order to train, strengthen, condition, or the like; put through exercises
4. to carry out the function of; execute; perform: *exercise the role of disciplinarian.*
5. to absorb the attentions of; especially to worry, upset, or make anxious.

Exhaust
1. to let out or draw off (air or fumes).
2. to draw out the contents of; drain, empty.
3. to use up; expend; consume.
4. to wear out completely; tire.
5. to drain of resources or properties, deplete.
6. to study or deal with comprehensively.

Exhibit
1. to show; display.
2. to present for the public to view.
3. to give an instance or evidence of; demonstrate.
4. *Law.* to submit (evidence or document) in a court; introduce officially.

Expose
1. to lay open, as to something undesirable or injurious
2. to subject (a photographic film or plate) to the action of light.
3. to make visible or known; make manifest; display; reveal; or exhibit.
4. to disclose or unmask, as a crime; lay bare; make known.

Express
1. to make known or set forth in words; state; utter.
2. to manifest or communicate; as by a gesture; show; exhibit.
3. to make one's feeling or opinions known.
4. to make or suggest a representation of; depict.
5. to represent by a sign or symbol; symbolize.
6. to squeeze or press out, as juice from a fruit.
7. to send by special courier or rapid transport.

File
1. to put or keep (papers or card, for example) in useful order; to catalogue.
2. to enter (a legal document, for example) on public record or official record.
3. to send or submit (copy) to a newspaper or the like; especially, to transmit by wireless.
4. to march or walk in a line or lines.

Find
1. to come upon by accident; meet with.
2. to come upon after a search.
3. to come upon through experience or study; obtain knowledge or a view of; attin.
4. to succeed on reaching; arrive at.
5. to learn by inquiry or research; determine; ascertain.
6. to consider; regard.
7. to recover (something lost).
8. to recover the use of; regain.
9. to declare as a verdict or conclusion.
10. to furnish; supply.

Gauge
1. to measure precisely.
2. to determine the capacity, volume, or contents of.
3. to evaluate or judge.
4. to adapt to a specific measurement.

Govern
1. to control the actions or behavior of; guide; direct.
2. to make and administer public policy for (a political unit); exercise sovereign authority in.
3. to control the speed or magnitude of; regulate
4. to keep under control; restrain.
5. to decide; determine.

Index
1. to furnish with an index.
2. to enter (an item) in an index.
3. to indicate or signal.

Interrogate to examine by formal questioning.

Inventory to make a detailed list of things I one's view or possession; especially, a periodic survey of all goods and materials in stock.

Investigate to observe or inquire into in detail; examine systematically.

Itemize to set down item by item; to list.

Maneuver
1. to make a change, or series of changes, in position for some desired end.
2. to shift ground or location; change tactics.
3. to attempt to bring about something by planning or scheming.
4. to alter the tactical placement of (troops or warships).
5. to manipulate into a desired position or toward a predetermined goal.

Manipulate
1. to operate or control by skilled use of hands; handle.
2. to influence or manage shrewdly or deviously.
3. to tamper with or falsify (financial records) for personal gain.

Map
1. to make a representation, usually on a plane surface of a region of the earth or heavens.
2. to explore or make a survey of (a region) for the purpose of making a map.
3. to plan or delineate, especially in detail; arrange.

Mark
1 to put or make a mark or marks on
2. to identify or designate by or as by a mark or marks
3. to trace, make , or produce by or as by marks; draw, write, record, etc.
4. to show or indicate by a mark or marks
5. to show plainly; manifest; make clear or perceptible
6. to set off as distinctive; distinguish; characterize
7. to observe; note; take notice of; heed
8. to give a grade of grades to; rate
9. to put price tags on (merchandise)
10. to keep (score, etc.); record

Measure 1. to find out or estimate the extent, dimensions, etc. of, esp. by a standard
2. to get, take, set apart, or mark off by measuring
3. to estimate by comparison; judge; appraise Example: to *measure* one's foe
4. to bring into comparison or rivalry
5. to adjust or proportion by a standard (Example: to *measure* a speech by the listeners' reactions)
6. to choose or weigh carefully

Mend 1. to repair (something broken, torn, or worn); restore to good condition, make whole, fix
2. to make better; improve; reform; set right

Outline 1. to draw a profile of; draw in outline
2. to give or write an outline, or main point of

Pick 1. to break up, pierce, oar dig up (soil, rock, etc.) with something sharply pointed
2. to make or form (a hole) with something pointed
3. to dig, probe, or scratch at with the fingers or with something pointed in an attempt to remove
4. to remove by pulling as with the fingers, to pluck or gather flowers , berries, etc.
5. to pull (fibers, tags, etc.) apart
6. to choose; select; cull
7. to pluck (the strings on a guitar, banjo, etc.)
8. to open (a lock) with a wire, etc. instead of a key

Point out to show or call attention to

Practice 1. to do or engage in frequently or usually; make a habit or custom of
2. to do repeatedly in order to learn or become proficient; exercise or drill oneself in

Present 1. to bring (a person) into the presence of, and introduce formally to, another or others
2. to offer for viewing or notice; exhibit; display; show
3. to offer for consideration
4. to give or bestow (a gift, donation, award, etc.)to (a person, organization, etc.)
5. to hand over, give, or send (a bill, credentials, etc) to (someone)
6. to represent, depict, or interpret in the manner indicated
7. to point or aim (a weapon, etc.)
8. (*Law) a)* to put before a legislature, court, etc. for consideration *b)* to bring a charge or indictment against

Probe 1. to explore (a wound, etc.) with a probe
2. to investigate or examine with great thoroughness

Proclaim 1. to announce officially; announce to be
2. to shoe to be
3. to praise

Procure to get or bring about by some effort; obtain; secure

Prosecute 1. to follow up or pursue (something) to a conclusion
2. to carry on; engage in
3. to institute legal proceedings against, or conduct criminal proceedings in court against
4. to try to get, enforce, etc. by legal process

Quote 1. to reproduce or repeat a passage from of statement of
2. to refer to as authority or an example; cite
3. *(Commerce)* to state (a price) or state the price of (something

Raise 1. to cause to rise; move to a higher level; lift; elevate
2. to bring to or place in an upright position
3. to construct or erect (a building, etc.)
4. to wake from sleep; to stir up; arouse; incite
5. to increase in size, value, amount, etc.
6. to increase in degree, intensity, strength, etc.
7. to improve the position, rank, or situation of
8. to advance or enhance (fame, reputation, etc.)
9. to cause to come about; provoke; inspire
10. to bring forward for consideration

Rebuild 1. to build anew
2. to restore to a previous condition
3. to repair or remodel extensively, as taking apart and reconstructing, often with new parts

Recondition to put back in good condition by cleaning, patching, repairing, etc

Recount to count again

Refer 1. to assign or attribute (to) as cause or origin
2. to assign, or regard or name a belonging
3. to submit (a quarrel, question, etc.) for determination or settlement
4. to send or direct (to someone or something) for aid, information, etc.

Refute 1. to prove (a person) to be wrong, confute
2. to prove (an argument or statement) to be false or wrong, by argument or evidence

Register 1. to enter in or as in a record or list; enroll or record officially; to transcribe permanently, as if in a register
2. to indicate on or as on a scale
3. to safeguard (mail) by having it committal to the postal system recorded, on payment of a fee

Regulate 1. to control, direct, or govern according to a rule, principle, or system
2. to adjust to a standard, rate, degree, etc.
3. to adjust so as to make operate accurately

Reinforce 1. to strengthen (a military, naval, air force, etc.) with additional troops, ships, planes, etc
2. to increase the number or amount of
3. to strengthen or make stronger, as by patching, propping, adding new material, etc.
4. to make stronger or more compelling
5. to increase the probability of (a response to a stimulus) by giving a reward or ending a painful stimulus

Reject 1. to refuse to accept, recognize, or make use of; repudiate
2. to refuse to consider or grant; deny
3. to refuse affection or recognition to (a person)
4. to discard as defective or useless; throw away
5. to spit out or vomit

Relay 1. to pass or send along by or as if by relay
2. to supply with fresh relays
3. *Electricity* to control by means of a relay

Reply 1. to give an answer in speech or writing
2. to respond by some action or gesture
3. *Law* to answer a defendant's plea

Represent 1. to stand for ; symbolize
2. to depict, portray
3. to present clearly to mind
4. to make representation (of something) to someone by way of remonstrance or expostulation
5. to describe (a person or thing) as an embodiment of some specific quality
6. to serve as the official and authorized delegate of; agent for; act as a spokesperson for
7. to serve as an example of
8. to be the equivalent of

Requisition 1. to demand, as for military needs
2. to make demands of

Reserve 1. to keep back or save for future use or special purpose
2. to set apart for a particular person or use
3. to keep or secure for oneself; retain

Respond 1. to make a reply; to answer
2. to act in return or in answer
3. to react positively or cooperatively

Restore 1. to bring back into existence or use; re-establish
2. to bring back to a previous, normal condition
3. to put (someone) back in a proper position

Route 1. to send along; to forward
2. to schedule or dispatch on a sequence of procedures or stops

Salvage 1. to save (a ship or its cargo) from loss or destruction
2. to save (discarded or damaged material) for further use

Scan 1. to look at closely or in a broad, searching way; scrutinize
2. to glance at quickly; consider hastily
3. *(Computers)* to examine in sequence (written, printed, etc. data), esp. with an electronic device that then usually initiates a numerical printout, oscilloscope signal, etc.
4. *(Radar)* to transverse (a region) with a succession of transmitted radar beams, usually radiated in a systematic pattern

Scrutinize to look at very carefully; examine closely; inspect minutely

Search 1. to go over or look through for the purpose of finding something; explore; rummage; examine
2. to examine (a person) for something concealed
3. to examine closely and carefully: test and try; probe
4. to look through (writings, records, ets.) to establish certain facts
5. to find out or uncover by investigation

Separate 1. To set or put apart into sections, groups, sets, units, etc.; cause to part; divide; disunite; sever
2. to see the differences between; distinguish or discriminate between
3. to keep apart by being between; divide
4. to single out or set apart from others for a special purpose; sort, segregate
5. to take away (a part or ingredient) from a combination or mixture
6. to discharge (a) to release from military service (b) to dismiss from employment

Service 1. To furnish with a service
2. to make or keep fit for service, as by inspecting, adjusting, repairing, refueling, etc.

Sight 1. to observe or examine by taking a sight
2. to catch sight of; see
3. to bring into the sight of a rifle, etc.; aim at
4. to aim (a gun etc.) using sights
5. to take aim or an observation with a sight
6. to look carefully in a specific direction

Signal 1. to make a signal or signals to
2. to make known or communicate (information) by signals

Simulate 1. To give a false indicator or appearance of, pretend; feign
2. to have or take on the external appearance of; look or act like

Sketch to draw or describe quickly or in outline

Specify 1. To mention, describe, or define in detail; state definitely
2. to include as an item is a set of specification
3. To state explicitly as a condition

Spot 1. To mark with spots
2. to sully; stain; blemish
3. to mark for future consideration
4. to place in or on a given spot or spots
5. to be located at various places in or on
6. to shine a spot light on
7. to remove (individual spots, marks, etc.) as in dry cleaning
8. to pick out; detect; see; recognize
9. to determine the location of (a target, the enemy, etc.)
10. to correct the accuracy of (gunfire) for a gun crew
11. to observe and report on (plays) as a spotter in sports

Substantiate 1. To give substance or true existence to
2. to give concrete form or body to; convert into substance; embody
3. to show to be true or real by giving evidence, prove, confirm

Supply 1. To give, furnish or provide (what is needed or wanted)
2. to meet the needs or requirements of; furnish; provide or equip with what is needed of wanted
3. to compensate for; make good
4. to act as a substitute in; fill or serve in temporarily

Tabulate to put (facts, statistics, etc.) in a table or columns; arrange systematically

Tally . 1. To put on or as on a tally; record
2. to count; add (usually with *up*)
3. to put a label or tag on

Tell 1. To enumerate; count; reckon
2. to relate in order; narrate; recount
3. to express in spoken or written words; utter; say
4. to report; announce; publish
5. to reveal; disclose; make known
6. to recognize; distinguish; discriminate
7. to decide; know
8. to know; inform; aquaint;
9. to request; direct; order; command
10. to state emphatically; assure

Total 1. 1. To find the total of; add
2. to equal a total of; add up to
3. (Slang) to wreck completely, demolish

Transcribe 1. To writ out or type out in full (shorthand, notes, a speech, etc.)
2. to represent (something spoken or written) in phonetic or phonemic symbols
3. to translate or transliterate
4. to arrange or adapt (a piece of music) for an instrument voice , or ensemble other than for which it was originally written
5. to make a recording of; specif., *Radio & TV* to record (aprogram, commercial, etc.) for broadcast as some latter time

Type 1. To classify according to type
2. to write with a typewriter; typewrite
3. *Med.* To determine the type of (a blood sample)

Warn 1. To tell (a person) of a danger, coming evil, misfortune, etc.; put on guard; caution
2. to caution about certain acts; admonish
3. to notify in advance; inform
4. to give notice to (a peron) to stay or keep (*off, away,* etc.)

Weld 1. To unite (pieces of metal, etc.) by heating until molten and fused or until soft enough to hammer or press together
2. to bring into close or intimate union; unite in a single, compact whole

Wield 1. To handle and use (a tool or weapon) especially with skill and control
2. to exercise (power, influence, etc.)
3. to govern or rule

Work 1. To exert oneself in order to do or make something; do work; labor; toil
2. to be employed
3. *a)* to perform its required or expected function, operate or act as specified *b) to operate effectively; be effectual*
4. to undergo fermentation
5. to produce results or exert an influence
6. to be manipulated, kneaded, etc.
7. to move, proceed, etc, slowly and with or as with difficulty
8. To move, twitch, etc. as from agitation
9. To change into a specified condition, as by repeated movement

Write 1. *a)* to form or inscribe (words, letters, symbols, etc.) on a surface, as by cutting, carving, embossing ir especially marking with a pen or pencil *b)* to form words, letters or symbols with pencil, chalk, typewriter, etc.; put down in a form to be read
2. to form or inscribe (words) in cursive style; opposed to PRINT
3. to spell (a name, word, etc)
4. to know (a specific alphabet, language, etc,) well enough to communicate in writing
5. to be the author or composer of (literary or musical material)
6. to draw up or compose a legal form
7. to fill in (a check , printed form, etc.) with necessary writing
8. to cover with writing
9. to communicate in writing
10. to communicate with in writing; write a letter or note to
11. 11.to entitle or designate in writing
12. to underwrite
13. to record (Information) in a computer's memory or on a tape, etc. for use by a computer
14. to leave marks, signs, or evidence of; show clearly

The following is a list of verbs requiring qualifiers. Some verbs do not (under all circumstances) fully indicate the specific action (behavior) desired. In such cases, a qualifier is added to make the meaning clear. For example, the verb "answer" may require a qualifier under certain conditions: "Answer the question" does not tell the soldier how to answer, and a qualifier is needed. The statement "the soldier will answer in writing" or "…orally in presence of the commander" clarifies what the soldier is to do. Some verbs may or may not use qualifiers depending on the performance desired, and, in some case, the qualifier may be implicit without being stated. For example, The word "order" ….
In the objective statement "The soldier, acting as a squad leader, will order the squad to perform six close-order drill movements," the objective is clear, the order will be given orally. In different situations, a qualifier may be required. For example, "The soldier acting as an MI Battalion Commander, will order in written form the implementation of the order."

Adjudge 1. to determine or decide by judicial procedure; adjudicate
2. to order judicially; rule
3. to award (costs or damages, for example) by law
4. to regard, consider, or deem

Answer 1. Respond in words or action. Used with *to*
2. to be liable or accountable, Used with *for*
3. to reply to
4. to respond correctly to
5. to fulfill the demands of; serve
6. to conform or correspond to
7. to be responsible for; meet; discharge (a claim or debt, for example)

Appoint 1. To select or designate to fill an office or position
2. to fix or set by authority or by mutual agreement
3. to order, require, or enjoin with authority; prescribe
4. *Law* to direct the disposition of (property) to a person or persons in exercise of a power granted for this purpose by a preceding deed

Appraise 1. To evaluate, especially in an official capacity
2. to estimate the quality, amount, size, and other features of; to judge

Authenticate 1. to verify identity in response to a challenge. ***Note:*** See challenge.
2. to verify the authenticity of.

Authorize 1. To grant authority or power to
2. to approve or give permission for; to sanction

Budget 1. To plan in advance the expenditure of (money or time, for example)
2. to enter or plan for in a budget

Build 1. to form by combining materials or parts.
2. to give form to according to a definite plan or process.
3. to establish and strengthen.

Certify 1. To confirm formally as true, accurate, or genuine; testify to or vouch for in writing
2. to guarantee as meeting a standard; attest
3. to assure or make certain; tell positively

Charge 1. to place a burden on; entrust with a duty, responsibility, task, or obligation.
2. to place an order or injunction upon, command
3. to instruct, warn, or urge authoritatively
4. to blame, accuse, or impute something to. Often used with *with.*
5. to load (a gun or other firearm).
6. to fill (any substance) with another substance

Clarify 1. To make clear or easier tao understand; elucidate
2. to make clear by removing impurities, often by heating gently

Classify 1. To arrange or organize according to class or category
2.to designate (a document, for instance) as secret and available only to authorized persons

Command 1. to direct with authority; give order to.
2. to have control or authority over; rule.

Commit 1. To do, perform, or perpetrate
2. to place in trust or charge; consign; entrust
3. to place officially in confinement or custody
4. to consign for future use or reference or for preservation
5. to put in some place to be kept safe or be disposed of
6. to pledge (oneself) to a position on some issue
7. to bind or obligate, as by a pledge
8. to refer (a bill, for example) to a committee

Compile 1. To gather (facts, literature, or other material) into one book or corpus
2. to put together or compose (a book, outline, or other collection) from materials gathered from several sources

Conduct 1. to direct the course of, manage; control
2. to lead or guide
3. to lead an orchestra or other musical group
4. to serve as a medium or channel for conveying; transmit

The verb 'Conduct' should be used ONLY when a more precise verb does not exist or when the use of a more precise verb would result in an unusually clumsy construction.
Example 1 of proper use:
Conduct a Deliberate Attack.
Example 1 of improper use:
Attack Deliberately.
Note: "Attack" is the proper verb in the above task statement – that is what you are going to do – but the construction is so clumsy that in this case it is preferable to use "Conduct."
Example 2 of proper use:
Suppress Enemy Fires.
Example 2 of improper use:
Conduct Suppression Operations.

CAUTION: The verb "Conduct" (as well as "Perform" and other verbs that simply mean 'Do') is often used to mask a serious error –

Count
1. To name or list (the units of a group or collection) one by one in order to determine a total, to number
2. to recite numerals in ascending order up to and including
3. to include in a reckoning, to take account of
4. to believe or consider to be; deem

Criticize
1. to judge the merits and faults of; analyze and evaluate
2. to judge with severity; find fault with; censure

Declassify To remove official security classification from (a document)

Describe
1. To give a verbal account of; tell about in detail
2. to transmit a mental image or impression of with words; picture verbally
3. to trace or draw the figure of; outline

Design
1. To conceive; invent; contrive to form a plan for
2. to draw a sketch of to have as a goal or purpose; intend
3. to make or execute plans
4. to create designs

Designate
1. to indicate and set apart for a specific purpose, office, or duty.
2. to select.
   Note: Usually said of a target.

Devise
1. To form or arrange in the mind; plan; invent; contrive
2. *Law* to transmit or give (real property) by will

Diagnose
1. To distinguish or identify by diagnosis, as a disease
2. to perform an examination of (a person or thing)

Differentiate
1. to constitute the difference in or between; serve to make a distinctions between.
2. to perceive or show the difference in or between; discriminate; distinguish.
3. to develop differences in by alteration of modification.

Direct
1. to conduct the affairs of; manage; regulate
2. to take charge of with authority; control
3. to conduct (musicians) in a musical rehearsal or performance
4. to move (something or someone) toward a goal; aim; point
5. to give instructions to (someone) for finding a place
6. to address to a designation
7. to address to a person or audience
8. to give guidance and instruction to (actors) in the rehearsal and performance of a play or the filming of a motion picture
9. to supervise the performance of actors in
10. to give commands or directions
11. to conduct a performance or rehearsal

Discuss
1. To speak or write about; treat of
2. to speak together about; talk over

Distinguish
1. To recognize as being different of distinct
2. to perceive distinctly; discern; make out
3. to detect or recognize; pick out
4. to make noticeable or different; set apart
5. to cause to be eminent or recognized

Document
1. to furnish with a document or documents.
2. to support (an assertion or claim, for example) with evidence or decisive information.
3. to support (statement in a book, for example) with written references or citations; annotate.

Edit
1. To make (written material) suitable for publication or presentation
2. to prepare an edition of for publication
3. to supervise the publication of (a newspaper or magazine, for example)
4. to omit or eliminate; delete
5. to integrate the component parts of (film, electronic tape, or sound track) by cutting, combining and splicing

Elaborate
1. To work out with care and detail; develop thoroughly
2. to produce by effort; create
3. to express oneself at greater length or in greater detail; provide further information

Enforce to see that the provisions (of an order or regulation) are carried out effectively.

Endorse
1. To write one's signature on the back of (a check, money order, or stock certificate) as evidence of the legal transfer of its ownership, especially in return for cash or credit indicated on its face
2. to place (one's signature) on a contract or other instrument to indicate approval of its contents or terms
3. to acknowledge (receipt of payment) by signing the bill, draft, or other instrument
4. to give approval of or support to; sanction

Estimate
1. To make a judgement as to the likely or approximate cost, quantity, or extent of; calculate approximately
2. to form a tentative opinion about; evaluate

Exercise
1. to put into play or operation; employ.
2. to bring to bear; exert.
3. to subject to forms of practice or exertion in order to train, strengthen, condition, or the like; put through exercises
4. to carry out the function of; execute; perform: *exercise the role of disciplinarian.*
5. to absorb the attentions of; especially to worry, upset, or make anxious.

Explain 1. To make plain or comprehensible; remove obscurity from; elucidate
2. to define; explicate, expound
3. to offer reasons for or a cause of; answer for; justify

Express 1. to make known or set forth in words; state; utter.
2. to manifest or communicate; as by a gesture; show; exhibit.
3. to make one's feeling or opinions known.
4. to make or suggest a representation of; depict.
5. to represent by a sign or symbol; symbolize.
6. to squeeze or press out, as juice from a fruit.
7. to send by special courier or rapid transport.

Exploit 1. To employ to the greatest possible advantage; utilize
2. to make use of selfishly or unethically

Find 1. to come upon by accident; meet with.
2. to come upon after a search.
3. to come upon through experience or study; obtain knowledge or a view of; attain.
4. to succeed on reaching; arrive at.
5. to learn by inquiry or research; determine; ascertain.
6. to consider; regard.
7. to recover (something lost).
8. to recover the use of; regain.
9. to declare as a verdict or conclusion.
10. to furnish; supply.

Forecast 1. To estimate or calculate in advance; especially, to predict (weather conditions) by analysis of meteorological data
2. to serve as an advanced indication of; foreshadow
3. to make an estimation or calculation in advance

Gather 1. To cause to come together; convene
2. to accumulate gradually; amass
3. to harvest or pick
4. to gain or increase by degrees
5. to collect into one place; assemble
6. to draw (a garment, for example) about or closer to something

Give 1. **a**. To make a present of; bestow **b**. to deliver in exchange or in recompense; pay for or sell. Used with *for:* **c**. to put temporarily at the disposal of; entrust to
2. **a**. to convey or offer for conveyance **b**. to bestow; confer **c.** to impart **d.** to grant **e.** to bestow
3. to contribute; furnish; donate
4. to provide (something required or expected)
5. to emit or issue
6. to award
7. to grant as a supposition; acknowledge

Guide 1. To show the way to; to conduct; lead; direct
2. to direct the course of; to steer
3. to manage the affairs of; govern
4. to influence the conduct or opinions of; be a criterion for or motive of

Illustrate 1. **a.** to clarify by use of examples, comparisons, or the like **b.** to clarify by serving and example, comparison of the like
2. to provide (a publication) with explanatory or decorative pictures, photographs, diagrams, or the like

Improve 1. To advance to a better state or quality; make better
2. to increase the productivity or value of (land)

Indicate 1. **a.** to demonstrate or point out with precision **b.** to state or exhibit in complete detail
2. to serve as a sign, symptom, or token of; signify
3. to suggest or demonstrate the necessity, expedience, or advisability of
4. to state, disclose, or express briefly

Insert 1. To put or set into, between, or among another or other things
2. to introduce into a body or text of something, interpolate
3. to place into an orbit, trajectory, or stream

Install 1. to put in an indicated place, condition, or status.
2. to put in an office, rank, or position
3. to settle in a place or condition indicated; establish

Institute 1. To establish, organize, and set in operation
2. to establish or invest in a position

Instruct 1. To furnish with knowledge; teach; educate
2. to give orders to; to direct

Invent 1. to conceive of or devise first; originate
2. to fabricate; to make up

Itemize to set down item by item; to list.

Judge 1. **a.** to pass judgement upon in a court of law. **b.** to sit in judgement upon; to try; hear.
2. to determine authoritatively after deliberation
3. to form an opinion about
4. to criticize; to censure

List 1. To make a list of; itemize
2. to enter in a list; register or catalogue

Locate to determine or set the position of.

Make to create or cause to happen.

Manage 1. to handle or direct with a degree of skill or specialized knowledge.
2. to exercise executive, administrative, and supervisory direction.

Difficult to observe or measure. Usually the analyst would be better off stating what the individual has to do in order to manage something. Since management is a complex set of skills, a task that uses the verb "manage" should be closely examined. It will often be found to be so broad that it must be split into several more well-defined tasks.

Mobilize 1. To make mobile or capable of movement
2. to assemble, prepare, or put into operation for war or similar emergency

Monitor 1. To check (the transmission quality of a signal) by means of a receiver
2. to test (a surface for radiation intensity)
3. to keep track by means of an electronic device
4. to check by means of a receiver for significant content
5. to scrutinize or check systematically with view of collecting certain specified categories of data
6. to keep watch over; supervise
7. to direct as a monitor
8. To watch, observe, or check, especially for a special purpose

Usually indicates a step or enabling objective.

Mount 1. To climb or ascend
2. to get up on; place oneself upon
3. to provide with a riding horse or horses
4. to prepare, place, or fix on or in an appropriate or convenient setting, as for display, study, or use
5. to provide with scenery, costumes and other accessories
6. *Military* **a.** to set guns in position **b.** to put in readiness and start to carry out **c.** to be furnished with or carry **d.** to post (a guard)

Note1. 1. To observe carefully; notice; perceive
2. to write down; make a note of
3. to show indicate
4. to make particular mention of; remark

Order 1. to handle or direct with a degree of skill or specialized knowledge.
2. to exercise executive, administrative, and supervisory direction.
3. To command a specific action to be executed.

Prepare 1. to put together.
Example: Prepare launcher for firing.
2. to combine elements and produce a product.
Example: Prepare a meal.
3. to make ready.
Example: Prepare to continue the attack.
4. to make other persons or things ready.
Example: Prepare a battle position.

Predict 1. To state, tell about, or make known in advance, especially on the basis of special knowledge; foretell

Prescribe 1. To set down as a rule or guide, ordain, enjoin
2. *Medicine* to order or recommend the use of (a drug or other therapy)

Preside 1. To hold the position of authority; act a chairperson or president
2. to possess or exercise authority or control

Program 1. To include or schedule in a program
2. to design or schedule programs
3. to provide (a computer) with a set of instructions for solving a problem

Propose 1. To put forward for consideration, discussion, or adoption; suggest
2. to present or nominate (a person) for a position, office, or membership
3. to offer (a toast to be drunk)

Prove 1. To establish the truth or validity of by presentation of argument or evidence
2. *Law* to establish the authenticity of (a will)
3. To determine the quality of by testing; try out
4. *Mathematics* **a.** to validate (a hypothesis or proposition) by proof **b.** to verify (the result of a calculation)
5. *Printing* to make a sample impression of (type)

Publish 1. To prepare and issue (printed material) for public distribution or sale
2. to bring to public attention; announce

Put 1. To place in a specified location; set
2. To cause to be in a specified condition: *put one's room in order*
3. To cause to undergo something; to subject
4. To assign; attribute: *put a false interpretation on events.*
5. To estimate: *He put the time at five o'clock.*
6. To impose or levy: *put a tax on cigarettes.*
7. To bet; wager (a stake)
8. To hurl with an overhand pushing motion: *put the shot.*
9. to bring up for consideration or judgement:
10. to adapt: *lyrics put to music.*
11. To urge or force some action: *put an outlaw to flight.*

Quantify 1. To determine or express the quantify of
2. *Logic* to limit the quantity of (a proposition) by prefixing an expression such as *all, some,* or *none.*

Quote 1. to reproduce or repeat a passage from of statement of
2. to refer to as authority or an example; cite\
3. *(Commerce)* to state (a price) or state the price of (something)

Rate 1. To calculate the value of; appraise
2. to place in a particular rank or grade
3. to regard or account
4. to specify the performance limits of (a machine or firearm, for example)

Recite 1. To repeat or utter aloud something rehearsed or memorized, especially publicly.
2. to relate in detail
3. to list or enumerate

Recommend 1. to endorse as worthy, fit, competent, exceptional, etc.
2. to make attractive or acceptable *Honesty recommends any man.*
3. To commit to the charge of another; entrust
4. To counsel or advise (that something be done).

Regulate 1. to control, direct, or govern according to a rule, principle, or system
2. to adjust to a standard, rate, degree, etc.
3. to adjust so as to make operate accurately

Repeat 1. To utter or state again
2. to utter in duplication of another's utterance
3. to recite from memory
4. to tell to another
5. to do, experience or produce again
6. to manifest or express in the same way or words

Reply 1. To give an answer in speech or writing
2. to respond by some action or gesture
3. to echo
4. *Law* to answer a defendant's plea

Respond 1. To make a reply; to answer
2. to act in return or in answer
3. to react positively or cooperatively

Restore 1. to bring back into existence or use; re-establish
2. to bring back to a previous, normal condition
3. to put (someone) back in a proper position

Solve 1. To find a solution to; answer; explain
2. to work out a correct solution to (a problem)

Stage 1. To exhibit, present, or perform on or as if on a stage.
2. to produce or direct (a theatrical performance)
3. to arrange and carry out: *stage an invasion.*

Standardize to make, cause, or adapt to fit a standard

Substantiate 1. To give substance or true existence to
2. to give concrete form or body to; convert into substance; embody
3. to show to be true or real by giving evidence, prove, confirm

Survey 1. To examine or look at in a comprehensive way
2. to inspect carefully; scrutinize
3. to determine the boundaries, the area, or the elevation of (land or structures on the earth's surface) by means of measuring angles and distances, using the techniques of geometry and trigonometry

Teach 1. To impart knowledge or skill to; to give instruction to
2. to provide knowledge of; instruct in
3. to cause to learn by example or experience

Translate to express in more comprehensive term, or in a different language.

Write 1. *a)* to form or inscribe (words, letters, symbols, etc.) on a surface, as by cutting, carving, embossing or especially marking with a pen or pencil *b)* to form words, letters or symbols with pencil, chalk, typewriter, etc.; put down in a form to be read
2. to form or inscribe (words) in cursive style; opposed to PRINT
3. to spell (a name, word, etc)
4. to know (a specific alphabet, language, etc,) well enough to communicate in writing
5. to be the author or composer of (literary or musical material)
6. to draw up or compose a legal form
7. to fill in (a check , printed form, etc.) with necessary writing
8. to cover with writing
9. to communicate in writing
10. to communicate with in writing; write a letter or note to
11. 11.to entitle or designate in writing
12. to underwrite
13. to record (Information) in a computer's memory or on a tape, etc. for use by a computer
14. to leave marks, signs, or evidence of; show clearly

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CP – 1

METHODS OF INSTRUCTION

OBJECTIVE:

Select the best method(s) of instruction to teach a specific task or subject.

Using:

a. Your approved task analysis report.
b. Your approved terminal learning objective
c. Staff and Faculty Student Book, Module CP – 1
d. TRADOC Regulation 350-70

The selected method(s) must effectively foster the acquisition of the skills, knowledge, and the students' ability to perform the required performance steps. You are to justify why you feel the methods you selected are the best ones to facilitate the teaching of the learning objective and maximizing student participation.

CRITERION TEST

Select the best method(s) of instruction to teach your final (45 minute) class.

Using:

a. Your approved task analysis report.
b. Your approved terminal learning objective
c. Staff and Faculty Student Book, Module CP – 1
d. TRADOC Regulation 350-70

The selected method(s) must effectively foster the acquisition of the skills, knowledge, and the students' ability to perform the required performance steps. You are to justify why you feel the methods you selected are the best ones to facilitate the teaching of the learning objective and maximizing student participation.

METHODS OF INSTRUCTION

You want to be sure to deliver your instruction using procedures that are as close to the state of the art as your circumstances will allow.

A variety of instructional methods are available to an instructor. The methods most frequently used are the:

- demonstration
- developmental conference
- instructional conference
- practical exercise

The developmental conference, demonstration, and practical exercise methods are discussed in depth in separate modules.

No one method of instruction is suitable for all teaching situations because no single method is flexible enough to meet the needs of the students in every learning situation. This module will aid you in selecting the methods of instruction for a given course.

The following pages describe 15 different methods of instruction. Each description includes a definition of the method, limitations of the method, procedures for using the method, and complementary methods. The complementary methods listed at the end of each description are methods that are commonly used along with the method being described. For example, the Demonstration is a method that is complemented by Independent Practice by the students (another method).

After the description of the 15 methods of instruction, you will find a section on auxiliary methods. Auxiliary methods are procedures or techniques to add variety to the method. They are usually not used just by themselves. Many auxiliary methods are only used for short periods of time during a class.

1. LECTURE

a. Definition. The lecture is a carefully prepared presentation of knowledge that does not require students to answer questions or respond in any way. An instructor may use this method in the introduction of a lesson to establish motivation and/or to inform students of the learning objectives. The lecture method is efficient in very large classes or when a great amount of material must be covered in a relatively short amount of time. Although the lecture is generally considered to be a group method, it may be adapted for individual use through the use of audiotapes, records, or videotapes.

b. Limitations. In itself, the lecture is a non-participative medium. Information flows in one direction – from the medium (instructor or device) to the student. The instructor cannot evaluate his/her teaching effectiveness because there is no way to tell if the students comprehend the material. The students receive no feedback to the way they are interpreting the material.

c. Instructional Procedures.

- Instructor presents an introduction
- Instructor covers the information.
- Instructor presents a summary and conclusion.
- Students are not required to participate or respond to the information.

d. Complementary Method.

- Independent Practice — to reinforce learning gained during the lecture.

2. INSTRUCTIONAL CONFERENCE.

a. Definition. The instructional conference is used to teach students, who have neither background experience nor basic information. In this type of conference, the instructor lectures in short segments that are broken up with periods for questions and discussion. The students base their answers to the questions upon the material the instructor has just finished covering. In this way the instructor can determine if the students understand the information by their responses to the questions asked. The students receive immediate feedback and the instructor evaluates their answers to the questions.

b. Limitations. For this method to be effective, the instructor must prepare a list of well constructed questions ahead of time. The questions should be challenging but not so complex that the students require more than a minute or so to formulate an answer. The instructor must then decide where to insert the questions throughout the lesson plan.

c. Instructional Procedures.

- A segment of information is presented in the form of a very brief lecture.
- Questions are posed to the group.
- Selected students are asked to respond.
- The above steps are repeated until all the instructional material is covered.

d. Complementary Methods, (Auxiliary Methods).

- Study Assignment — This can give students some background information to help put new concepts in context.
- Buzz Group — Instructor can assign a different question to small teams of 2-3 students to answer within a few minutes and have each team report its response as an alternative to asking questions to the whole group.
- Brainstorming — Students working in small teams can quickly generate ideas related to a key point or questions they would like to have addressed.
- Independent Practice — to reinforce learning gained during the instructional conference.

3. CONTROLLED PRACTICE EXERCISE

a. Definition. This method explains and demonstrates a task to a group of students who then perform the task in unison, with everyone practicing the same step at the same time. The students practice each step of the task along with the instructor. The instructor guides the class through the task in a step-by-step fashion until the class has completed the entire task. The controlled practical exercise is used to teach basic skills in both group and individualized instruction. Controlled practical exercises presented on videotape allow for individualized instruction, for example videotapes of aerobics classes. If a videotape is used in group instruction, the instructor is free to evaluate and reinforce student behavior.

b. Limitation. If the task being trained requires equipment or tools, this can be an expensive method because each student in the class must have his/her own set of equipment and tools. In large groups, assistant instructors are required to provide feedback to students at they perform the task.

c. Instructional Procedure.

- The first step of the task is demonstrated.
- Each student performs the first step of the task.

- The instructor confirms what the students have done and may ask questions.

- This instructor continues this step-by-step process of demonstrating a single step, having the students practice that step, and confirming the correctness of the step, until the entire task has been completed.

d. Complementary Methods,

- Lecture - to provide background information.

- Instructional Conference - to provide background information.

- Demonstration - to demonstrate the entire task before having the class do it along with the instructor.

- Tutorial - to provide one-on-one assistance to students who are not performing a given step correctly.

4. DEVELOPMENTAL CONFERENCE.

a. Definition. The developmental conference is appropriate when students have already acquired knowledge of the subject through past experiences, either school training or previous job experience. By pooling the knowledge and past experiences of the group, the instructor helps the students arrive at more clearly stated concepts, principles, or procedures. Students may direct their comments or questions to each other as well as to the instructor. The instructor monitors the discussion so that not everyone is speaking at once.

b. Limitations. The instructor must possess group dynamics skills. He/she must be able to keep the discussion on track and keep the participation well balanced. Good questioning technique is critical to the success of this method, especially the ability to ask open-ended questions. Also, the instructor must be a true subject matter expert and capable of discussing all aspects of the topic. This method can be time consuming.

c. Instructional Procedures.

- The instructor asks an open-ended question related to one of the key points of the discussion.

- The instructor calls on a student to answer the question.

- The instructor may ask other students to answer the same question, if appropriate.

- The instructor asks additional questions to further develop an idea.

- The instructor adds key points to the discussion only if he/she cannot draw them from the students.

- The instructor continues to develop the key points in this manner until all key points have been discussed.

d. Complementary Methods

- Role Play — to supplement a conference topic that involves interpersonal skills.
- Case Study —. to apply concepts discussed.
- Incident Process — to practice fact-finding skills related to the topic.
- In-Basket Exercise — to practice decision making.

5. **PRACTICE (COACH AND PUPIL).**

a. Definition. After students have achieved the basics in performing a skill, they may be paired so that one plays the role of coach while the other plays the role of pupil. Later, they reverse roles. The instructor assumes a supporting, role and supervises the progress of the students as they practice. If using this method in peer instruction (i.e. as remedial work by pairing an advanced student with a student needing extra help), the roles are not reversed. The advanced student remains in the role of "coach."

b. Limitations. Students must have enough background in the task to allow them to provide useful information when they are in the role of coach.

c. Instructional Procedures.

- Instructor provides directions.
- Instructor assigns students into pairs.
- The "coach" observes the "pupil" perform the task.
- The "coach" shows the "pupil" how to improve task performance.
- The instructor listens and observes the pairs of students as they practice to ensure the "coach" provides correct feedback.
- Students reverse roles.
- Steps are repeated until the objective is accomplished.

d. Complementary Methods.

- Lecture — to provide background information.
- Instructional Conference—- to provide background information.

- Demonstration — to allow students to see the task performed correctly before they attempt to practice it themselves.

- Role Play — to practice interpersonal skills.

- Tutorial — the instructor may need to assist a student who is having difficulty if the "coach" is unable to do so.

6. INDEPENDENT PRACTICE

a. Definition. This method is used when students need to practice a skill or task on their own. In self-paced instruction, students are guided through different exercises by a particular medium (for instance, workbooks or computer programs) and work along at their own pace. The instructor has a secondary role of supervising students and answering any questions that may arise.

However, independent practice does not have to be self-paced. It is used anytime the instructor requires each student to practice a skill or task independently of other students. For example, students might rehearse a briefing independently or practice preparing food independently. Independent practice is only used after students have received instruction on how to perform the skill or task.

b. Limitations. It is very time-consuming and expensive to develop procedural guides and workbooks for self-paced instruction if they do not already exist. Tasks that are complex may require constant instructor supervision rather than an occasional check. Assistant instructors may be required.

c. Instructional Procedures.

- The instructor ensures that the student has acquired the prerequisite knowledge and skills before allowing the student to practice independently.

- If the independent practice is self-paced, the instructor tells the student how to use the self-paced materials (e.g. workbook, computer, etc.).

- The instructor provides the student with all necessary equipment and materials.

- The student practices the task on his/her own.

- The instructor assists each student as needed, either by using the tutorial method or by directing the student to an appropriate learning resource.

d. Complementary Methods.

- Lecture — to provide background information.

- Instructional Conference — to provide background information.

- Tutorial — to assist students who are having difficulty.

- Coach and Pupil Practice — as a way to get feedback after a task has been practiced independently (e.g., for the task of giving a briefing).

7. **TEAM PRACTICE**

a. Definition. Team Practice refers to performing a collective task, that is, a task that takes more than one person to complete. Within a collective task, not everyone has the same assignment. For example, if an Army band plays "The Star Spangled Banner," not all soldiers will be playing the same instrument although the collective task is to play this song. Drill and ceremony is another example of a collective task. Team practice is necessary to ensure that the group is coordinated when the collective task is performed. The instructor assumes a supervisory role when team practice is the method used. Command Post Exercises and Field Training Exercises are examples of the team practice method.

b. Limitations. Sometimes students are responsible for learning how to perform more than one function within a collective task. For example, all students might be responsible for knowing how to function as S-1 (Personnel Officer), S-2 (Intelligence Officer), S-3 (Operations and Training Officer), S-4(Logistics Officer), and S-5 (Civil-Military Operations Officer). However, due to time constraints imposed on a team practice, not all students will be able to practice each function they are responsible for learning.

c. Instructional Procedures.

- Students are grouped into teams and given specific assignments and/or problems.

- Each team member reacts to the mission in a manner consistent with his/her assigned role.

- When all teams have completed the assignment(s), the instructor summarizes the activities. An After Action Review may be included at this point (see AAR Module for an explanation of After Action Reviews).

d. Complementary Methods.

- Lecture — to provide background information.

- Instructional Conference — to provide background information.

- Demonstration — to show how required skills/procedures are performed.

- Role Play — if part of the mission involves using interpersonal communications skills.
- Independent Practice — if individual tasks within the overall collective task are complicated enough that they need to be practiced alone, e.g., a musician would practice playing a song on his/her instrument independently before playing it along with other musicians.

- Coach and Pupil Practice — to practice individual tasks that are part of the collective task.

- <u>ROLE PLAY</u>

- <u>Definition</u>. Role Play allows students to reenact situations which they are likely to face on the job. A situation is presented to the class and some students are asked to assume roles and enact the situation. Other students observe the behavior. Following the scene, the class discusses its observations and the actors express their thoughts and feelings.

- Role Play can be used as a means for students to experiment with behaviors they think would be useful. Students may suggest Role Play of situations they think they may encounter in the future. Alternative ways of handling a situation may be tried by replaying the scene.

- <u>Limitations</u>. Students need to have some basic knowledge or background in the subject being taught before assuming a role. For example, if the subject were counseling, students would first be taught ways to establish rapport before acting in a Role Play which required use of this skill.

- The instructor must be well-versed in aspects of human behavior. This method can be time-consuming. Sometimes people may resist this method for fear of embarrassment

- <u>Instructional Procedures</u>.

- The instructor presents the situation.

- The instructor assigns roles.

- The instructor gives the observers directions, e.g. specific things to note.

- The role players enact the scene.

- Class discusses critical issues and solutions.

- Instructor summarizes key learning points.

d. <u>Complementary Methods</u>.

- Lecture — to provide prerequisite knowledge.

- Instructional Conference — to provide prerequisite knowledge.

- Demonstration — to illustrate an interpersonal skill, such as questioning technique.

- Case Study — to illustrate how human relations can influence decision making.

- Coach and Pupil Practice — to give students both practice and feedback on interpersonal skills.

9. **CASE STUDY**.

a. Definition. The case study method is used to teach difficult and critical knowledge in career-level courses or management seminars.** A description of a complex, real-life problem is presented to the group by one or more media (e.g. printed material, television, etc.). Students receive all of the surrounding facts, contributing factors, and incidental conditions. The students may be required to do further research in order to solve the problem. The instructor may require that students turn in written analyses of the case prior to class discussion. Students usually work in small groups. The case study method provides practice in problem analysis and decision making skills.

b. Limitations. Case studies are time-consuming to write. They are also time consuming to teach because they require complicated analysis. Case studies are intended for students who have had some actual experience in the subject matter.

c. Instructional Procedures.

- Instructor introduces the case.
- Instructor may give study assignments.
- The case is presented.
- Students analyze the problem and arrive at a solution.
- Instructor leads discussion to analyze the case.
- Students present their solutions.
- Instructor leads discussion weighing the merits of the proposed solutions.

d. Complementary Methods.

- Developmental Conference — to discuss how students reached their decisions and the pros and cons of the proposed solutions.
- Role Play — to demonstrate how interpersonal communications may have affected the case.
- Study Assignment — to research information needed to make a sound decision, e.g. regulations that apply to the case, etc.

**Short case studies that are not very complicated can be used to have students apply concepts they have learned in a course. These "mini" case studies do not require extensive background on the part of the student and can be used to teach a variety of subjects.

10. INCIDENT PROCESS

a. Definition. The incident process is a method used to teach fact-finding and subsequent decision-making in management and career level courses. The incident process is a short, true account of an actual incident which occurred. It may be presented via print, audiotape, videotape, or computer. The incident process deliberately gives the students far too little data to reach any decision. The challenge for the students is to decide exactly what additional information is required.

The instructor has all of the information about the incident but he/she furnishes it only as students request specific items of information. If the information is not requested, the instructor does not furnish it. At the end of a specified time period, the students must make a decision based upon the information they collected from the instructor. Students may be required to write out their decisions and the supporting reasons for it. As proposed decisions are presented, the class discusses their merit. The students then hear the real, or preferred decision and analyze the adequacy or inadequacy of their own fact-finding and decision making in contrast with it.

b. Limitations. The instructor must be an expert within the subject matter because he/she must be able to analyze the adequacy of all the proposed decisions students make. Students may propose an adequate solution that may differ from the actual solution that was used. The instructor must be able explain why a proposed solution would or would not be viable.

c. Instructional Procedures.

- The instructor explains the directions and time limits. (Students may be assigned to work in teams.)
- The incident is presented.
- Students ask questions concerning omitted data that they feel are pertinent to a solution.
- Instructor answers the students' questions until time limits have expired.
- Students analyze the incident and suggest a solution.
- Students present their solutions that are then discussed by the class.
- Instructor tells the group the decision made in the actual incident, the results of that decision, and includes any material the students did not request that was key to the final decision.

d. Complementary Methods.

- Developmental Conference — to discuss student analyses of the incident.
- Role Play — to illustrate how interpersonal communications may have affected the incident.
- Study Assignment — to research information relevant to the incident.
- Case Study — to illustrate the types of information that can be researched and necessary to reach a sound decision.

11. IN-BASKET EXERCISE

a. Definition. In-baskets simulate the paperwork aspects of an actual Job students are being trained to perform. Students get all the materials that they might expect to find in an "IN" basket if they held a particular position. They must then process that paperwork until all the items are in the "0UT" basket. For example, they must make decisions about items such as scheduling employees, responding to complaints, and delegating work assignments. Students receive a brief scenario telling them what position they hold, where they fit in the organizational chart, who works for them and other relevant information. They then have a specified amount of time to dispose of the items in the "IN" basket. Sometimes this method simulates stress by giving the students more items than they can reasonably complete within the allotted time for the exercise. Students work individually. This method can be used for evaluating as well as for training.

b. Limitations. The instructor must be extremely well versed in the topic to write realistic messages and to evaluate them correctly. As with the case study method and incident process, more than one solution may be correct. Since students may present solutions the instructor hadn't heard before, the instructor must be able to determine if such solutions would work. If the in-basket requires complicated decisions, the instructor may have to provide research material for the students.

c. Instructional Procedures.

- The instructor provides directions and time limits.
- The in-basket is given to the students.
- The items in the in-basket are discussed and the "school solution" is given. Possible alternative solutions are discussed.
- The instructor summarizes the key learning points.

d. Complementary Methods.

- Team Practice — an in-basket can be incorporated into a collective task that simulates the operations of a unit such as a Personnel Administration Center (PAC).

- Study Assignment — can be given prior to an in-basket exercise to give students information pertinent to the decisions that will be made during the exercise.

- Role Play — can be used to illustrate possible outcomes of decisions students suggest

- Incident Process — can be used prior to in-basket exercise to give students practice in identifying the type of data they need to support decisions they make.

12. **DEMONSTRATION.**

a. Definition. The demonstration is a method for showing students what to do and how to do it. It serves as a model or standard for performing an operation or doing a task or job. An instructor may present the demonstration or may use another medium such as television. The demonstration orients students to actual equipment prior to operating it. Demonstrations may also be used to illustrate interpersonal skills such as interviewing or counseling. Demonstrations can be presented to a group or on a one-on-one basis.

b. Limitations. Careful preparation, rehearsal, and technical competence are all necessary.

c. Instructional Procedures

- Show procedures for performance to the student.

- Continue procedures until task is complete.

d. Complementary Methods.

- Lecture — to provide an orientation or overview.

- Developmental Conference — to discuss what was demonstrated.

- Role playing — to illustrate interpersonal skills.

- Controlled Practical Exercise — to try out the demonstrated skill.

- Independent Practice — to try out the demonstrated skill.

13. **STUDY ASSIGNMENT.**

a. Definition. The study assignment is a method an instructor may use for either group or self-paced instruction. Although it is usually a reading assignment that students complete during class, they can also study other materials, e.g. maps or models. Instructors are available to answer questions as the students complete the study assignment. Instructors use study assignments when they have material to cover that the students cannot or should not complete as homework. For example, students may study models they cannot take home.

b <u>Limitations.</u> Unless detailed checking occurs, the instructor cannot be certain whether the student completes the study assignment. Therefore, instructors need to build in accountability by ensuring that students are tested on the application of the concepts they studied. Also, students will finish the assignment at varying rates, so the instructor should plan accordingly.

c. <u>Instructional Procedures.</u>

- Present the objectives of the assignment.
- State the time limit to complete the assignment.
- Have students apply the knowledge gained from the study assignment immediately in subsequent classes.

d. <u>Complementary Methods.</u>

- Lecture — to provide introduction or overview.
- Developmental Conference — to discuss concepts studied.
- Independent Practice — to apply concepts studied.

14. **<u>TUTORIAL.</u>**

a. <u>Definition.</u> This is an individualized method because the instructor works one-on-one with individual students. Tutoring may involve demonstration, conference, coaching, or guided practice, depending upon the nature *of* the task. This method is used with students who are having difficulty meeting the learning objective(s). However, tutoring is also used with students who have been assigned independent projects. For example, students in a class may each be assigned different research topics on which to write a paper. The instructor may set aside private conference sessions to meet individually with each student to ensure that everyone is on the right track.

b. Limitations. Tutoring is one of the most demanding types of instruction to conduct. It requires the instructor's complete attention. If tutoring is used to conduct remedial training, the instructor must be skilled at identifying the learning problem and correcting the learning difficulty. Tutoring is also an extremely time-consuming method.

c. <u>Instructional Procedures.</u>

- The instructor identifies the learning problem or assigns a new task to be completed.
- By observation, questioning, and listening to the student, the instructor determines the nature of the learning problem or the student's progress to date with the new task.

- By conference, demonstration, coaching and/or guided practice, the instructor assists the student to achieve the learning objective.

- The instructor may direct the student to additional resources.

- In remedial training, the instructor may have the student practice a task as the instructor coaches him/her.

- In remedial training, the instructor evaluates the new performance and either recommends progression, repeat performance, or re-start.

d. Complementary Methods.

- Lecture — to provide background knowledge.

- Instructional Conference — to provide background knowledge.

- Demonstration — to illustrate correct performance.

- Independent Practice — to refine a skill.

15. PROGRAMMED INSTRUCTION

a. Definition. Programmed Instruction is self-paced, small step learning that gives the student immediate feedback. Students are presented small bits of information, called frames, and are required to answer questions frequently as they work through reading these frames. The "program" tells the student right away whether or not the response to a given question was correct. This "program"' may be printed in a book, stored in a computer or presented in some audiovisual "teaching machine." Students are kept actively involved by answering questions and getting immediate feedback to their answers.

When the student answers a question correctly, the program directs the student to the next frame. If the student's answer is incorrect, the program may direct the student to re-read a previous frame. Some programs direct the student to a set of frames that review the concept the student doesn't understand. Programmed instruction allows students to work at their own rate.

Programmed instruction is generally used in self-paced instruction but it may also be used with groups of students in traditional classes. It requires active involvement of the learners and provides immediate feedback about the quality of the learner's response to questions.

b. Limitations. Programmed instruction is very time-consuming and expensive to produce. Programmed instruction on a computer also requires that each student have his/her own computer to use.

c. Instructional Procedures.

- Instructor introduces the program and states the objective.
- Instructor gives directions on how to use the program.
- Students work through the steps of the program until they have completed it.
- Students take the test covering the content of the program.

d. Complementary Methods.

- Lecture — to provide background knowledge.
- Instructional Conference — to provide background knowledge.
- Independent Practice — to reinforce the skill learned.
- Demonstration — to illustrate how the task is completed before students begin their step-by-step learning.

The following chart summarizes how to match an instructional method with an appropriate complementary method.

INSTRUCTIONAL METHOD	COMPLEMENTARY METHODS
1. Lecture	Independent Practice
2. Instructional Conference	Study Assignment Independent Practice
3. Controlled Practice Exercise	Lecture Instructional Conference Demonstration Tutorial
4. Developmental Conference	Role Play Case Study Incident Process In-Basket Exercise
5. Practice (Coach and Pupil)	Lecture Instructional Conference Demonstration Role Play Tutorial
6. Practice (Independent)	Lecture Instructional Conference Tutorial Practice (Coach & Pupil)
7. Team Practice	Lecture Instructional Conference Demonstration Role Play Independent Practice Practice (Coach and Pupil)
8. Role Play	Lecture Instructional Conference Demonstration Case Study Practice (Coach and Pupil)
9. Case Study	Developmental Conference Role Play Study Assignment
10. Incident Process	Developmental Conference Role Play Study Assignment Case Study
11. In Basket Exercise	Team Practice Study Assignment Role Play Incident Process

INSTRUCTIONAL METHOD	COMPLEMENTARY METHODS
12. Demonstration	Lecture Developmental Conference Role Play Controlled Practical Exercise Independent Practice
13. Study Assignment	Lecture Instructional Conference Developmental Conference Independent Practice
14. Tutorial	Lecture Instructional Conference Demonstration Independent Practice
15. Programmed Instruction	Lecture Instructional Conference Independent Practice Demonstration

AUXILIARY TEACHING METHODS THAT SUPPORT PRIMARY INSTRUCTIONAL METHODS

This section presents auxiliary teaching methods than can be used to add variety to the 15 methods previously discussed. These auxiliary teaching methods cannot stand-alone. They must be used as part of a primary method of instruction.

The auxiliary teaching methods are very specific procedures or techniques. For example, dividing students into small groups is a teaching strategy called subgrouping. This strategy could be used when the method is a case study or an incident process. Or, on the other hand subgrouping could be used as a variation of a method. Students might practice a task in small groups instead of pairs — a variation of the coach and pupil practice method. Students could be assigned to conduct role plays in subgroups. This is a variation of the role play method where one role play is conducted in front of the whole class.

A. **SUBGROUPING.**

a. Definition. A class is divided into small groups of usually no more than six persons for the purpose of completing an in-class assignment. Students may be given tasks to complete, issues to discuss or problems to solve. The instructor may assign different tasks or problems to each subgroup or can give each subgroup the same assignment to generate different ideas or perspectives on an issue. Subgrouping is a useful strategy to increase student participation, especially in large classes where all students would not otherwise be able to participate.

b. Limitations. Students must have enough background to successfully complete the assignment with minimal supervision. Sometimes a few students will not do their fair share of the work and let the others in the group "carry" them. To insure individual accountability, the instructor, may randomly call on students to explain group answers instead of having the group elect a spokesperson.

c. Guidelines for use.

It is best to divide students randomly into subgroups. For example, students can count off by four; all "ones" form a group, all "twos" form a group, and so on.

Provide clear directions, such as time limits or where to get supply materials.

If subgroups are to elect a spokesperson or secretary, tell them to do this before they begin the assignment.

Monitor the groups. You may need to clarify instructions, answer questions or get a group "back on track."

B. **BUZZ SESSION**

a. Definition. The class is divided into small groups to discuss a topic for a short period of time, usually no more than ten minutes. Instructors also use buzz groups to have students generate a list of questions they would like answered or issues they would like discussed. No advance preparation is required. When used to discuss a topic, no group reports back to the class as a whole are required. The instructor leads a discussion *of* the whole class after the buzz session is finished.

b. Limitations. None.

c. Guidelines f*or* Use. Ensure that the students understand they do not have to come to a resolution on the issue. This is a strategy to stimulate thought, not complete a task.

C. **BRAINSTORMING.**

a. Definition. Students list as many ideas as they can about a given topic for 5 to 15 minutes. A recorder writes down all ideas given, even repeats. At the end of the specified time limit, the group evaluates all of the ideas listed. This evaluation period will also have a time limit. If the class is divided into more than one group, the class is then reconvened as a whole and the different groups present their lists.

b. Limitations. None.

c. Guidelines for Use.

- Instructor should clearly explain that during the first phase of brainstorming, no criticism or discussion is allowed. The idea is to generate as many ideas as possible. Quantity is preferred oven quality.

- Instructor should monitor the brainstorming to ensure that the students do not elaborate on ideas during the first phase and that <u>all</u> ideas are being recorded.

- Instructor should periodically let students know how much time they have left.

D. **<u>PANEL DISCUSSION</u>**

a. <u>Definition</u>. A group of three to six students each present a brief lecture on a different aspect of a topic. After these brief lectures, the panelists answer questions from the class. Panelists sometimes discuss or debate issues among themselves under the leadership of a moderator (usually the instructor). For example, the overall topic might be how to start a physical fitness program for civilian employees. One student might report on how to set up health risk assessments. A second student might report on how to organize physical fitness activities. A third student might report on how to get a policy written and approved to guide the program. A fourth student might report on classes that could be offered, e.g., nutrition.

b. <u>Limitations</u>. Student participation is very low when the panelists are presenting their lectures. The instructor does not have complete control over the content of these lectures. The instructor must have confidence that the students assigned to the panel will do a good Job of covering the material.

c. <u>Guidelines for Use</u>.

- The question and answer session should be held after all the panelists have finished their lectures. Otherwise, material to be covered toward the end of the presentation might come up in an earlier question/answer session.

- The instructor may wish to assign advance readings to the class.

F. **<u>CRITICAL INCIDENT</u>**.

a. <u>Definition</u>. Actual student experiences are used to illustrate the concepts of a course. Students are required to share a "critical incident" which bad a significant impact on their careers. For example, a student might describe *a* decision he/she once made and the results of that decision. The critical incident strategy is suited for advanced courses in leadership, management, or counseling.

b. <u>Limitations</u>. Students must have actual experience within the subject matter being taught. This strategy is not suited for large classes because it would take too much time to listen to and discuss an incident from each student.

c. <u>Guidelines for Use</u>.

- Allow students enough time to think about a critical incident relevant to the course. You may assign a short write-up of a critical incident as homework.

G. **<u>EDUCATIONAL GAMES</u>**

a. Definition. Games bring the element of competition into the classroom. Educational games range from simple reviews of facts to involved simulations of systems. Educational games are not difficult to construct. Instructors can use the basic framework of popular television or board games. For example, an instructor could pattern review questions after the TV game "Jeopardy" or the board game "Trivial Pursuit." The winning student or team can win "prizes" such as the Championship Title, etc.

Even simpler competitions can be set up. For example, the team who can list the most alternatives for solving a management problem wins the game. Some instructors use the concept of a Jigsaw puzzle to construct a game, giving students pieces to put together to complete an integrated picture. For example, students might be given all of the positions of an organization and then be required to construct an organizational chart. Jigsaws are useful for teaching organizational skills and problem-solving skills.

Many commercial games are available, especially within the broad areas of management and human relation skills. If you use a commercially published game, you may need to adapt it to fit your particular course and target population. For instance, you might change positions such as "vice-president of human resources" to the appropriate military equivalent position.

b. Limitations. A general rule, avoid games with extremely complicated rules. Otherwise, students may spend more time learning the rules than learning the concepts illustrated by the game.

c. Guidelines for Use.

- Remember; the starting point for constructing any educational game is the learning objective(s). Consider what critical skills or knowledge you want to reinforce before you develop any game.

- Ensure the directions are clear to the students. You may wish to provide written directions if the game has several different steps.

Appendix H: Methods and Techniques for Delivering Instruction

Contents

<u>H-1. Methods of Instruction</u>. This paragraph provides a general description and other information for each of the important methods of instruction.

Note: TRADOC schools are not restricted to the methods of instruction listed in the following table. When a school identifies another method of instruction, please provide TITLE, DESCRIPTION, and USES information to the HQ TRADOC ATTN: ATTG-CD, for inclusion in this table.

METHOD	DESCRIPTION	USES	INSTRUCTOR/ STUDENT RATIO REMARKS	ABBRE-VIATION
Brainstorming	Students are presented with a problem and develop constrained solutions.	Provides a means for students to develop solutions to unpredictable situations or problems.	Instructor/ facilitator control driven	BR
Case Study	The student is presented a description of a situation and is required to solve problems or identify actions related to the situation.	Provides an excellent means for a student to solve problems either individually or as a member of a group.	Instructor/ facilitator control driven	CS
Conference (Discussion)	Student-centered instruction in which the instructor leads a discussion of the learning objective. Student participation is elicited. The three general types of discussion are as follows: • Directed discussion --- The instructor guides the student discussion so the facts, principles, concepts, or procedures are clearly articulated and applied. • Developmental discussion --- The instructor guides the discussion to pool student knowledge and past experience to improve the performance of all students. • Problem solving conference --- The instructor uses the conference to find an acceptable answer or solution to a problem. The instructor defines the problem and encourages free and full student participation.	• Prepares students for --- •• Follow-on training. •• The application of theory and procedures to specific situations. • Stimulates interest and thinking. • Develops imaginative solutions to problems. • Summarizes, clarifies, and reviews the learning objective material.	1:25 maximum	CO
Demonstration	The instructor and/or support personnel show and explain operation or action to the students. The student is expected to be able to perform the operation or action after the demonstration.	This method of instruction shows how something is done. Some of its more important uses are to --- • Teach --- •• Manipulative operations and/or procedures, e.g., how something is done. •• Equipment operations or functions, e.g., how something works. •• Safety procedures. •• Teamwork, e.g., how people work together to do something as a team. • Illustrate principles, e.g., why something works. • Set workmanship standards.	Equipment/ safety driven	DM

Continued on next page

H-1. Methods of Instruction (Continued)

METHOD	DESCRIPTION	USES	INSTRUCTOR/ STUDENT RATIO REMARKS	ABBRE-VIATION
Flight: dual or solo	Used in aviator courses in conjunction with other type of instruction.	See "Practical Exercise" and "Test" below.	Equipment/ safety driven	DF/SF
Gaming	Applies the concepts of a game, i.e., rules, turn taking, winning, and losing to a learning situation. The students "play" the game by obtaining information, making decisions, and taking actions required to accomplish the game objective. Games may be on a board, but with current technology, they will probably be played on a computer. The student may tend to "play" in terms of winning and losing instead of thinking in terms of learning objectives.	Provides --- • A means for individuals to make decisions, take actions, and see the results of those actions to accomplish the game objective without killing people or destroying materiel. • Immediate feedback for increased learning. • A means for students to be exposed to determine solutions to unpredictable situations to increase learning. • A means for motivating students.	Instructor/ facilitator control driven	GA
Guest Speaker	An individual, other than a member of the normal Staff and Faculty, presents information to support a specific lesson to the class. *Note:* Avoid having the speaker present a "Lecture" instead of a discussion-type lesson.	Experts provide information directly supportive of the learning objectives. The most important uses of the guest speaker is to provide --- • Expertise not available within the course staff. • Information based on extensive experience. • Current information. • Motivation.	See discussion or lecture methods.	GS
Lecture	An individual verbally passes information to attending students. Student participation is minimal. It has low training efficiency. It violates all three of the self-paced learning principles. Note: Dissemination of information in written format is usually more efficient and effective.	Lecture is a means to tell students information they need to know. Some of its more important uses are to --- • Disseminate information that is not yet available in print. • Motivate, e.g., set the stage for a demonstration, discussion, or performance. • Orient.	1: audience	LE
Panel Discussion	A panel consisting of instructors, guest speakers, or a combination discuss material pertinent to the lesson learning objective. The panel presents information and responds to student questions.	Provides a variety of views and opinions concerning material or problem for which there is no one correct solution.	Instructor/ facilitator control driven	PD
Practical exercise (Performance)	Student is required to perform the action required by the learning objective under controlled conditions to the established standard.	The most efficient way to learn to do something is to actually do it. This method of instruction is the best way for a student to learn to perform the required action to the established standard. Examples: operation and repair of equipment; exercises (e.g., field training exercises [FTX]); forms completion. Also, see "CBI."	Safety/ equipment driven	PE
• Hardware oriented	Performance is on actual equipment, to include simulators and training devices.	Used when the actual hardware is available and the risk to individuals and equipment is kept to an acceptable level.		
• Non-hardware oriented	Performance not involving actual equipment, e.g., a paper-based exercise.	Used when the hardware is not required to perform the required actions, e. g., "Plan Convoy Operations."		
Research/Study	Students research/study material in preparation for subsequent course requirements. It is associated directly to specific, identified lesson(s). Research/study is conducted during regular training hours.	Research/Study is used to provide the students the opportunity to locate, analyze, and determine facts, procedures, and concepts on their own.	Instructor control driven	RS

Continued on next page

H-1. Methods of Instruction (Continued)

METHOD	DESCRIPTION	USES	INSTRUCTOR/ STUDENT RATIO REMARKS	ABBRE-VIATION
Role playing	Similar to the case study method. The students act out the simulated situation. The student may assume the duties of a staff member in an organization and perform the work of that position.	Provides --- • Simulated experience in the situation being acted out. • A means to assess decision making in a specific role. • Provides opportunities for the student to develop solutions to unpredictable situations and conditions.	Safety and instructor/ facilitator control driven	RP
Seminar	A group, usually guided by an instructor, seeks solutions to problems.	It is primarily used by a group working on advanced studies or a research project to --- • Provide general guidance to the group. • Provide information on techniques and approaches being explored. • Develop imaginative solutions to problems under study.	Instructor/ facilitator control driven	SE
Student panel	Students participate as members of a panel. They discuss material directly related to the lesson learning objective.	Student panels are used to obtain --- • Full student participation in a discussion. • A variety of student views, especially on material directly associated with subject matter expertise. See "Peer Instruction."	Instructor/ facilitator control driven	SP
Study assignment	Assignments are provided to the students that they must complete as either independent or supervised study. This is testable material.	Provides a means to --- • Capitalize on individual differences, thereby improving learning. • Provide enrichment material. • Reduce classroom time.	Instructor control driven	SA
Test • Hardware oriented • Non-hardware oriented	Student are evaluated on the performance of the action required by the learning objective. Performance test is on actual equipment, to include simulators and training devices. Performance not involving actual equipment, e.g., a paper based exercise.	Used to determine if the --- • Students can perform the objectives to the Established standards. • Instruction teaches what it is supposed to train.	Safety/ equipment driven	TE
Test Review	After-action review of test with students.	Increases learning.	Safety and instructor control driven	TR
Tutorial	The instructor works directly with an individual student. It includes adaptive instruction, stimulates active participation, and promotes effectiveness and safety.	The primary uses are to --- • Teach highly complex operations. • Provide individual remedial assistance. *Note:* See "CBI" (this appendix).	Instructor/ facilitator control driven	TU

H-2. Techniques of Delivery. This paragraph provides a general description and other information for each of the important techniques for delivering instruction. These techniques are listed in two groups for clarification purposes: Instructional Strategies and Media.

H-2-1. Instructional Strategies. These strategies use the Methods of Instruction (Paragraph H-1) and Media (Paragraph H-2-2) to present the lesson material.

TECHNIQUE	DESCRIPTION	USES	INSTRUCTOR/ STUDENT RATIO REMARKS	ABBRE-VIATION
Group-paced Instruction Large Group Instruction	The training of individuals in a group that moves through the training as a class (in lock-step). A means of delivering training that places much of the responsibility on the instructor or facilitator for the presentation and management control of the training. The instructor uses various methods of instruction , e.g., discussions, demonstrations, practical exercises.	Provides for easy management of students. The large group process provides a means to manage the training method easily. Students are moved through the training as a group with minimal attention to individual training/assistance requirements.	See method of instruction used. 1:25 maximum for effective instruction. Modified downward by method of instruction used.	GP
Small Group Instruction (SGI)	A means of delivering training which places the responsibility for learning on the soldier through participation in small groups led by small group leaders (SGL) who serve as role models throughout the course. SGI uses small group processes, methods, and techniques to stimulate learning. The SGL is an instructor who facilitates role modeling, counseling, coaching, learning, and team building in SGI.	The small group process is a technique for learning in small groups that capitalizes on (uses) student experiences, requires intensive student interaction, and makes each student responsible for his/her own learning. Cooperation takes precedence over competition. A faculty advisor is required. SGI provides --- • Individualized learning. • Team building. • Maximum exchange of ideas.	1:16 maximum. Modified downward by method of instruction used.	SG
Individualized, self-paced Instruction	The individual completes lessons at his/her own pace. This Instructional Strategy is extremely effective when properly managed. It is the foundation for programmed learning and individual CBI. When used in a formal environment, it frees up instructors to provide 1:1 instruction to individuals needing assistance. This technique does not reduce instructor requirements.	• It is of immense value because it is built on the following three principles: •• Information is presented in small steps. •• Learner is given immediate feedback. •• Learner learns at his/her own pace. • To be most effective, management controls are put on the time it takes to complete the training and the number of times the learner may take a test to prove mastery of the objective.	safety/ equipment driven.	IP
Mentoring	Involves a knowledgeable individual who trains, tutors, and/or guides a subordinate or individual, e.g., a leader mentors subordinates.	Provides direct one-on-one training and guidance to the individual. Provides direct real life, on-the-job experience with that guidance, e.g., an apprenticeship or OJT program.	Mentor control driven.	ME
Peer instruction	Individuals learn from their peers in a group (team, squad, etc.) when working toward achieving common learning objectives. Students are trained by instructors; then the trained students train other students.	It is useful for team building if properly controlled by the staff. This technique leverages the advantages of individual training, peer pressure, and motivation to achieve a team objective. Peer training is most effective for training job-related individual critical tasks.	Facilitator control driven.	PI
Programmed instruction	Information is structured to guide the student through the material (paper, CBI, simulation, etc.) depending on the student's response to questions. It is a form of self-paced instruction. Immediate feedback is provided for student responses.	Programmed instruction takes advantage of how we learn. It provides information in small bits, provides immediate feedback, and lets the individual progress at his/her own pace. See "CBI" (this appendix).	Safety or instructor control driven.	PG

H-2-2. Media. These media incorporate various Methods Of Instruction in the lessons and can be presented using the Instructional Strategies listed in paragraph H-2-1 above.

TECHNIQUE	DESCRIPTION	USES	INSTRUCTOR/ STUDENT RATIO REMARKS	ABBRE-VIATION
Computer Based Instruction (CBI)	CBI is a means for delivering instruction; it is not a method of instruction. It is essentially individualized self-paced or group-paced interactive instruction combined with multimedia presentations. Interactive instruction is student/group centered performance oriented training that requires students/groups to practice what they learn, receive immediate feedback, and take tests. The priority for interaction is between the student and the equipment/subject matter. In CBI, the computer courseware controls the training content, delivery pace, and learning sequence based on trainee input. The courseware is designed using a variety of methods of instruction to lead the student/group through the learning process.	CBI is of value for presenting learning material in any situation that will maximize individual or group learning by full use of multiple learning methods. It provides a means of practicing activities without causing damage to individuals or equipment. Each member of the group may have a different role to play. In *CBI* - • Information to be learned is presented in small bits. • Learners are provided rapid feedback. • Learners proceed at their own pace within certain limits. • Material presentations take advantage of media benefits. • Exercises/simulations can be repeated many times using/developing different solutions to problems, e.g., "what if" drills. • Students can be exposed to unpredictable situations to maximize learning.	See method of instruction used. Instructor/ facilitator control is often a major factor if used in an institution.	IC
Correspon-dence	Provides a relatively low-cost means for providing a learning opportunity that maximizes student participation. Is usually text based but not necessarily so. The two basic arrangements for correspondence study are as follows: • Independent study --- The individual student works alone at a time and place of his/her own choosing. Lesson material designed for individual, self-paced learning is provided by the proponent school. • Group study --- The students meet with a group leader available to facilitate the discussions and guide learning toward achieving the learning objective. Tests are usually taken by each student independently.	• Provides --- •• Learning opportunities to personnel who are unable to attend residence courses. •• Prerequisite instruction for attendance at a resident or other type distributed course. •• "Electives" for students in other fields of study. •• Continuing education opportunities. • Supplements on-the-job training.		CC
Field trip	The students visit a place to acquire information required to support a specific learning objective. The instructor/guide may provide a discourse and/or written material concerning the site. Audio/video tapes may be used at the site.	The primary uses of a field trip are to motivate and to show the relationship between provided information and the reality of the location.	Instructor/ facilitator control driven.	FT
Simulation	Any representation or imitation of reality simulating part of a system, the operation of a system, and the environment in which a system will operate are three common types. There are virtual and constructive simulations.	• Replaces/Complements live training. • Provides the means to safely practice an action or activity under any condition. • Can be used for individual training (e.g., repair of equipment, gunnery) or group training (e.g., fighting a tank or tank company). • May be used in a single computer or distributed over a LAN/WAN to multiple simultaneous users	Instructor/ facilitator/ observer control and equipment driven.	SI

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H-2-2. Media (Continued)

Simulator	Substitutes for, by emulation, the functions and environment of an actual process, equipment, or system. Any training device, machine, or apparatus that synthetically reproduces a desired set of conditions. Used specifically for training, it is a relatively complete item or training equipment, using electronic/mechanical means to reproduce conditions necessary for an individual or a crew to practice tasks/learning objectives. It represents the operational equipment physically and functionally to varying degrees. *Note:* A simulation allows for the use of simulations to train/practice tasks and supported missions.	• Substitutes for real equipment, thereby --- •• Saving material and maintenance costs. •• Freeing real equipment for operational use. •• Increasing training safety. *Note:* Generally, the higher the fidelity, the higher the transfer of training. • May be used in conjunction with simulations, e.g., a tank simulator with operational simulations presented to the trainees.	Instructor/ facilitator control driven.	SO
Television	A broadcast or networked television program is a primary technique to deliver the instruction. See video teletraining	Used to distribute training to a number of students simultaneously. Different methods of instruction may be used to present the material.	See method of instruction used.	TV
Training Aid	Provides a means for reducing the training development/training costs and improving efficiency. Training Aids clarify information and present it in a concise, efficient manner during training, whereas job aids actually replace training.	• Enables trainers to conduct and sustain task-based training in lieu of using extensive printed material or an expensive piece of equipment. • May increase performance as on-the-job training or job aids. • Ranges from quick reference memory aids to battalion simulation games.	Training aid and instructor control driven.	TA
Training Device	Three-dimensional object and associated computer software developed, fabricated, or procured specifically for improving the learning process. Categorized as either system or nonsystem devices. • System device. Device designed for use with a system, family of systems, or item of equipment, including subassemblies and components. It may be stand-alone, embedded, or appended. • Nonsystem device. Device designed to support general military training and nonsystem-specific training requirements.	• Provides the means to safely practice an action or activity under any condition. • Substitutes for real equipment, thereby --- •• Saving material and maintenance costs. •• Freeing real equipment for operational use. •• Increasing training safety.	Training device and instructor control driven.	TD
Video tape/film	A videotape/film is not a method of instruction. It is used as the primary means to deliver the instruction. The tape/film is introduced verbally or with text. The students are informed as to what they are to learn from the tape/film. Different methods of instruction may be used to present the material, e.g., demonstrations can be used to present information. Film/Video images can be presented in CBI.	Use videotape/film to show action that is too dangerous, cannot normally be observed by the eye, or cannot be readily observed. They are specifically useful for showing --- • Things or actions that are very small or large. • Actions that occur too fast or slow. • Things that are dangerous, such as destroying a bridge.	See method of instruction used.	FI (Film) TP (Tape)

H-2-2. Media (Continued)

<table>
<tr>
<td rowspan="2">Video teletraining</td>
<td>An interactive transmission vehicle for training delivery. Two types of VTT:
• Broadcast VTT. TRADOC broadcast VTT consists of two networks:
•• TNET equipment and communications are contractor owned and government operated.
•• SEN uplinks and studio equipment are government owned and contractor operated; downlinks are government owned and operated.</td>
<td rowspan="2">Used to simultaneously distribute training to a number of students. Different methods of instruction may be used to present the material.

Using VTT, proponents can ---
• Increase class size and the span of coverage, including OCONUS.
• Reach students in remote locations.
• Reduce travel and per diem costs.
• Provide critical, short-notice training.
• Originate training from any network link.
• Conduct joint, multiservice, federal, and civilian courses.
• Interlink with other DoD, government, and private sector training networks.</td>
<td>See method of instruction used.</td>
<td>VT</td>
</tr>
<tr>
<td>• Desktop VTT. This type of VTT is the delivery of instruction by the instructor/facilitator directly to each student's desktop computer. Allows instructor/facilitator-to-student(s) and student-to-student interaction via audio, video, chat mode, and file sharing.</td>
<td>See method of instruction used.</td>
<td>DT</td>
</tr>
</table>

IA-1

SELECT MEDIA

OBJECTIVE:

Select two (2) different media forms for use in teaching the approved Terminal Learning Objective during the presentation of the designated 45-minute class.

CRITERION TEST:

Select two (2) different media forms for use in teaching the approved Terminal Learning Objective during the presentation of the designated 45 minute class in accordance with the criteria given in Module IA-I.

Select Media

Media is the means of conveying or delivering information to assist in the teaching and learning process. It can take any form, structure, or composition when it is employed to assist in the teaching of specific information or action.

There are numerous forms of media. Each is capable of aiding in the learning process when it complements and is appropriate for the subject. All media forms have advantages and disadvantages. In selecting a media for in teaching of a specific task or element of, its capability to aid must be carefully weighed.

The primary factor in choosing a media is determining if it is necessary to achieve the learning objective. Could the objective be achieved effectively without the use of media. In most instances, the answer will be, it could be taught, but the effectiveness of the instruction and learner ability to comprehend is lessened. The use of media can and does increase the effectiveness of instruction from the instructor and learner aspects. Thus the task is to determine what would be the best media form to increase the learner's capability to master the learning objective.

In your introduction to the Adult Learning Concept, three primary learning domains were discussed. These must be considered in media selection. As you recall, certain types of stimuli are more appropriate for one learning domain than another. You should also recall (review if needed) the strategies that can be employed in each learning domain to enhance and reinforce the learning of essential elements and to increase their long-term retention. Lets take a quick review of these three domains and activities that occur in their sub-categories.

a. Knowledge. Associated with thinking, analytical and reasoning tasks, although its execution often results in some form of physical product.

Rule learning.	Detecting.
Identifying symbols.	Classifying.
Making decisions.	Analyzing.
Synthesizing.	Evaluating

b. Skill. Associated with hands on performance, manual or physical activities, which also requires an extensive body of knowledge.

Performing gross motor Skills.	Positioning movements and recalling procedures.
Steering and guiding continuous movement.	Prior knowledge of theory, applications, and safety.

c. Affective. Associated with how one feels about an activity, task, or in being within an activity. It is the attitude one develops for the effort to be expended.

Valuing of learning.	Attending to instruction.
Making judgments.	Attitude formation.
Internalization of value.	Demonstration of behavior

Media provides the stimulus to foster and increase the learner's ability to complete the learning objective. The Task Analysis Report delineates all the performance steps, skills and knowledge's necessary for the learner to master the task. Considering the task, what media would provide the most appropriate stimulus to facilitate the transfer and mastering of the performance, skill or knowledge. Could this competency be accomplished with only the spoken or written word. Would a picture, drawing, or the real item make learning easier.

Recall from your own experience, the frustration of trying to visualize the conduct of an action using only the written word. What other forms of stimuli would have made learning easier. You may also recall, how the media changed to complement the change in the task.

Use the following examples as a point of departure when selecting media. In each example you could use several different media forms. Think of the stimulus each media provides for that learning objective. Do they enhance or take away from learning. Is the stimulus provided appropriate for what is to be learned.

Learning Objective (Action)	**Media**
Identify Enemy Aircraft	Video, Flash Cards GTA, Models, Film Strip
Remove Brake Shoes	TM Graphics, Overhead Video, Actual Parts
Prepare Collection Voucher	AR, Overhead, Actual Form
Prepare Chapel for Service	AR, Overhead, Video, Slides, Actual Site, Mock -up.
Conduct Sales Interview	AR, Overhead, Video,

In looking at the examples, you may have thought of other media that could be used. In themselves there are no best or worse forms of media. Their appropriateness must be judged on how they enhance the learner's ability to master the subject.

After considering media selection from the learning objective and learner's perspectives, the reality of scarce resources must be addressed. The availability and appropriateness of existing media should be compared against the cost and time of developing new media. First choice should be existing media, which provides the learning stimulus needed. When the desired media does not exist or falls short of what is needed, alternate media should be sought, before developing new.

When media must be developed, development should focus on what is cost effective for the learning gain. A thorough analysis must be done to compare what is better against what is necessary. What media would provide the stimulus needed. Is the video, in color, the only means to provide the learning stimulus. Will the instructor be able to use properly, have time or need to use, and will it be available.

Safety, hazards, and environmental impact must also be considered in the selection of media. This is critical when using actual equipment or accessories. Will the media increase the safety requirements or raise the risk level inappropriately for the target audience. Does the media pose environmental issues. Will the use of certain media create distracters or resource drains, that are not offset by their contribution to learning.

Definitions, advantages and disadvantages of various media forms are provided at the end of this text. These descriptions will provide you with a broader scope of media characteristics.

In the initial selection of media you may have selected several that meet all the basic criteria for use. Before making the final selection there are other criteria to consider. Consider the following in making the best possible selection.

> Student activities cannot be easily carried out with the media.
>
> The basic medium is under developed or being tested and may be unavailable for practical application when required.
>
> Certain media are more effective for large audiences, others for small audiences.
>
> Many new courses must be designed to interface with the existing programs.
>
> Media, which require long lead-time for development may not be useful when scheduled training date, do not allow a long development cycle. Some training approaches such as closed circuit TV may result in low cost per student graduate overall, but the initial investment is high.
>
> Sometimes people resist innovations if they are significantly different from existing techniques. Additional resources must be allocated to training and public relations or traditional forms must be used.
>
> Time, money, skilled personnel, and equipment must be available if the courseware is to be developed in house.
>
> The projected life cycle cost of a media approach may be significantly higher than other equally useful alternatives, thus rejecting high cost alternatives.
>
> If trainees have low reading ability, or would be limited in their ability to use certain kinds of media, then reject this media as inappropriate.

Media selection should be made after evaluating the media against the criteria for your learning objective and resource constraints. Develop a simple decision matrix to aid in comparing the advantages and disadvantages of initial selections; all have advantages and disadvantages. Select the one that maximizes the learning effect, while meeting resource constraints.

The following is a condensed version of Media definitions and their advantages/disadvantages from TRADOC Pamphlet 350-30.

MEDIA DEFINITIONS

AUDIO ONLY SYSTEMS

AUDIO TAPE SYSTEM: An audio system that uses a tape recorder to record sound on magnetic tape that may be played back upon request by a listener.

TELEPHONE CONFERENCE SYSTEM: A telephone system that allows multiple-station two-way audio communication at two or more remote locations.

AUDIO - VISUAL SYSTEMS

AUDIO TAPE WITH PRINTED MATERIAL: An audio system that uses a tape recorder to record sound on magnetic tape that may be played upon request. Printed materials such as text, worksheets, programmed instruction and test material used with audio tapes.

FILMSTRIP PROJECTION SYSTEM WITH AUDIO: A sound filmstrip projector using single frame visual filmstrip with sound on magnetic tape or records. Visuals and sound may be manually or automatically synchronized, or be completely independent of one another.

LIQUID CRYSTAL DISPLAY (LCD): A system, which can project the computer’s digital image on a screen. Depending on the make and model it may also have audio and video capabilities.

MOTION PICTURE PROJECTION SYSTEM: 16mm and Super 8mm Films. A motion picture projection system that use professionally prepared commercial or locally produced 16mm or 8-8mm sound motion picture films for training.

MICROFORM WITH INFORMATION MAPPING AND AUDIO: A training system to support individualized instruction composed of imagery in an information map format, a microform projector, an audio tape in a cassette and an audio cassette playback unit.

SOUND SLIDE PROJECTION SYSTEM: A system for presenting information by means of an audio tape and a series of synchronized projected visual slides.

TELECONFERENCE SYSTEM: A Telecommunication system that allows audio and visual two-way communication between two or more remote locations.

TELEVISION - CABLE (CATV): A CATV system offering selective multiple channels encoded programming to cable network patrons. A typical system consists of the master station and relay of programs via sub-stations to system subscribers. Programming may also be generated and transmitted between substations offering multiple options for conference or training.

TELEVISION-PORTABLE VIDIO TAPE SYSTEM: A low cost video tape recording and playback system, which is self-contained and portable. Typical systems consist of one or two mobile video cameras, a small scan video tape recorder and a monitor/receiver. Immediate area programming and open broadcast reception and recording are standard.

COMPUTER ASSISTED INSTRUCTION (CAI): A form of individual instruction that employs digital computer technology to manage and display information to a student, accepts student responses, provide knowledge of results, and select subsequent learning events.

COMPUTER MANAGED INSTRUCTION (CMI): A computer that has the required instructional design program. It can receive information about student behavior from terminals either on or off line and give them information about their achievement. The design normally gives instructions for changes, which are indicated by student response and may drop them to easier exercises or automatically cycle them to a higher response exercise.

COMPUTER SIMULATION

COMPUTER SIMULATION ON-LINE: A trainee station equipped with a computer terminal in which the trainee operates in direct interface with the computer as part of the program loop. By their inputs, the trainee determines their allowable performance limits and evaluates the effect of their inputs upon the program.

COMPUTER SIMULATION OFF-LINE: A trainee station equipped with a computer terminal enabling a trainee to select a computer simulation program, enter their own variables (batch processing) and run the simulation to determine the performance of the simulated system under a variety of conditions.

ELECTRONIC INFORMATION DELIVERY SYSTEM (EIDS): EIDS is the Army's standard, computer - based instruction, and interactive video disc (IVD) delivery system for education and training materials. This system is capable of random access to text, motion, video, color, audio, and graphics.

GAME COMPUTER SIMLATION: Any contest governed by rules, between a single player and a computer with visual attachments where the contest is a model of some real world system or event.

OPERATIONAL EQUIPMENT WITH MANUALS: A unit of operational equipment being used for instructional or training purposes with its operator's guides, maintenance manuals and parts lists (electronic black box, rifle, or truck). Usually associated with individual training leading to team training.

OPERATIONAL SYSTEM REAL ENVIRONMENT: An operational system used for training such as aircraft, ship, or truck vehicle. P art task, full task, sub-team, team, or multi-team training may be conducted in conjunction with or independent of normal operations.

OPERATIONAL SYSTEM SYNTHETICALLY SIMULATED: A device, machine, apparatus, or paper model that synthetically reproduces a condition or conditions of an operational system. It may or may not physically represent the operational system, but will functionally allow an individual or crew to practice operational tasks in accordance with training objectives.

SIMULATOR: Training hardware that is designed specifically for training purposes to simulate operational equipment/systems and simulates the environment of a training situation.

SPECIMEN SETS: An instructional kit containing samples of similar items, liquids, or materials that may be tested or evaluated for identification, quality or type.

PHYSIOLOGICAL TRAINER (HOSTILE ENVIRONMENT): A training device designed to place controlled stress on the human sensory system through the use of physiologically and/or psychologically adverse or low threshold signals, to enable a trainee to learn to function in adverse pressure, temperature, pain, or disorientating motion environments.

VISUAL ONLY

CHALKBOARD/WHITEBOARD: A vertical surface, either wall mounted or portable, with a dull finish which may be written on with chalk or dry markers. Some boards are magnetic, which will permit the use of magnets for holding lightweight materials in place.

CHARTS/POSTERS: Charts can be prepared in a variety of formats and sizes. Considerable detail in subject matter is possible on the format. The major advantage of these aids over other types of two-dimensional aids lies in their flexibility. They can be used either in the classroom or in the field, with no special facilities or power requirements. Charts and posters are identical except a chart is temporary (used during a class) and a poster is displayed indefinitely.

FILMSTRIP PROJECTOR SYSTEM: A single frame projector or attachment that will accept a filmstrip format and project the film images upon a viewing screen.

OVERHEAD PROJECTOR: A system consisting of a horizontal stage projector designed to use a vertical throw for focusing an enlarged transparency image upon a projection screen.

SIGNS/SLAPSTICKS: These are normally cardboard or plastic on which cue words or phrases are impressed. The signs can be magnetized for use with a magnetic chalkboard or prepared for attaching to other surfaces. They are used in sequence, one at a time, in order to emphasize main points.

SLIDE PROJECTOR SYSTEM: A class of single frame picture projectors that will accept standard 2* x 2* slides and project the contained image upon a viewing screen.

TEACHING MACHINE: An individualized instruction system composed of a fixed linear sequence of small step programmed instruction frames (still) and manually controlled device to display the information.

PRINTED MATERIALS

CASE STUDY FOLDER: A folder of detailed background information on a problem requiring a decision or plan of action; to be read by a trainee prior to their making a decision on how to resolve the issue, and participating in a critique on various solutions.

FLASH CARDS/STUDY CARDS: A set of cards designed to be used by an instructor in front of a group of trainees to drill the group in the recall of memory type information. Study cards are a deck of cards to be used by an individual student.

HANDOUTS: Handouts are a class of printed materials issued to a student for their use and supplement regular instructional materials. The instructor usually prepares handouts.

JOB/PERFORMANCE AIDS: Job/Performance aides are a class of printed materials that aid in job performance by providing data that should not be committed to memory, such as checklist routines, conversion tables, equipment test tolerance matrices, and the like.

REFERENCE BOOKS AND CHARTS: Reference books are a class of printed materials used to identify certain facts or background information such as dictionaries, encyclopedias or technical publications. Reference charts consist of printed material (pictures or graphically displaying data) used to identify certain facts or for background information. Included are data charts, schematic diagrams, topographical maps, and the like.

SELF SCORING EXERCISES: Self scoring materials include exercises and quizzes used in conjunction with standard curriculum, programmed instruction or independent study. These have the capability of providing immediate student feedback without the use of prolonged scoring procedures.

WORKBOOK: Workbooks are a class of printed material used to supplement or replace regular instructional texts by providing a mix of text information and practice exercises within a single book or manual.

TEXTBOOK: Textbooks are a class of printed material dealing with a subject of study, intended for use at a specified level of instruction and used as the principal source of study.

PROGRAMED TEXT BRANCHING: A printed text having frames of information and multiple choice questions organized in such a way that the trainee’s choice of response directs him to carefully sequenced, tested, and revised selections.

PROGRAMED TEXT LINEAR: A printed text containing a fixed sequence of small frames of information usually in the form of questions requiring the trainee to construct a simple written response, which is immediately evaluated.

SPECIAL AND NON- STANDARD ITEMS

AUTOMATIC RATERS-INFORMAL TRAINING: A class of electro-mechanical response rating devices used primarily for informal refresher type training. Typically, a gaming approach is used to offer multiple choice type questions to the trainee. Immediate feedback upon choice selection is given in the form of right, wrong, or item score as well as cumulative score.

GAME, COMPUTER SIMULATION: Any contest, governed by rules, between teams or individuals, where the contest is a model of some real system, and a computer is used in performing some of the calculations necessary for the operation of the model as in computer supported war games.

MOCKUPS, PANELS, DEMONSTRATORS: A visual training aid that allows an instructor to demonstrate manipulative principle, movement in time or space, steps of a procedure, linear effect within systems or changes in condition of equipment or systems through one or more operating phases.

MODELS AND STATIC MOCKUPS: A three-dimensional training aid built to scale representing operational equipment. It may be a solid or cutaway model capable of disassembly by which spatial and/or sequential relationships are represented. Also included are layout modes, recognition model sets, and terrain or topographical models.

MULTI-MEDIA

MULTI-MEDIA: Multi-media is the use of more than one form of media in a presentation or block of instruction.

ADVANTAGES AND DISADVANTAGES

The course designer/instructor is faced with a vast amount of media from which to choose. The advantages and disadvantages of these generic media are presented in the following pages. The designer/instructor of training materials must evaluate the media with respect to the objectives and the subsequent learning activities then select the media that will best accomplish the training objectives.

OVERHEAD TRANSPARIENCES/PROJECTOR:

Advantages: Program and transparencies easily modified. Time spent on each picture is instructor controlled. The instructor faces the students and may write on the transparency. Production cost is minimal. Use with large and medium sized group and in a lighted room.

Disadvantages: Needs projector and screen. Limited student interaction. Visibility guidelines are often violated.

AUDIO TAPES:

Advantages: Easy to produce, transport and operate. Good to support low-reading skills, to teach recognition and/or discrimination of specific sounds, second language reinforcement and with programmed instruction.

Disadvantages: Fixed rate of presentation, initial development of script time consuming. Script and dialogue pacing must be suitable for content and student abilities.

SLIDE/AUDIO:

Advantages: Easy to produce, reproduce and modify. Suitable for any group size. Instructor/student controlled, easy to transport and operate, moderate cost to produce and operate.

Disadvantages: Minimum student interaction. Requires time for script and film preparation. Problems with film and auto synchronization. Room lights need to be dimmed.

FILM STRIPS:

Advantages: Fixed sequence. Instructor/student controlled. Easy to operate, store and transport. May be used with audio tapes or instructor read script. Filmstrips are suitable for all group sizes.

Disadvantages: Requires extensive planning before production or modification (artwork and script writing) fixed sequence. Requires room lights to be dimmed.

FILM:

Advantages: Easy to operate, store and transport. Use is suitable for large and small groups. Realistic situations and environments.

Disadvantages: Requires extensive planning and production time to produce or modify. High production cost, film, and equipment becoming obsolete. Little student interaction. Viewing room needs to be dark. Has almost become extinct, with most of the older training films converted to videocassettes.

TELEVISION/VIDEO:

Advantages: Shows motion and realistic performance and environment. Suitable for large and small groups. Equipment easy to operate and tapes easy to store. (Replacing 16mm film)

Disadvantages: Scheduling constraints if ETV (Educational Television) requires multiple monitors for large groups and limited student interaction. Requires extensive planning and cost to produce and service equipment.

PRINTED MATERIAL:

Advantages: Easy and economical to produce or update. Easy to store-use and transport. Suitable for all groups and instructor/student controlled. Good for identification and recall objectives.

Disadvantages: Limited to recall, recognition, definition or discrimination objectives. Time and cost for color printing. Lack of student interaction.

SIMULATORS:

Advantages: Reduce actual training costs and reduces damage to real equipment. Reduces possibility of injury to student. Allows for practice of manual skills and develops tactile sense. Student feedback and testing

Disadvantages: Expensive, non-portable, development time and cost are high. Requires considerable up front analysis before development.

MODELS/MOCK-UPS:

Advantages: Reduces training costs. Three dimensional training. Actual equipment not needed.

Disadvantage: May be expensive in time and money to produce. May not be a good representation.

COMPUTER ASSISTED INSTRUCTION (CAI):

Advantages: Custom designed instruction. Student interaction, standardized training. Reduces training resource requirements.

Disadvantages: Expensive in time and money for initial development.
Equipment repair costly. Not portable. Can only be used by one or two students.

INTERACTIVE VIDEO DISC:

Advantages: Simulates equipment that is not available, too large, too dangerous, highly expensive and easily damaged.

Disadvantages: High initial production costs, produced videodisc cannot be changed easily, facility modifications may be required.

MULTI-MEDIA:

Advantages: Increases the number of sensory stimulus provided students. Increases students interest and simplify learning.

Disadvantage: Can be costly to develop and produce. Requires skill instruct to move from one media form to another. May also detract from learning if media is inappropriately selected for effect rather that learning.

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IA–2

DEVELOP MEDIA

Objective:

> Develop two different forms of media for use in the 20-minute mini-Class and for the 45-minute presentation. Each type will conform to the standards associated with the specific type.

Criterion-Reference Test:

> Develop two different forms of media for use in the 20-minute mini-class and for the 45-minute presentation. Each type will conform to the standards associated with the specific type.

DEVELOP MEDIA

GENERAL

The purpose of media and training aids is to help convey meaning. This is the most important principle to consider in the use and development of these. For the remainder of this text the term “media” will be used to denote media or training aids or both.

The nature of the task and experience of the audience are used to determine what media is needed. The task nature should have been identified during the task analysis conducted in Analysis Phase. A description of the audience for task training is prepared in the Design Phase.

Media helps students learn by seeing, hearing, or when appropriate, touching and doing. Media is an addition to, not a substitute for, an instructor. Media can help to simplify learning by presenting the learner with a clearer example of the task components. They aid by providing a physical dimension or a visual representation of new information or procedures. Media can be employed to simplify a complex task by presenting its components in manageable chunks or clusters.

Media can be used to organize the teaching points of the tasks. In this manner their use could show or explain the logical application, progression, and linkage of one performance step to another. Student attention and retention can be increased by the use of appropriate media. The increase in the number of learner’s senses stimulated directly affects the attention given and retention of learning.

Before beginning to revise existing or to develop new media, its effect on the instructor and institution must be considered. Media used in training should be of the best quality and technology advanced as needed. There are multiple factors that must be considered in developing media. Unfortunately there is one single factor, other than need, that can be used in determining the best form of media to develop. Changes in references, equipment, or procedures must be considered in revising existing media.

Media used should be appropriate to the task taught and the learning environment. It should be simple for the instructor and students to use. Media with complex operation requirements take the instructor’s attention away from the students; and distract the student’s from focusing on other learning activities.

Media used must be accurate. Inaccurate media detracts form the course and causes a questioning of instructor competency.

The considerations discussed in Module IA-1, Select Media, should be reviewed before actual development of media. The reasons for selection of media forms in the design phase may be overcome by the reality of the development phase. The learning effect sought may not equal or exceed the cost to develop and distribute. In actual physical form or use of the media may increase safety requirements or impose risks greater than can be tolerated in the training environment. Resources of time and/or money may not be available to develop, produce, and distribute for scheduled implementation. If the task is evolving, it may not be practical or cost effective to develop elaborate media that will soon be inappropriate for use.

As an Instructor or Developer/Writer your role in the school institution will influence the depth of your involvement in the development of media. This, however, may only be in relationship to availability and amount of resources available to you for the courses you teach or develop. All have a responsibility to provide accurate and viable training.

The Developer/Writer has several advantages in the development of media. Their time perspective is long term, looking out to see change and means to manage it within the learning environment. They will also have access to information on future developments, course changes, and probable resources available to develop training products.

The Developer/Writer will have access to technology that will afford them the ability to apply computer-based programs in the design and development of training products. With these capabilities (Designer's Edge, Tool Book) the range of media possibilities increases to include Computer Assisted Instruction, Computer Based Instruction, and Interactive CDROM. (Given the availability of student hardware). The use and application of the computer-based programs is beyond the scope of what can be taught in this short time. Training in their use will be accomplished on the job.

The Instructor, while vexed with a here and now in the classroom time perspective, has the advantage of being able to personally assess and receive student feedback on how effective the media is in the application. This insight can be used to develop short-term improvements and then provided to developer/writers for long-term revisions.

Because the primary function of Instructors is to perform classroom instruction, they normally will not have access to or the time to employ newer technological innovations. Although, media development is not their primary function, many media forms are easily adapted or modified. Changes in lesson media should not be done in isolation, but discussed with section/division leaders and developer/writers. Revision of existing media or new developments must be a direct improvement to learning and not change the established learning objective.

General information and features of the most familiar and commonly used Media that can be readily developed or revised by developer/writers and instructors are presented below. This information is intended to provide a springboard for those involved in developing or presenting instruction. It provides the reader with a broad array of media characteristics and applications. This information can be used in final selection and media development. More detailed and technical information may be found in specific texts, in libraries and resource centers, dealing with media forms and instructional design. Because these are continually being revised and new publications issued, a specific list is not given. Search library catalog listings in categories of Media and Instructional Design, depending on the system employed they may also be filed under Education.

CHALKBOARDS AND WHITE BOARDS

Chalk and white boards share the same advantages because they share the functions. The white board's creation eliminated chalk dust, messy cleaning and irritating screech. Do not use it for an overhead screen, the glare is harmful to the eyes. The availability of the boards in classrooms makes them an economically good choice for use. The boards should be used to write key points; diagrams; show progress from one point to another;

sketch out ideas; model; and to work out practical examples. They allow for immediate correction and ability to add additional information as the instruction progresses.

Always **print** at least two-inch block letters (use upper and lower case) for easy readability. If you have trouble spelling, make up note cards and place in chalk tray for later use. Move to the right as you print to reduce the slanting of letter. Stand slightly away from the board with your arm half-extended to minimize changes in letter size. Use colors to show differences on diagrams or in categories.

If the information is complex or time-consuming, print it on the board before class and cover it until you need it. Use paper, sliding board or a pull down screen to cover it until needed.

Use appropriate writing tools: chalk for chalkboards and dry erase markers for white boards. Erase with felt erasers. Be careful to avoid inhaling chalk dust or dry marker cleaning fluid fumes.

CHARTS AND GRAPHS

Cards and illustrated charts visually emphasize and clarify important points, concepts and ideas. Insure the use and content of proposed graphs and charts support your learning objective. Graphs and charts present numbers and data in simple visual form. They can be used to compare the magnitude of similar items at different times and to show relative sizes/parts of a whole.

If graphs or charts are intended for long term use, coordinate with your local or supporting Training Support Center (TSC). Most TSC are capable of producing high quality graphics in support of training. You must consider the lead-time required to submit requests and to produce materials, in planning the use of these in training.

Make graphs or charts on white or colored poster board. Print titles in one color and text in another color. Identify and label all parts and titles. Legibility depends on the size of the lettering and the viewing distance. When using colors on bar graphs use lighter colors for the taller elements and darker color for shorter. If using multiple colors on a single element, apply darker at bottom and lighter tones at top.

The Kodak School Rule to determine proper size is one inch lettering for each 32-foot distance. Larger is even better, given it will fit.

For short term use or when presenting materials that frequently change consider preparing your own. Some tips on preparing these follow.

1. Print in block letters using upper and lower case. Use CAPITAL letters for emphasis and titles.

2. Print letters 1 inch for every 32-feet or distance.

3. Limit information to 10 lines or less.

4. Print only key points. Use short words and phrases.

5. Use wide tip, water-soluble felt markers.

6. Use strong, bright hues and dark colors for ease in reading. Use red only for emphasis.

FLIPCHART (BUTCHER BOARD)

The Flipchart, more commonly referred to as the Butcher Board, is used in the same way as chalk and white boards. They have the advantage of being portable. Their lack of width is made up in depth, as many sheets as needed can be used. The flipchart is effective in small groups; the sheets can be flipped back and forth or hung on walls. They are developed essentially with the same consideration used in graphs and charts.

Some tips to make the use of flipcharts more effective are provided below:

1. Make sure flipchart pad fits your flipchart stand.

2. Use a lined pad instead of a plain one, to make it easier to draw straight line and align your text. If these are unavailable make yourself a lined sheet to place behind to help keep letters aligned.

3. Design visuals on note paper, before drawing them on the actual flipchart pad.

4. Lightly write your text in pencil before using the markers.

5. Use the 7 x7 Rule: no more that 7 words on each line and no more than 7 lines to a sheet. The 6 x 6 rule is even better.

6. Use water-soluble markers or those specially designed for flipcharts.

7. Avoid using yellow, pink or orange markers. These are difficult for the audience to read.

8. Avoid using too many colors: one dark and one accent color works best.

9. Lightly pencil in your speaker’s notes next to key points. Write a cue for the next topic at bottom of each sheet to help introduce the content of the next sheet.

10. Use white-out correction fluid to cover small errors. For larger areas, cover the mistake with a double layer of flipchart paper, then make the correction.

11. Properly store and transport your flipchart pads.

12. Be sure to print your text and titles neatly and clearly.

13. Create your flipcharts early.

OVERHEAD PROJECTORS

The overhead projector is probably the most common media form to most in the military school system. Its ease in use coupled with the mechanic advantage of having few moving parts make it an easy choice. Its is portable and is simple to use. Transparencies for use with the overhead projector can be made on most office copiers. Making transparencies is quick, easy and inexpensive.

The overhead projector can be used in artificial or normal daylight conditions. When using dark or colored transparencies the classroom may need to be darkened.

In the preparation of transparencies, consider what you want to emphasize to or focus students' attention on. Transparencies can be used to show key words, phrases, form outlines, forms, and graphs. They can be structured to show the development of a desired action, such as the succeeding steps in the processing. Use the largest font size practical and do not over crowd your transparency. Remember that the text or illustration should be in landscape format, more horizontal than vertical. The Power Point Program offers a quick and easy tool to develop masters for transparencies (more on Power Point will be discussed in conjunction with the use of LCD projection). Generally stay with six or less words per line and six or less lines per transparency. Use upper and lower case for the text; restrict all caps to main headings.

Practice with the overhead projector to include the placement of transparencies. Mount all transparencies on borders and number their display sequence. Ensure you have the correct markers if you are going to write on the transparency during your presentation. Be sure the transparencies are in proper order for showing: the writing should appear the same as on a book page with the top of the text facing the rear of the overhead.

LIQUID CRYSTAL DISPLAY (LCD) SYSTEM (Computer Projector) (Sometimes at SSI referred to by the manufacturer name "Proxima."

The Liquid Crystal Display System, commonly referred to as LCD projector, is actually a composite of equipment needed to reach full Multi-media dimension. The system can consist of a LCD projector, computer, VCR, audio player and document camera. The basic non-multi-media configuration consists of a LCD projector and Computer.

The LCD serves as a projector and sound system; it can display images from the connected computer, VCR, sound from these plus an audio source and images fraom the document camera. They are able to project in color. Most do not have or have very little internal storage capabilities for use in presentations.

The LCD is multimedia capable with the appropriate accessories. The type of projector and availability of accessory equipment determine the specific system capabilities. You may on occasion hear the system referred to by the particular manufacturer's name, for example: Box-Lit, In-Focus, and Proxima. The LCD system provides much clearer and more detailed imaginary than possible with the overhead projector. The LCD is suitable for presenting briefings or instruction in a classroom environment. It is fairly simple to setup and use. Because each brand and model has different features the manufacturer's instruction manual for each model should be followed for setup and use. Operators should become familiar with all features and controls before attempting to use in class presentations.

LCD projectors are expensive. The system becomes even more costly when component costs are added in. The projector alone can range from $2,500 to $7,200, with the cost of a basic computer adding another $600 to $2,500.

Because of the high cost, it is not reasonable to expect to have one in every classroom. This must be considered in developing training exported to other users. The diskette, video, or cassette will be of little use without the necessary hardware to employ them. If the system is on hand upgrading existing media pose no addition equipment costs. Changes to presentations are easily and quickly made with the Microsoft PowerPoint Program.

MICOROSOFT POWER POINT

Microsoft's Power Point is an excellent tool for preparation of Media. The program itself is not a media, however; because of its frequent association with briefings and training courses it been enveloped in that context.

Power Point makes it extremely easy to develop and prepare high quality visuals. With the large selection of templates scaled for projection it is only a matter of filling in the key points/words or bullets. While Power Point can be used to make masters for making transparencies, its effectiveness is increased with the use of a LCD system. When displayed with LCD, the capability to import pictures and graphics is exploited.

This section is not intended to teach PowerPoint, as the instructions for its applications in the user's manual consume over a hundred pages. There are specialized texts available on the commercial market for those wanting more specifics "how to" on using PowerPoint. As with all new equipment/ procedures of changes in them, refer to the operator's manual for specifics.

GENERAL CONSIDERATIONS

How many slides should used. There is no set number, but the nature of the task and audience should provide an indication of what really is needed to facilitate learning the objective. Because slides are easy to make with PowerPoint, they can exceed what is needed. Do not become a member of the "Death by PowerPoint" society. Limit slide text to six lines of six or less words.

Use the largest font size possible (no smaller than 30). The projected imagine should be at least 1 inch for every 20-foot distance from the screen. Do a self-check, by stepping back about 8 feet from the monitor, if the text can be read easily it will probably be all right.

Use fonts that have a consistent thickness in the letters (san serif). Consider Arial, Century Gothic, or Universal fonts. Avoid serif fonts because on their narrowness. Use no more than 2 or 3 font types per page if needed to highlight specific points.

Graphics can make a presentation more interesting. Ensure graphics are relevant to the subject. Graphic/pictures for their own sake can confuse your audience of its intent. Use in place of text, or supplement text with graphics. Do not put text over graphic, as it is hard to read. Use only what is needed. Too much can divert the student's attention from what is important.

Color has been found to increase the persuasive power of presentation and hold attention. In developing color presentations consider the display effect of the color range. Use dark background with light colored text. Keep text and graphics in the same color range and intensity; pastels with pastels and bright with bright.

a. Avoid color combinations that accent lack of color-perception, e.g.

   Red near Green tends to vibrate

   Blue on Black looks fuzzy

b. Background Colors suggest specific emotions.

   Green -- stimulates interaction

   Black -- connotes finality

   Blue -- calming, conservative

   Red -- passion, competition

c. Arrange colors in Earth-to-Sky order. Place light colors on top of darker "heavier" colors.

d. Use Graphic Shapes to increase clarity. The eyes tend to gravitate toward geometric shapes, rows of bullets, and other graphic elements before reading the text.

The layout of the presentation should not mirror student handouts. Use bullets rather than full sentences. Use punctuation only for quotes. Justify all text left except titles.

Use the spell check.

Number slides with a color that barely shows against background.

35MM SLIDE PROJECTOR

35mm slides are an excellent choice when color and high resolution are essential to depicting the object correctly. They are especially good when large imaging is needed for a large audience. They require more time for preparation and are more expensive than overhead transparencies. 35mm slides are normally available local TSC. In some instances, you can take them yourself, if you know basic photography, and have the TSC develop and mount them.

The slide projector requires a little more practice that the overhead. Ensure the slides are properly placed in the carousel or tray in the correct sequence. Practice slide advancement or timer if it is to be used. Lighting is more critical than with an overhead and most class areas will need to be darkened.

EDUCATIONAL TELEVISION (ETV) AND VCR

More Americans can tell you how to set the TV than the alarm clock. Since its inception, the TV has permeated and shaped the life and culture of America. Nothing could be more natural than watching how to do something, revisiting the past or seeing history as it unfolds before you on the TV. The TV has the awesome power to present learning in motion replete with all the nuisances that accompany the conduct or performance of the learning objective.

The learning objective should drive the use and selection of suitable subject matter for the classroom. While ETV has a varied educational programming, it is unlikely that they will present subjects suitable for training on a recurring basis for continuing courses. When programming is aired that relates to and can be beneficial in teaching the learning objective, consideration should be given to acquiring a copy for training purposes. This would insure continuity from class to class and allow for flexibility in the time of presentation. Often the fee is waived or lowered when used in educational programs. If a copy was locally reproduced the procedures in gaining copy right release must be followed before using in succeeding classes or incorporating into lesson plans, especially exportable training materials.

TV with the coupling of the VCR is an excellent media for the presentation of high action, rapid movement, or dangerous activities. The Army's former 16mm training films were converted to videocassettes. In addition to older remastered training films, there are numerous training videos available in the new video format. If your section does not own a copy, ensure to allow required lead-time to order, preview, or review before presentation. These are available from the local servicing TSC.

Videos can also be developed to support presentation of ongoing Army instruction. Consideration should be given those tasks that would be enhanced by visual stimulation. These would normally be those that can not be conducted in the training environment: lack of facilities, equipment, to dangerous or time sensitive. Tasks selected for development of Videos should be long term and stable with few modifications expected.

Normally funding for training videos has to be programmed and paid by the school budget. The developer is normally responsible for developing the scripts, obtaining or coordination for equipment, clothing and any other specialized material.

Videos are probably the most expensive in terms of dollars and time to create. This is greatly increased when these have to be included in training support material distributed outside the immediate schoolhouse.

Before using TVs or VCRs in the classroom, read the instruction manual for each piece of equipment. Failure to become familiar with the equipment can result in faulty training, damage to equipment, and possible personal injury. Preset the volume and fine-tune the imaging. Set the cassette to the proper start point. Do not show or waste training time on non-essentials.

Always preview any recorded materials before showing them in the classroom. This allows you to verify suitability for task and classroom. It also enables you to verify time required and to develop an appropriate review outline for the training. Conduct the end of class review the same as if you had personally presented the instruction. Always conduct a review.

AUDIO TAPES

Audio Tapes have become virtually obsolete although the equipment to utilize this media is now common place and inexpensive. The use of audio tapes has dwindled with the prevalence of TV and VCR. They still can be useful in those instances where the sound bears directly on the learning objective. Audio tapes are useful for reliving historical events and capturing the statements of the famous.

The most common uses of audio tapes are in training of dictation, stenography, and languages. They can also be useful in providing feedback to students on their own voice qualities for speech or development of a command voice.

CAMCORDERS

The camcorder in the classroom can be a valuable tool for students to refine and apply instructional skills. The camcorder leaves little doubt to the student on what was really said and the actual psychical behavior exhibited in the presentation. The essential element in use of the camcorder for teaching is a. willingness of the student to be totally objective and critical in the review of their personal presentations.

The camcorder can also be used to record student group activity for later critical review. In these instances all should be made aware of its use and purpose for the recording.

With the highly crafted camcorder on the market today, a person knowledgeable in photography, lighting and editing, could produce a training video. This production would still require a script, actors, and reproduction means.

Before attempting to use a camcorder always refer to the manufacturer's operation manual for instructions on use and care.

HANDOUTS

Handouts can be used effectively as practical exercises or to provide students with materials too complex or large to be shown on transparencies or slides. Handouts could be extracts of regulations, sample of completed or blank forms, job aids, modules, or references. These can be used to aid in note taking, and to add emphasis to central theme or key points. Handouts can be used to provide students with specific facts or procedures needed to perform task. They can be used as references for later use of same information. Do not reproduce copyright material without proper release. Provide handouts for essential information only.

Handouts should be given out at the point in instruction that they are needed. If this is not possible, give them out at beginning of class and explain their use and purpose. In large classes students may be used to help pass out the handouts. Allow students a moment to read and examine. This will help keep the curious focused on the new task.

Alert the student to when they should start using handouts.

GENERAL GUIDELINES:

Prepare media for use. Set it up and check it out before class time. When using visual projection devices ensure extra bulbs are in place and wiring does not pose safety hazards. Check arrangement of viewgraphs or slides before not during your presentation. Pre-checks of media cannot be overemphasized; double check to see if your media works with the equipment in the classroom. Do not go on it worked at your workstation or home. Make sure videos and sound recordings are set at appropriate start point and volume set before starting.

Rehearse using your media. Practice your entire presentation including all media forms. Use the classroom and real materials. You can not get an estimate of how long it takes or how it should be done unless you practice as you will do it.

Pre-check equipment before class starts. A bulb may have burned out or it may have been unplugged. Do not be surprised, because of unchecked equipment failure.

Preview the screen placement of visual displays: overhead, LCD projector, and 35mm slides. Be sure to fill the screen: image size increases as the distance between the projector and screen increases. Adjust focus for the proper distance. Mark correct positions or check before each showing.

Avoid displaying a blank white screen. This can distract and cause undo eyestrain. Use a flip cover for the overhead, as excessive on and off will cause bulbs to fail prematurely. With LCD projection, insert blank slides or blank out screen if that feature in available.

Always be prepared for alternative action should the equipment needed to present your primary media fails.

Explain the media to the class. When using new or unsual media especially the real item explain how it is used and any important features, essential to look for, or cautions the students would need to know how to use or avoid injury. When using handout type media, explain its organization and when it will be used. This will keep students from wondering through it before they are prepared to use it and not focusing of learning what is being taught.

Present media so all can see. For overhead and other forms of visual displays this may not pose a serious problem. If the real items or parts or forms are used the visibility is normally diminished. Considered providing some form of handout, more samples for individual students or use assistant instructor to help make item more readily visible.

Do not talk to the media. Media can mesmerize the instructor as well as the student. Maintain eye contact with the students while showing and explaining the media. Avoid talking and focusing on the media. Stand to the side or behind the media used. Avoid playing with pointers, pens or other objects when presenting instruction. Check screen for placement of transparencies or LCD projected slides then focus your attention on your audience.

Use a pointer. The pointer is used to draw the students' attention to a key point. If there are frequent needs use an appropriate pointer, for rare occasions a finger will do. When using the overhead projector consider a pen or a metal finger nail file. It will not roll off as easily as a pen. When using a pointer consider in which hand it is held and your positioning to what will be pointed. If you are on left side of screen, board, or item (as seen from the students) use right hand to point, this prevents you from having to turn you body away from the students. Once you have used the pointer, put it away. Forgetting to do so, can become a real distracter to your presentation, as the pointer often becomes the outlet for your nervous energy.

Display your media only when needed. Good media attracts and maintains student attention and interest. However, they may be too effective and prevent the student from focusing what you are trying to teach. Consider the natural curiosity of the learner and the need for the media: too late it has lost its punch, too soon it takes them away from learning. Employ your media when it is needed to help the student learn, after it has served its purpose, put it away.

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Certain exceptions to the owner's exclusive right exist. One germane to the learning arena is the Fair Use Exception. The fair use exception allows use of a portion of a copyrighted work for purposes of criticism, comment, news reporting, teaching, scholarship or research. The teaching exception permits the making of multiple copies for distribution (showing) to a single class, but not to consecutive classes.

Written permission must be obtained before any copyrighted materials can be published, reproduced, distributed or displayed.

To obtain permission without charge, write the copyright owner or their authorized agent. Use your official unit letterhead; have signed by appropriate official. Prepare memorandum that includes all elements given below. Provide alternate points of contact.

a. Request no greater rights than needed. (If you only want to reprint a quote, do not request the entire chapter).

b. Fully identify the material you want permission to use. (Be specific, cite fully page number, and paragraph numbers/letters if they are used if not, page xx, lines 2 through 5 of third full paragraph).

c. Tell how you intend to use the material and the limits of the permission. For example: (Paragraph 8 and 9 page 6 will be used to illustrate the purpose of laws in the AG Basic Officer Course, this material will not be used in any other publication, unless specifically requested and approved).

d. Send two copies of the request to the copyright owner or agent. They will retain one copy and return a signed copy granting permission for use.

e. Enclose a self-addressed return envelope (with postage).

f. Do not request for signature by more than one corporate office, corporate seal, corporate certificate, warranty as to title, or the return of more that one copy of the signed permission.

g. A sample of memorandum for request of release of copyright material is given in AR 25-30.

The preparing activity retains the original copy of copyright release statement with the training audit files. A copy of copyright release must be provided with any requests for printing or duplication services. A credit line will be used for the copyright material if requested. Example of statement for giving credit is in AR 25-30.

Developed by the Warrant Officer Career Center

Guidelines for Preparing Presentations

1. Introduction

Preparing a presentation, whether for a briefing or instruction, is a creative process that need not be restricted by a list of inflexible rules. This is, therefore, a *guide* to help you design and prepare your presentations in the best possible format. It is based upon the experience and collective knowledge of a number of organizations and individuals. References are listed at the end of this guide.

2. Software

There are various software programs available for doing presentations, and all have both advantages and disadvantages. Almost all are relatively easy to learn and use.

3. Design

a. **Relevance**. Everything in your presentation needs to relate directly to the lesson. The star of your presentation is the information, not all the "gee whiz" tricks available in a computer.

b. **How many slides**. Recommendations varied between the references we used. The ideal, however, seemed to be an average of one 1 visual for every 5 minutes of instruction time. Consider that some slides may actually be a build of various images toward a final image, increasing the number required.

c. **Consistency**. This is extremely important to the presentation. After a few screens, your students will anticipate the style of your presentation. Constant changes will keep them off balance and detract from the lesson.

- Have no more than one concept per slide.

- Be consistent in your format. Avoid constant changes in backgrounds or colors. Use the software capability to produce a master background.

4. Font Style

a. Presentations are displayed in pixels — dots — when using a computer projection system. These dots are visible when you look very closely at your computer screen. The base level is 640 by 480 dots per inch (dpi). Many of our newer computers here are set at 800 by 600 dpi or better, enhancing image clarity. By comparison, a 35mm slide is equal to approximately 2,400 by 2,400 dpi.

b. Most of the older computer projectors work at 640 by 480 dpi. Whenever you expand the size of a 640 by 480 image with a projection system each dot is significantly larger, making the pixels very noticeable. This can cause smaller items to lose clarity when projected on the large screen. The newer computer projectors accommodate a higher resolution (800 by 600 dpi and in some models even higher resolution).

c. **Style**. Thinner and smaller fonts lose their sharpness and become difficult to read. Bold can be used to make fonts darker, but become ineffective if the font is too small.

(1) Serif fonts such as CG Times and Times New Roman may only be a single pixel thick at certain points. While the preferred font for lengthy text in handouts, serif is a poor choice for presentations.

(2) To preserve text clarity use fonts having a consistent thickness in the letters (san serif fonts).

Arial
Century Gothic
Univers
Arial Rounded MT Bold

d. **Variations**.

(1) Have no more than 2 or 3 font types to a page. Keep in mind that some may be attractive to look at but very difficult to read. This doesn't mean; however, that you can't use a special font to highlight a specific point. For example:

Ozzie Black

Wide Latin

Matura MT Script

(2) Remember that not every computer will have the special fonts installed that you have on your office or home computer. Although you can project the slide, the font may change to a standard font, such as Arial or Univers.

d. **Case**. Use both upper and lower case in titles and text. Titles should use "Title Case," with each word capitalized, but not each letter. As you can see in the following examples, using all capitals makes it more difficult to read and takes more space.

Title of the Slide

TITLE OF THE SLIDE

e. **Main Title**. You may wish to use Word Art instead of a regular font on your first screen or for other title screens. This feature is part of all Microsoft Office applications. Similar features are available in other presentation programs.

WordArt

f. **Shadowed Text**. Use the shadow text (or drop shadow) features in your software to provide depth to text, making it easier to read. The deeper the shadow, the closer the text appears to be to the audience.

Drop Shadow

h. **Underlining**. Use boldface or italic in place of underlining. Keep underlining to a minimum.

5. Font Size

Measuring the size of text in points was originally used when setting type for printing. It is a measurement of the height of the font, with each point equal to 1/72 inch. For example:

- 18 Points
- 30 Points
- 36 Points

a. **Body Text**.

(1) Your message must be large enough for the audience to read from any location in the room. The larger the room and audience, the larger the font required. Start with a 30 point font and adjust from there. A font of 18 points is usually too small for most presentations.

(2) Test out your font size. What looks large on the computer screen may not be large enough for the classroom. Step back 8 feet from your screen and look at your slide. If your computer screen is only 15 inches and you can read all text from that distance it should be okay in the classroom. When projected, your text should be a base size of 1 inch in height for an audience sitting a maximum of 20 feet from the screen – and increase by 1 inch for each additional 20 feet of classroom depth.

b. **Titles and headings**. Normally, you'll use a larger size font, allowing more latitude in the font style.

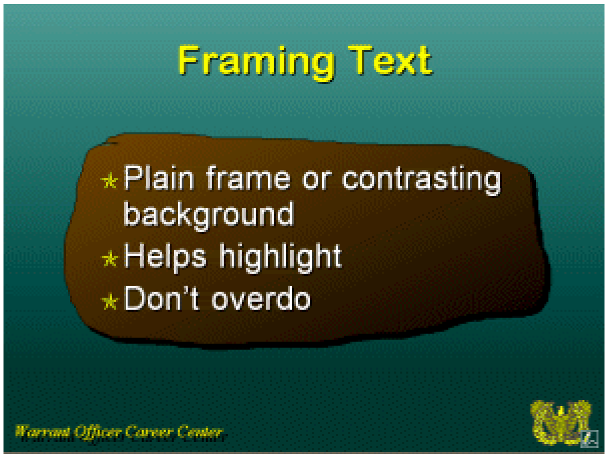
6. Graphics

a. It's true that you can say more with pictures than you can with words. A presentation that is all text usually says something, too — nap time. Pictures, however, must serve to clarify your message. An illustration with no relationship to the message is confusing.

(1) Use graphics in place of text whenever feasible. Just make sure the graphics serve to illustrate the point.

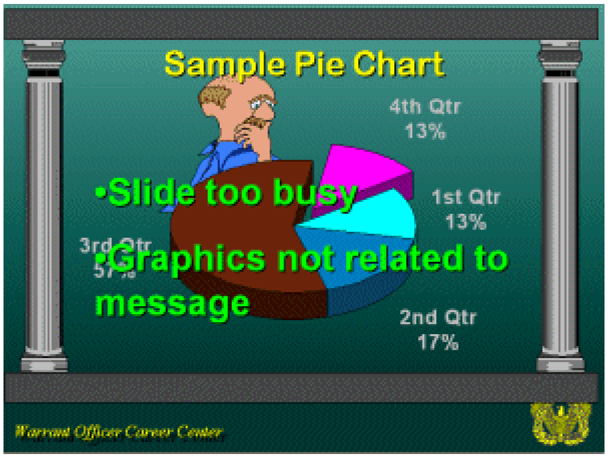
(2) Text over graphics will be hard to read, even with contrasting colors.

(2) Text in a frame with color contrasting against the slide background may be effective to highlight important points, but use this only occasionally.



b. Too much is not good. A background full of graphics, even those relative to the material, diverts one's attention from the primary text or illustration. Keep your background simple.

A single color may be the most effective background. If you have a logo, keep it consistent throughout the presentation and unobtrusive. Avoid fancy borders. Watch out when using hatched patterns — not more than one.



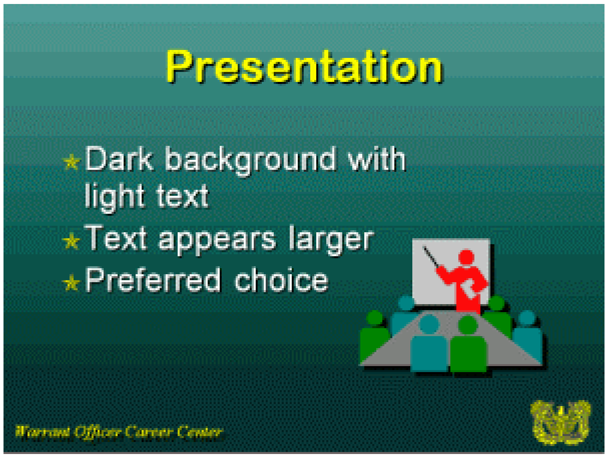
c. As with text, a drop shadow will enhance the sharpness of any graphic and make it appear to be closer to the audience than it really is. It is your choice as to whether or not this is an effect you desire on a particular slide.

7. Colors

Although there are unlimited possibilities in color combinations, only a relative few work well in combination. Some are either hard on the eyes while others send the audience running for Dramamine. Another factor is the room light under which it is being presented.

a. **Background**. A good background should contrast with the text and graphics. Keep them plain, except for a simple logo.

(1) **Dark background**. Light colored text on a dark background appears larger than dark text on a light background. It is also easier on the eyes. Black can be an effective backdrop because it's darker than any other color. It looks very good with bright or pastel foreground colors. Other backgrounds that work well are dark green and navy.



(2) **Light background**. Although the preferred background is a dark one, this does not prohibit the use of a light background with dark text.

(3) **Graduated**. A graduated background contains a color that gradually changes from one shade to another. The darker or heavier color should be on the bottom for best balance.

b. **Foreground Colors**. Text and graphics must be visible against the background.

c. **Color Combinations**. Don't judge combinations by looking at your computer screen—try it out in a classroom. Remember to use higher contrast colors for those who have impaired color vision. Some suggestions are:

(1) Try to keep text and graphics in the same color range and intensity. If, for example, you use pastel blue for the text, choose a pastel green for the graphic instead of bright green.

(2) Choosing colors in the same range helps keep the graphic consistent. For example, a bright green graphic would catch the eye, making it the most important part. If you want a graphic to dominate, then use a strong color. If not, keep the text and graphics in the same range.

Background Color	Acceptable text/object color	Unacceptable text/object color
Black	White Yellow Cyan Orange Light Green	Blue Red Violet
Dark Blue	**White** **Yellow** **Light Blue** **Orange**	**Blue** **Black** **Violet**
Dark Green	**White** **Yellow** **Light Blue** **Light Green** **Orange**	**Red** **Magenta** **Purple** **Blue**
White	**Dark Blue** **Black** **Red** **Dark Green**	**Yellow** **Light Blue** **Light Green**

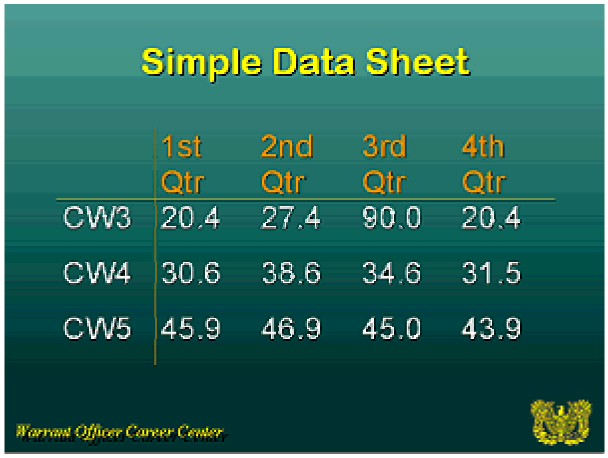
(3) Don't use a royal blue, dark blue, or a dark green for text on a dark background — the audience won't be able to see the letters. Red, orange, and magenta may all end up looking like red. Blue or blue-violet may all appear as blue. Yellow, gold, orange, red, and brown may appear lighter than they really are. Greens and blues look darker when projected.

(4) Avoid certain disturbing color combinations. For example, don't combine red and green or red and blue.

8. Tables and Graphs

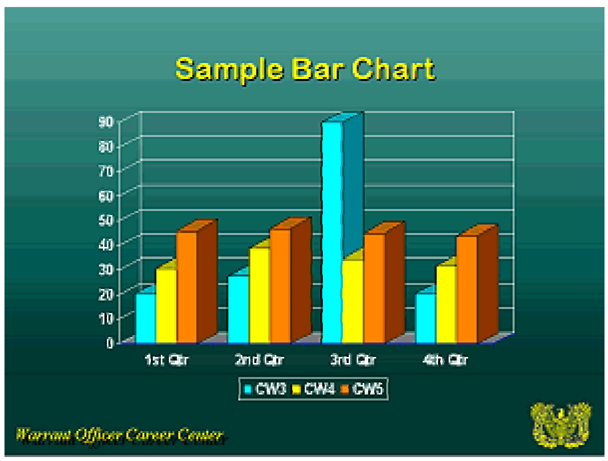
Tables and graphs, like text slides, need to be easily read by your audience.

a. **Table**. Avoid a lot of lines on your tables. It is best to limit the size to a maximum of 6 rows by 5 columns (to include labels). This may mean using a series of tables rather than a single one. Before using a table ask yourself if a chart would be better.

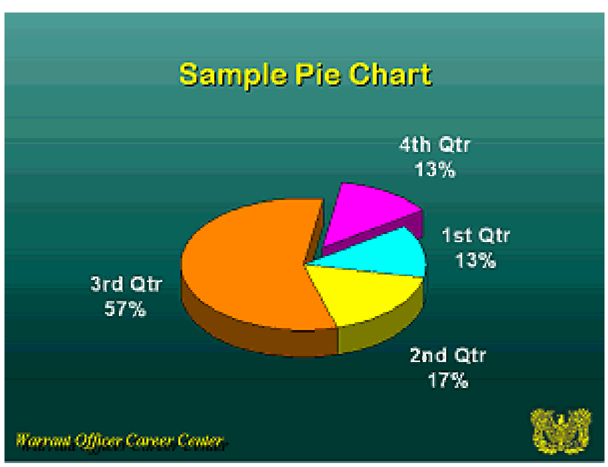


	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
CW3	20.4	27.4	90.0	20.4
CW4	30.6	38.6	34.6	31.5
CW5	45.9	46.9	45.0	43.9

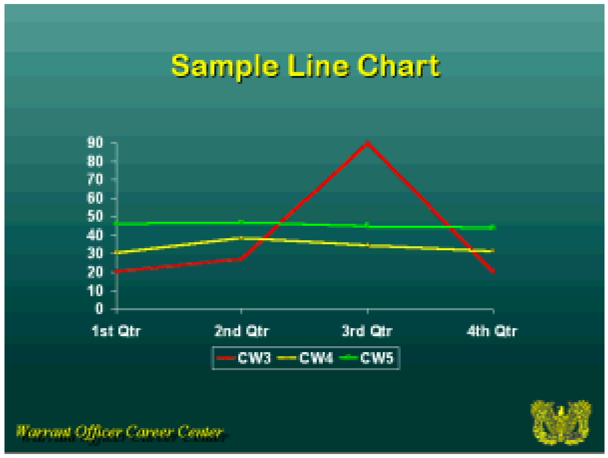
b. **Bar Chart**. Again, simplicity yields clarity. In the example, shown below, there are only 3 different bars in 4 sets. While more could be added to the example, we would soon reach a point were the information is all but unreadable.



c. **Pie Chart**. Maximum suggested size is no more than 8 slices, with only a single slice separated from the pie.



d. **Line Chart**. Line charts are extremely difficult to read if you have too many lines on them. The recommended maximum is 3 lines.



e. **Organization Chart**. Keep these as simple as possible for clarity. If necessary, use a series of simple organization charts rather than a single one that is nothing but confusion.

9. Layout

a. Presentations should not repeat the student handout word for word. Use phrases rather than complete sentences and avoid punctuation unless absolutely necessary. Quotations, of course, are the exception.

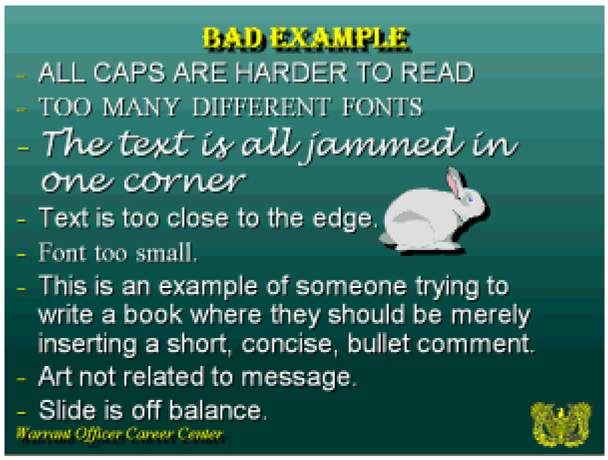
b. Left justify all text except titles. Position the slide title as necessary to create balance in the slide. Titles should be no longer than 4 or 5 words in length.

c. Experts disagree on how much text should be on a single line or slide. Try to limit your text to a maximum of 6 lines per slide and 6 words per line. Limit “laundry lists” to a maximum of 7 lines.

d. Allow large margins around your text. Blank space is necessary to direct the student's concentration on the text. Too much text with no space to rest the eyes can be overwhelming.

e. Does the slide look out of balance? This could be caused by text and graphics jammed on one side or into a corner. Center the text box on the page unless balanced by an image. When using an image the picture and text should be balanced against one another.

f. Bullets need not be boring. Avoid using a dash (-) or asterisk (*) as a bullet. Your software should give you an abundance of options, e.g., arrows, numbers, figures.



10. Motion

Software can add life to your presentation through use of transitions and builds. Transitions are the changes between slides. Builds are transitions within a slide, allowing you to control the flow of information to students a line at a time.

a. Constant changes in the method of transition or build can distract the students from your message. Most software has a "Random Effects" option for builds within a slide – don't use it! Remember that you want to have a consistent style within your lesson, or at least within major sections of the lesson.

b. Certain software packages can't create builds with either dual text columns or graphics. However, you can achieve the same effect by using a series of slides, adding a bit more information at each transition. You can use this same method to create builds using 35mm slides, one slide at a time.

11. Other Recommendations

a. **Final checks**.

(1) Run spell check

(2) Match the slides to the student handout. If they don't match, correct either the slide or the student handout. You may amend the handout using an errata sheet until time for a major revision.

(3) Have someone else review the slides.

(4) Review the slides in a classroom.

b. **Numbering slides**. You should be able to automatically number your slides in almost all software packages. In PowerPoint, for example, simply add a text code "##" somewhere on your slide master. The "##" will be replaced by the sequence number of that slide when either printed or projected on screen. If desired, you may preface it with the notes or a lesson number (e.g., "8580 - ##"). Use a color that barely shows against the background, allowing you to see the number, yet not let it distract the students from the main theme of the slide.

c. **Backup**. Always have backup in transparencies or 35mm slide format. We don't have enough rooms with computer projectors, so odds are you may someday have to use the backup. If you're doing a one-time brief on another post you may wish to print overhead transparencies instead.

d. **Slide size**.

(1) Whether first preparing or later modifying your presentation, set the slide size for "On-screen Show." This gives you an optimal image size for computer presentations.

(2) Change the slide size to “35mm Slide” and eliminate all transitions and builds before having 35mm slides made. Save under another name so you don’t overlay your original computer presentation. The “35mm Slide” format will project, but the image is not as large as the “On-screen Show.”

- Review all slides for any distortions in text or pictures that may have occurred in the transition process.

- Make sure you leave a large enough margin for the plastic film frame used for the 35mm format.

e. **Handouts**. Although dark backgrounds are best on screen, printed text is better with a light background. Set the print mode to pure black and white when printing handouts or paper copies of slides.

References

Following are the major references used, all of which were accessed through the Internet. The actual number of references available is almost unlimited.

Suggestions for Preparation of Audio/Visual Presentations at AMS Meetings, American Meterological Society, http://www.ametsoc.org/ AMS/meet/avhelp.html.
U.S. Army Medical Command Guidelines for Presentations, Army Medical Command, http://www.medcom.amedd.army.mil/medcom/news/viguide.htm.
Dazzling Yet Effective: Presentation Graphics Tips, Association for Educational Communication and Technology, University of Florida, http://nervm.nerdc.ufl.edu/~dhughes/present.html.
Presentations - Computer Issues, Computouch, Ltd., Calgary, CA, http://www.tcel.com/~achapman/ presentc.htm.
Guidelines for Creating and Using Visuals, Georgia State University, http://www.gsu.edu/~bcpbgn/dnvisual.html.
Top Ten Design Tips, Greenstar Productions, Inc., http://www.greenstar.com/d.html.
Designing Effective Visuals, Radel, Jeff, Dept of Occupational Therapy Education, Kansas University Medical Center, http://www.kumc.edu/SAH/OETd/jradel/ Effective%20visuals/VisStrt.html. *Pedagogogical Screen Design Principles for Graphics in Teleconferencing*, McGreal, Rory, New Brunswick TeleEducation, http://tenb.mta.ca/articles2/screen0.html.
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Slide Tips and Tricks, How to Design Presentation Graphics That Sell, Opus 1000, Inc., http://www.opus1000.com/opsweb4.htm.
Designing Visuals, Using Visual Aids in Extension Teaching, Cheek, Jimmy G. and Beeman, Carl E., University of Illinois Urbana-Champaign
Using Computer Slide Presentations in the College Classroom, Sammons, Martha C., Wright State University, http://sunsite.unc.edu/horizon/mono/higher_ed/sammons.htm.

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C – 1

ASSESSING TRAINEE PERFORMANCE

OBJECTIVE:

Develop a practice exercise for the terminal learning objective (TLO) of the task you will teach in your final presentation or, if applicable, for an enabling learning objective (ELO) of the task you will teach in your final presentation. You are to use the approved task analysis report (performance steps, skills and knowledge to be acquired), the approved terminal learning objective (TLO), your target population description, and your approved choices of method and media. You have available TRADOC Reg 350-70, USASSI Regulation 350-20, USASSI Regulation 350-22, and the Staff & Faculty Course Book. The practice exercise must mirror the final student assessment. It is to contain examinee instructions, the performance or performance based assessment instrument (the test) addressing the skills and knowledge identified as needed to be acquired, scoring instructions (answer key), and administration guidance.

CRITERION-REFERENCED TEST:

Develop a practice exercise for the terminal learning objective (TLO) of the task you will teach in your final presentation or, if applicable, for an enabling learning objective (ELO) of the task you will teach in your final presentation. You are to use the approved task analysis report (performance steps, skills and knowledge to be acquired), the approved terminal learning objective (TLO), your target population description, and your approved choices of method and media. You have available TRADOC Reg 350-70, USASSI Regulation 350-20, USASSI Regulation 350-22, and the Staff & Faculty Course Book. The practice exercise must mirror the final student assessment. It is to contain examinee instructions, the performance or performance based assessment instrument (the test) addressing the performance steps (performance measures) and the accompanying required skills and knowledge identified as needed to be acquired, scoring instructions (answer key), and administration guidance.

ASSESSING TRAINEE PERFORMANCE

The audit trail for teaching your task now includes a task analysis report (performance steps, skills and knowledge to be acquired), a terminal learning objective (TLO), and your choices of method and media. Now you want to develop the tools by which you can find out whether those objectives have been achieved—by which you can find out whether the instruction worked.

If it's worth teaching, it's worth finding out whether the instruction was successful. That sounds reasonable, doesn't it? After all, we weigh ourselves to find out whether we have achieved a weight target, and we test products to find out whether they are ready to ship to customers. In the same way, we measure the performance of our students to find out whether our instruction is doing what it's supposed to be doing.

The most direct measure of instructional success is to determine if the objective(s) (performance steps) were accomplished by each student. Enter the criterion test. In practice, largely because the word "test" has such anxiety-producing connotations, criterion tests are usually referred to by labels more acceptable to the people using them. Skill checks and performance checks are common examples.

In the design phase of the SAT process, you must create an assessment (test) that accurately measures the terminal learning objective. The assessment will be a criterion-referenced test. The preferred method is performance evaluations.

PERFORMANCE TESTS

NOTE: All performance tests must be criterion-referenced tests. Recall that criterion-referenced tests are evaluations in which specific standards are used to determine acceptable performance.

Performance Measurement/Testing is an integral part of the training program. To effectively evaluate student performance and training effectiveness, tests ---

a. Will be used to ---
   (1) Evaluate student performance.
   (2) Assess individual competency.
   (3) Determine if training does what it is designed to do.

b. Will be ---
   (1) Designed, developed, and presented as an integral part of the training to optimize learning and eliminate unnecessary training.
   (2) Written when designing the training to ensure measurement of the lesson objective performance to the prescribed standard.

Can be administered using actual equipment, simulated hands-on equipment, or pencil and paper (when the performance involves application of mental processes, e.g., calculation of an azimuth).

Methods of Testing

Two primary methods are used to test students:

Method	Description/Use
(1) Hands-on performance tests	Requires students to prove competency by using actual equipment, materials, simulators/simulations, or training aids to perform the required learning objective.
Note: This is the preferred method of testing and will be used to the greatest degree possible.	
(2) **Performance-based (written) tests**	Used to assess the student's ability to apply facts, principles, procedures, etc., required to perform the learning objective. Essay, short answer, and multiple-choice questions (in order of preference and effectiveness of measurement) can be question types for performance-based tests.
Note: Due to their reduced fidelity and resultant lower predictive validity, performance-based tests should be used **only** when the availability of equipment, safety, or other severe constraint precludes performance testing. All performance-based (written) tests should be a valid measure (predictor) of task performance. ***Note:*** Knowledge can be tested in the context of the (prerequisite) skills/knowledge required for performance. Prerequisite knowledge testing is the most appropriate use for written tests.	

There is increasing interest in designing and developing performance-based assessments as alternatives to the conventional multiple-choice tests. These performance assessments require demonstrations of what the person "KNOWS and can DO." The performance tasks closely resemble those required in realistic contexts and job tasks. Examples of such performance tasks include installation of a software program in both stand-alone and networked settings, troubleshooting typical system problems, or predicting the most likely outcome based on known symptoms. These performance tasks provide information on the person's learning and thinking processes, particularly analysis, synthesis, problem solving, and troubleshooting; types of performance errors encountered; and overall performance quality and competence.

A performance test is designed to assess the ability of a student to perform correctly in a real or simulated situation (i.e., a situation in which the student will be ultimately expected to apply his/her learning). The concept of simulation is central in performance testing; a performance test will simulate to some degree a real life situation to accomplish the assessment. In theory, a performance test could be constructed for any skill and real life situation. In practice, most performance tests have been developed for the assessment of vocational, managerial, administrative, leadership, communication, interpersonal, and physical skills in various simulated situations. Instructors administer a test by observing the students perform a process (observer scored) or produce a product (product scored). In some cases, students must perform both a process and produce a product in which case both the process and product are evaluated.

Conventional test development approaches, which represent the outcomes of job/task analysis as verbal lists of tasks (critical task list), culminating with verbal lists of test objectives and multiple choice exams, are appropriate for developing knowledge-based tests. Unfortunately, these knowledge-based tests do not adequately measure the expert's performance competencies and skills. Real expertise is not only found in the words, but "in the fingers, in the actions, and in the gut." Performance based assessments require assessments which can be appropriately modeled to provide high fidelity to the job setting, job tasks, and job materials.

Before proceeding further review the taxonomy of cognitive learning objectives as presented by Bloom.

As teachers, trainers, and training developers we tend to ask questions in the “knowledge” category a large percentage 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...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...?

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...?

Ideally, the test will measure **full** performance; if this is not possible, schools may use performance-based (answer-scored) tests. Schools will use a knowledge-based test **only** when the nature of the subject matter prevents a performance test.

The performance test's main purpose is to determine if a student meets the minimum requirements for acceptable on-the-job performance. Therefore, when you design performance tests, you must duplicate the real world conditions as close as possible of the task. Students perform the task using the same field equipment and under the same conditions as they would experience on the job. Budget constraints and safety precautions sometimes make this impossible. For example, a live firing of the Patriot Missile makes an ideal test, but the cost and the danger to others prohibits testing in a real world condition. You can, however, institute training using simulated equipment and conditions which resemble as closely as possible the actual job activity.

Advantages in Using Performance Test Items

Performance test items

- Can most appropriately measure learning objectives that focus on the ability of the students to apply skills or knowledge in real life situations.
- Usually provide a degree of test validity not possible with standard paper and pencil test items.
- Are useful for measuring learning objective in the psychomotor domain.

Limitations in Using Performance Test Items

Performance test items

- Are difficult and time consuming to construct.

- Are primarily used for testing students individually and not for testing groups. Consequently they are relatively costly, time consuming, and inconvenient forms of testing.
- Generally provide low test and test scorer reliability.
- Generally do not provide an objective measure of student achievement or ability (subject to bias on the part of the observer/grader).

Three categories for performance tests exist:

1. Process Test. This test evaluates the student's ability to perform the essential steps in the correct sequence. An example of a task evaluated by a process test would be "Splint a fracture." In this task, the process is critical, and the student must follow a series of steps in a particular sequence. To grade this type of test, you must design a checklist of steps, checking each one as the student performs it.

2. Product Test. This test evaluates the student's ability to produce a product. An example of a task evaluated by a product test would be "Construct a Storage Crate." In this task, the step sequence is not critical. It makes no difference which side the students build first. The end product is important. To grade this type of test, you must provide a description of the end product.

3. Process/Product Test. This test evaluates the student's ability to perform the essential steps in the correct sequence and to produce an end product. An example of this type task would be "Treat an Open Head Wound." In this task, the student must perform the steps in a specific sequence and produce a correctly dressed wound. To grade this type of test, you must design a checklist of procedures and provide a description of the end product.

***A PERFORMANCE TEST COMPLETELY MEASURES THE OBJECTIVE.**

If the performance test measures what is stated in the objective, the test will evaluate and determine if the student has met the requirements of the objective.

***A PERFORMANCE TEST MATCHES THE OBJECTIVE IN TERMS OF ACTION, CONDITIONS, AND STANDARDS.**

For example:

OBJECTIVE: Replace filter in M17-series protective mask. Using a mask with defective filters and a set of replacement filters, remove defective filters and install new filter elements. The mask must be operational with no damage.

This objective seeks to measure the student's ability to change filters in an M17-series protective mask. Since death can occur if this task is performed improperly, you, the instructor, must be very critical in testing a student's ability to perform it. The performance criterion-referenced test would resemble the following:

PERFORMANCE TEST: Replace the filter in your M17-series protective mask. You must use a mask with defective filters and a set of replacement filters. Remove the defective filters and install new filter elements without damaging the mask. The mask must be operational.

Sometimes the performance item almost duplicates the objective. Notice the only difference between the objective and the performance test item on the example above is the way they are written. Keep this in mind when writing your own performance test items.

Steps in Developing Performance Tests

Following are the major steps employed in the development of performance tests.

1. Prepare the task analysis report. This report should be very detailed. It must identify all the skills and knowledge that the target population must acquire. These skills and knowledge must be linked to the performance steps.

2. Write the terminal learning objective (TLO). The action, conditions, and standard must be as near real world situations as is possible to attain in the training environment. Simulated situations must approximate the real world with high level fidelity and reliability. The action statement is critical to establishing the overall method of evaluation (testing).

3. Examine the performance steps/performance measures to identify the level of criticality for each step. Each step needs to be evaluated for level of importance (Essential, Very Important, Somewhat Important, and Trivial) level of competence (Expert, Advanced, Intermediate, and Novice). It is a good practice for more than one subject matter expert (SME) make this evaluation. Any differences in the levels need to be resolved. The training developer uses this information to select issues of high importance and at the appropriate competence level for creating performance test items.

4. The weighting process described above leads to the development of the performance test blueprint. Scenarios are prepared which represent typical job (wartime) settings. Performance items are written which emphasize higher-level cognitive performance capabilities. The test items should reflect the highest level of importance and competence. Performance questions address a process, a product, or both.

5. Build the test items.

a. Process. The following table gives some general guidelines for writing items that are process measures.

TABLE 1

STEP	EXPANDED STEP INFORMATION
Create process measures	• Specify performance measures. Double check to see if standard is specified for each performance measure (step). • Ensure measurability and that all scores will agree on how to score. • Separate any performance measures (steps) that are lumped together. Spell out a separate action with each measure. • Eliminate scoring unnecessary actions. Actions that are dependent on other actions need not be stated. EXAMPLE: You have two actions: releases safety cover and activate firing switch. Assuming the firing switch cannot be activated without releasing the safety cover then eliminates the first element (releases safety cover) from scoring. • Verify scored action is observable. • State acceptable limits for error tolerance. • Add safety measures when needed. Cite the specific action(s) that must be done or must not be done. • Specify time limit. A time limit is a performance measure when task is time constrained. Insure both start and stop point are clearly identified to examinee and scorer. • Specify sequence. Examine closely for sequence requirements. – Some tasks total sequence – Others only partial sequence – If no sequence is required indicate on score sheet.

TABLE 2. An example checklist for process measures.

EXAMPLE OF PROCESS PERFORMANCE MEASURES FOR A TASK. *PUT ON A PROTECTIVE MASK*		
PERFORMANCE MEASURES (Sequence Is scored)	GO	**NO GO**
1. Removes headgear, opens carrier, grasps face-piece, and removes mask.		
2. Grasps face-piece with both hands, seats chin pocket of face-piece firmly on chin, and brings head harness smoothly over head.		
3. Smoothes edges of face-piece on face and presses out all bulges to secure an airtight seal.		
4. Closes outlet valve by cupping heel of right hand firmly over opening and blowing hard to clear agent from face-piece.		
5. Places hand over inlet valve, draws breath and collapses face-piece.		
6. Completes all performance measures in 9 seconds.		
7. Completes all performance measures in proper sequence.		

a. Product. The following table gives some general guidelines for writing items that are product measures.

TABLE 3

STEP	EXPANDED STEP INFORMATION
Create product measures.	• Define an acceptable product. This is the test standard. Use identifiable characteristics and absence of unacceptable characteristics • Define an observable and measurable standard for each characteristic of test product (such as height, width, etc.). See TABLE . • Specify acceptable range when there is a tolerance. To develop pencil-paper test items, • See TABLE 5 for locating components, TABLE 6 for filling in forms, TABLE 7 for classifying images,

TABLE 4 Example of product description terms.

EXAMPLES OF SCORABLE PRODUCT CHARACTERISTICS		
height	elasticity	sound
width	precision	rhythm
depth	tolerance	accuracy
length	shape	time
texture	color	speed
tightness	location	size
strength	position	adjustment

For tasks involving people or data, in addition to the scorable dimensions of format, clarity, and errors, also consider the following scorable dimensions—

- solve a problem
- gather information
- analyze situation or data
- make a decision
- develop a plan
- perform an evaluation

TABLE 5 Example of Locating Components

EXAMPLE OF TESTING THE LOCATING OF COMPONENTS .
When given the, name of a component of a system, locate the component.
Directions: Read a component name in the list below. Locate the component and its letter on the paper mock-up. Enter the letter in the blank following the component name.
List of component names: 1. sponsons _____ 2. headlights _____ 3. roadwheels _____ 4. compensating idler wheel _____ 5. hand hold _____ 6. sprocket _____ 7. rotary shock absorber housings _____ 8. driver's hatch _____ 9. roadarms _____ 10. track adjust link _____ 11. external fire extinguisher t-handle _____ 12. skirt step _____ 13. fuel filler caps _____ 14. support rollers _____ 15. skirt _____
Paper mock-up not included.

TABLE 6 Example of Filling In Forms

EXAMPLE OF TESTING THE FILLING IN OF FORMS.
When given a history of an operation and a form, fill in the form according to the rules.
Directions: Fill in DD Form 1970 using the information found in the diary which lists events taking place in an operation. All the information you need is presented in the diary. The diary also contains information that you will not need. Information may not be listed in a form you can use directly. After you have filled in the form, submit it for scoring.
Diary and form not included.

TABLE 7 Example of Classification of Images

EXAMPLE OF TESTING THE CLASSIFICATION OF IMAGES.
When given an image of an object or situation, name the class to which it belongs.
Directions: Study each image. Write the class name for each image in space provided.
Images and answer sheets not included.

c. Combination product and process.

As the name implies you will need to incorporate the descriptive standards for both the process and the product. The performance measures need to identify which are process requirements and which are product requirements. Some repair procedures fall in this category.

6. Develop the scoring tools

Scoring tools provide the scorer with a means of determining if the examinee is performing correctly. The types of scoring tools are: answer key, checklist, numerical scale, descriptive scale, and behavior anchored numerical scale.

The following tables are examples scoring tools that incorporate scales.

TABLE 8

EXAMPLE OF NUMERICAL SCALE FOR RATING PUBLIC SPEAKING ABILITY					
1	2	3	4	5	6
Is poor speaker but speaks without impediment					Speaks fluently, well modulated voice, is interesting does not pause inappropriately

TABLE 9

EXAMPLE OF BEHAVIORALLY ANCHORED RATING SCALE.					
1	2	3	4	5	6
Is poor speaker but speaks without impediment	Has nervous mannerisms	Says 'ah" a lot	Presents acceptable speech but delivery is too fast, too slow or not sufficiently clear.	Presents acceptable boring speech	Speaks fluently, well modulated voice, is interesting does not pause inappropriately.

TABLE 10

EXAMPLE OF BEHAVIORALLY ANCHORED PRODUCT RATING SCALE.				
1	2	3	4	5
Sparkplug gap off by ±004 of specified tolerance.	Sparkplug gap off by ±003 of specified tolerance.	Sparkplug gap off by ±002 of specified tolerance.	Sparkplug gap off by ±001 of specified tolerance.	Sparkplug gap set at exact tolerance specified.

More detail for developing/constructing a scoring tool is presented in the module "Construct a Rating Form."

7. Prepare examinee instructions.

ACTION	EXPANDED ACTION INFORMATION
Prepare examinee instructions (for each item).	• Decide what specific information the examinee needs in order to perform test action at test station or on test instrument. • State job situation for the test. – For group administered. Include in scenario. – For individually administered. Orient thinking to a specific piece of equipment, crew position, function, mission, or even task. EXAMPLE: You are the driver of an M113. – Not all tasks need a specific scenario. – Do not include unnecessary detail in scenario. • Tell examinees what they are to do. – Direct the examinees efforts – Establish limits. – For individually administered, include a statement on how far the examinee is supposed to go (state limits) if task is not being tested to normal limits EXAMPLES: – Don't replace engine cover. – Don't enter control number in log. • Orient examinee. – For group administered - include orientation in general instructions. – For individually administered - orient to first step in task as is typical on the job. – Avoid situation where examinee can have several correct starts unless part of task such as troubleshooting. – Avoid phrase "take appropriate action". Do not tell examinee how to perform task. **BAD EXAMPLE**: You are to put on the protective mask and clear it. Substitute. You must perform correct masking procedure. OMIT FOLLOWING FOR GROUP ADMINISTRATION INSTRUCTIONS • Give time limit in statement of what examinee is to do. • EXAMPLE: You will have 9 seconds to complete the task when I give the command GAS. – If task not time constrained, assign a time limit to enable efficient test administration. – Use job experts and field tryouts to ensure soldiers who can do task easily finish within the time limit and those who can't do task fail for reasons other than time. – Look at overall time: setup time, test performance time, scoring

	time, and examinee briefing time. – Review all test items taking more than 30 minutes, to shorten when feasible. • Tell examinee the standard or the acceptable range (such as plus or minus 6 meters) of test results. Do not allow standards to reveal information on how to perform a step or task. • State exactly what assistance will be available during test. EXAMPLE: I will issue the fire command to you. • See TABLE 11 for checklist to review instructions. • State there will be no assistance if none is planned or required.

The following is a checklist providing general guidelines for verifying that the examinee instructions contain the essential information for the person being tested.

TABLE 10

CHECKLIST FOR EXAMINEE INSTRUCTIONS.	**YES**	**NO**
Do instructions contain anything not needed?		
Are all the instructions essential to test action?		
Is terminology clear?		
Are terms explained that need no explanation?		
Is the terminology well understood by examinee? (uses normal field usage nomenclature or common name)		
If in doubt, does it use both nomenclature and common names?		
Are statements of what examinee is to do precise?		
Are statements of what examinee is to do concise?		
Is limited to what applies at the specific test station?		
Are instructions too long? (Anything over four or five medium length sentences or over 15 seconds total speaking time should be examined carefully)		
Would you know first step?		
Do instructions tell more than would be available on job?		
Do instructions ensure examinee understands what is expected?		

8. Prepare scorer instructions. In addition to scoring tools (guides), you need to prepare instructions for how the scorer is to function. The following outline is an example of Scorer Instructions.

Scorer Instructions for Protective Mask Test.

1. **OBJECTiVE**. The objective of this test is to measure examinees' ability to don a protective mask and check it for leaks when given command **GAS**.

2. **EQUIPMENT REQUIREMENTS.**

a. Each examinee is to have prefitted M1 7-series protective mask with accessories on arrival.
b. One stopwatch.
c. One copy FM 2l-41.
d. Three ballpoint pens.
e. Two clipboards.
f. Two field tables.

3. **PERSONNEL REQUIREMENTS**.

a. One scorer, E-6 or above, MOS nonspecific.
b. One alternate scorer, E-6 or above, MOS nonspecific.

4. **SITE REQUIREMENTS.** Either indoors or outdoors.

a. INDOORS. An open area of at least 100 square feet. One table should be available. Room lighting should be sufficient to read and observe. Temperature should range between 50 and 85 degrees Fahrenheit.
b. OUTDOORS. One table should be available. Conduct during daylight Temperature should range between 40 and 90 degrees Fahrenheit. Wind should not exceed 10 miles per hour. Do not conduct outdoors in inclement weather.

5. **PRETEST PREPARATION.**

a. Verify each examinee's identity.
b. Ensure all items are in working condition.
c. Ensure examinee has protective mask (properly stored in the carrier and at side carry position with carrier snapped).
d. Test station layout is attached (not included)

6. **INSTRUCTIONS FOR ADMINISTERING AND SCORING THE TEST**.

a. No questions answered during test.
b. Coaching will not be tolerated.
c. Do not tell examinees of how well they are doing during the test.
d. Score each performance measure (step) either GO or NO GO as it is performed and enter on score sheet.

6. **INSTRUCTIONS FOR ADMINISTERING AND SCORING THE TEST.** (Con't)

e. Scorer will stop test to prevent injury to personnel or damage to equipment.
   – Test will be terminated when examinee injures self and/or damages equipment by failing to observe safety precautions or warnings. NO-GO will be score.
   – When injury or damage is result of malfunction no time will be charged to examinee. Test will be restarted where the malfunction occurred.

f. Scorer will stop test when examinee claims malfunction of equipment.
   - If malfunction, correct before restarting test where the malfunction occurred. No time will be charged to examinee.
   - If no malfunction, score examinee as **NO-GO.**

g. Score **NO-GO** when examinee—
   - does not complete all performance measures.
   - exceeds time limit.

h. Do not score the replacement of protective mask in carrier.

i. The examinee will begin test with headgear on.

ATTACH SCORESHEET HERE – Not included in this figure.

WRITING PERFORMANCE BASED TESTS

Introduction

Writing test items is a matter of precision, perhaps more akin to computer programming than to writing prose. A test item must focus the attention of the examinee on the principle, learning objective, performance steps including specific skill(s) and knowledge upon which the item is based. Ideally, students who answer a test item incorrectly will do so because their mastery of the principle or learning objective in focus was inadequate or incomplete. Any characteristics of a test item that distract the examinee from the major point or focus of an item, reduce the effectiveness of that item. Any item answered correctly or incorrectly because of extraneous factors in the item, results in misleading feedback to both examinee and examiner.

A poet or writer, especially of fiction, relies on rich mental imagery on the part of the reader to produce an impact. For item writers, however, the task is to focus the attention of a group of students, often with widely varying background experiences, on a single idea. Such communication requires extreme care in choice of words and it may be necessary to try the items out before problems can be identified.

A. ESSENTIAL CHARACTERISTICS OF ITEM WRITERS

Given a task of precision communication, there are several attributes or mind-sets that are characteristics of a proficient item writer.

1. Knowledge and Understanding of the Material Being Tested

At this level of Army training, the depth and complexity of the material on which trainees are tested necessitates that only highly compete performers who are fully trained in a particular task or subject area can write concise, unambiguous test items in that discipline. In addition, the number of persons who can meaningfully critique test items, in terms of the principles or constructs involved, is limited. These individuals are the instructional systems specialists found in training development cells of the schools or in the Directorate of Training. A review of tests by colleagues, other subject matter experts (SME) too will likely improve the quality of items considerably prior to submission to the Directorate of Training for review before the first try-out with students.

2. Continuous Awareness of Objectives

A test must reflect the purposes of the instruction it is intended to assess. This quality of a test, referred to as content validity, is assured by specifying the nature and/or number of items prior to selecting and writing the items. Instructors sometimes develop a chart or test blueprint to help guide the selection of items. Such a chart may consider the criticality of the performance steps or performance measures as well as the nature of the skills and knowledge application a test is expected to assess.

In the case of criterion-referenced instruction, content validity is obtained by selecting a sample of performance steps or performance measures to include the skills and knowledge applications to be assessed.

3. Continuous Awareness of Instructional Model

Different instructional models require items of quite different characteristics for adequate assessment. For example, appropriate item difficulty in a mastery-model situation might be a maximum value of 20 (twenty-percent of the students answering incorrectly). On the other hand, items written for a normative model might have an appropriate average difficulty of the order of 30 to 40. However, you are not permitted to use the normative model in performance assessment.

Ideally, item discrimination (the degree to which an item differentiates between students with high test scores and students with low test scores) should be minimal in a mastery-model situation. We would like to have all students obtain high scores.

4. Understanding of the Students for Whom the Items are intended

Item difficulty and discrimination are determined as much by the level of ability and range of ability of the trainees as they are by the characteristics of the items. In performance assessment, item difficulty must not be so low as to provide no challenge whatever to any trainee in a class.

It is generally easier to adjust the difficulty than to adjust the discrimination of an item. Item discrimination depends to a degree on the range of trainee ability as well as on the difficulty of the item. It can be difficult to write mastery-model items which do not discriminate when the range of abilities among trainees is wide.

No matter what the instructional model or the range of abilities in a class, the only way to identify appropriate items is to select them on the basis of subjective judgment, administer them, and analyze the results. Then only items of appropriate difficulty and discrimination may be retained for future use.

5. Skill in Written Communication

An item writer's goal is to be clear and concise. The level of reading difficulty of the items must be appropriate for the trainees. Wording must not be more complicated than that used in instruction.

6. Skill in Techniques of Item Writing

There are many helpful hints and lists of pitfalls to avoid which may be helpful to the item writer. This is an area where measurement specialists may be particularly helpful. The remainder of this hand-out will be devoted to item-writing tips.

B. GENERAL TIPS

1. Express Items as Precisely, Clearly and as Simple as Possible

Unnecessary material reduces the effectiveness of an item by forcing trainees to respond to the irrelevant material and perhaps be distracted by it. For example, the following item:

> In carrying out scientific research, the type of hypothesis which indicates the direction in which the experimenter expects the results to occur once the data has been analyzed is known as a(n)

could be written

> An hypothesis which indicates the expected result of a study is called a(n)

2. Include all Qualifications Necessary to Provide a Reasonable Basis for Responding

The item

> What is the most effective type of test item?

might be rewritten

> According to Ebel, the most versatile type of objective item for measuring a variety of educational outcomes is the

The second version specifies whose opinion is to be used, narrows the task to consideration of objective items, and focuses on one item characteristic. The first version poses an almost impossible task.

3. Emphasize General Tasks Rather than Small Details

The item

> The product-moment coefficient of correlation was developed by
>
> 1. John Gosset
> 2. Sir Ronald Fisher
> 3. Karl Pearson

might be replaced by the item

> The product-moment coefficient of correlation is used to determine the degree of relationship between
>
> 1. two dichotomous variables.
> 2. a dichotomous variable and a continuous variable.

3. two continuous variables.

If an item on the product-moment coefficient of correlation is to be included in a test, it should concern some basic understanding or skill useful in determining when and how to apply the technique.

4. Avoid Jargon and Textbook Language

It is essential to use technical terms in any area of study. Sometimes, however, jargon and textbook phrases provide irrelevant clues to the answer, as the following item.

A test is valid when it

1. produces consistent scores over time.
2. correlates well with a parallel form.
3. measures what it purports to measure.
4. can be objectively scored.
5. has representative norms.

The phrase "measures what it purports to measure" is considered to be a measurement cliche which would be quickly recognized by students in the area. The item might be rewritten:

The validity of a test may be determined by

1. measuring the consistency of its scores.
2. comparing its scores with those of a parallel form.
3. correlating its scores with a criterion measure.
4. inspecting the system of scoring.
5. evaluating the usefulness of its norms.

5. Locate and Delete Irrelevant Clues

Occasionally, verbal associations and grammatical clues render an item ineffective. For example, the item

A test which may be scored merely by counting the correct responses is an _______________ test.

1. consistent
2. objective
3. stable
4. standardized
5. valid

contains a grammatical inconsistency (an objective) which gives away the answer.

The item could be rewritten

A test which may be scored by counting the correct responses is said to be

1. consistent.
2. objective.
3. stable.
4. standardized.
5. valid.

6. Eliminate Irrelevant Sources of Difficulty

Other extraneous sources of difficulty may plague trainees in addition to the item faults mentioned above. Trainees may misunderstand the test directions if the test format is complex and/or the students are not familiar with it. When response situations are common to two or more items, care must be taken that students are made aware of this fact. If a set of items using a common situation extends to a second page, the situation should be repeated on the second page. Then students will not forget the situation or have to turn back to an earlier page to consult the situation.

Whatever test formats are used, trainees are to have an opportunity to practice responding to items prior to the actual test whose results are used for grading. This is the intent of the required practice exercise. Such a practice administration will also give the item writer an indication of difficulties students may be having with directions or with the test format.

7. Place all Items of a Given Type Together in the Test

Grouping like test items allows trainees to respond to all items requiring a common mind-set at one time. They don't have to continually shift back and forth from one type of task to another. Further, when items are grouped by type, each item is contiguous to its appropriate Set of directions.

8. Prepare Keys or Model Answers in Advance of Test Administration

Preparing a key for objective-type items or a model answer to essay or short answer items is an excellent way to check the quality of the items. If there are major flaws in items, they are likely to be discovered in the keying process. Preparing a model answer prior to administering the test is especially important for essay or other open-end items because it allows the examiner to develop a frame of reference prior to grading the first examination.

9. Arrange for Competent Review of the Items

Anyone who has attempted to proof his or her own copy knows that it is much better to have the material proofed by another person. The same principle applies to proofing test items. However, it is important that the outside reviewer be competent in the subject matter area. Unfortunately, critical review of test items is a demanding and time-consuming task. Item writers may make reciprocal agreements with colleagues or may find advanced students (BNCOC, ANCOC, CCC, etc,) to critique their items. Instructional Systems Specialists may provide helpful comments with respect to general item characteristics.

C. WRITING SPECIFIC TYPES OF ITEMS

The level of instructional objective to some degree contributes to identifying the category of test that can measure performance.

Cognitive	**M-C**	M	FIB	CMP	**ESY**	**PER**
Knowledge	X	X	X	X	X	X
Comprehension	X	X	X	X	X	X
Application	X			X	X	X
Analysis	X			X	X	X
Synthesis	X			X	X	X
Evaluation	X			X	X	X

The type of behavior as specified by the action verb in the TLO limits the type of question that is suitable for measuring performance.

Type of Behavior Stated in Objective	**ESY**	**FIB**	**CMP**	**M-C**	**M**	**P-C**	**L-P-C**
State	X		X				
Identify		X	X	X	X		
Discuss	X		X				
Define	X		X				
Select				X	X		
Discriminate				X	X		
Solve	X	X	X	X		X	
Develop	X		X			X	
Locate	X	X	X	X	X	X	
Construct	X	X	X			X	X
Generate	X		X			X	X
Operate/Perform							X
Choose (attitude)	X			X			X

M-C = Multiple-Choice Items
M = Matching
FIB = Fill-in-the Blank
CMP = Completion
ESY = Essay
PER = Performance
P-C = Product Checklist
L-P-C = Live Performance Checklist

GENERAL RULES FOR DEVELOPING PERFORMANCE-BASED TEST ITEMS

1. Develop items so that all students competent in the subject matter agree on the correct response.

2. Test a concept or idea in each item that students must know, understand or apply.

3. State each item in the students' working language.

4. Be brief, simple, direct and clear.

5. Use problems, sketches, diagrams or pictures when they will add realism or understanding.

6. Avoid negative items. If you use a negative item, highlight the negative element by underlining or capitalizing it.

7. Kill double negatives. If you use a negative word in the stem, do **NOT** use another negative in the alternatives.

8. Write each item independent of every other test item.

9. Write distractors (wrong choices) to appear plausible and attractive to students who do not know the correct response.

10. Choose commonly made errors as distractors.

11. Use correct grammar and ensure alternatives agree with the stem.

12. Arrange number choices in ascending or descending order.

13. Make all alternatives about the same length. If answer lengths must vary, arrange them according to length.

14. Ensure correct responses appear in a random pattern.

15. List a correct response in each item. Do **NOT** use "None of the above." Use "all of the above" only when it is suitable and only sparingly.

16. Avoid absolutes such as ALL, ALWAYS, EVERY, ENTIRELY and NEVER.

17. Avoid words such as almost, few, great and large. They mean different things to different people.

18. Avoid opinion and obvious answers, such as common sense and common knowledge.

19. Do **NOT** use (as distracters) technical terms beyond the students' understanding.

20. Use the same terminology throughout the test/PE. For example, do not refer to “DA Form 201” one time and “MPRJ” the next time. Call it one or the other throughout the test/PE. Also, use the same verbiage on both the test and the PE.

21. Use neutral language. For example, instead of referring to SGT Mary Brown as “she,” or referring to SGT John Brown as “he;” refer to either SGT Brown as “soldier” or by some neutral word.

22. Ensure there is a balanced representation of gender, race, and ethnic groups for each test.

23. Use active voice.

Passive. The SIDPERS Active Army Locator File transaction to be reviewed is shown in Figure 2-1. (15 words)

Active. Review the SIDPERS Active Army Locator File transaction at Figure 2-1. (11 words)

24. Follow standard rules of punctuation, capitalization, and grammar when you develop the stem, answer choices (alternatives), and student instructions.

25. Use dates three or four years in the future for “today’s date” and on illustrations/documents. Using dates several years in the future eliminates updating tests/PEs for the sole reason of complying with this requirement.

26. Avoid using in test items and source documents recognizable names; e.g., movie stars, presidents, professional athletes, school instructors; and names that could be interpreted to have racial or sexual overtones or double meanings.

27. When space permits, leave a blank line after the stem and between each alternative.

28. Design a test that is easy to use. Related situations, questions, alternatives, and illustrations should appear on the same or facing pages when practicable. (Flipping back and forth in the test booklet is minimized.)

These general rules apply to all “stubby pencil” test items. Read on to learn about the types of test items.

MULTIPLE CHOICE ITEMS FOR TEST / PRACTICAL EXERCISES

The multiple-choice item consists of two parts: (1) the item stem or lead which asks a question and (2) several answer choices (responses or alternatives) one of which will answer the question in the stem. Answers are correct responses: distractors are incorrect responses.

Use the General Rules for Developing Test Items on the preceding page to help you write multiple-choice items as well as other test types. In addition, apply the specific rules appearing on the pages below for additional guidelines for developing multiple-choice written performance-based tests/practical exercises (PEs).

1. Design your test to measure the skills and knowledge the student uses on the job to perform a task (test the objective). Test key elements of the task. Relate each item to task performance. Design items to show that students can do the task. Simulate actual task performance if the actual performance is not possible.

2. Ask at least four questions to measure task performance. For more complex tasks, ask more questions. You can accurately assess task performance and make it unlikely for military students to pass a test/PE by chance.

3. Avoid trick questions, unimportant details, ambiguities, and leading questions. They confuse and antagonize the student.

4. Write each test question to contain one central problem, skill or piece of knowledge. For example, the question “Does SGT Brown meet the educational and citizenship requirements for the assignment?” contains two problems: education and citizenship. If they are both key elements of the task, write two separate questions.

5. If possible, prepare illustrations of source documents used on the job instead of giving information in a situation. Remember you want to simulate real world conditions. For example, if a test requires a student to prepare a financial SIDPERS departure transaction, include simulated reassignment orders and the sign-out register.

6. Write each item independently of other items on the test. Do **<u>NOT</u>** give the answer to one question in the stem of another question. Do **<u>NOT</u>** make the solution of one item dependent on the correct solution of another item. Dependent questions prevent you from pinpointing deficiencies in student comprehension and instruction. They penalize students twice for the same error.

Example of a Dependent Item

Test items 1, 2 and 3 require computations for separate blocks on a form. To obtain the answer for test item 4, you must add together the answers for test items 1, 2 and 3. Obviously, you must answer test items 1, 2 and 3 correctly before you can answer test item 4 (the dependent item). You can avoid the dependent test item 4 by constructing a new situation; i.e., provide the information to determine the answer for test item 4. NOTE: For an initial practical exercise (PE) and reinforcement training, you may use dependent items for some tasks; e.g., Prepare a Promotion Point Worksheet, Compute a Travel Voucher. Student must learn to perform the entire task. You can reinforce instruction by using a PE which requires them to perform all steps in the task. The PE allows students to discover that an error in one performance step creates an error in another performance step. Remember, the FINAL PE must mirror the test format!

7. Group all questions involving specific parts of a task/function together. For example, suppose your test questions concern determining the eligibility for a program and supporting documents for the application. Group the questions on eligibility together and the questions on the supporting documents for the application together. Arrange your questions in the same sequence as the items/blocks appear on a form or names appear on reports (e.g., Personnel Transaction Registers by Originator, JUMPS Transaction Reports) so the questions mirror the actual job performance sequence.

8. When you train and test tasks/functions in basic and advanced courses, develop more challenging test items for the higher level courses. For example, write questions for ANCOC and OAC at an advanced level of learning rather than at the basic level. Apply this rule to functional level courses also.

9. Write the stem as a question. The simply worded, direct question helps students recognize what you expect. For example, the question, “Which transaction is prepared correctly?” is better than the statement, “The transaction prepared correctly is...”

10. Word the stem to make all responses plausible. Avoid using synonyms for the correct response in the stem.

Example

Refer to Figure 6-2. (Assume Figure 6-2 illustrates a service member’s DA Form 2A.) What nine-place Primary MOS code should you enter in Part I (Administrative Data), block e (PMOS), of the NCO Evaluation Report?

1. 11B3
2. 11B30
3. 111B3OP5
4. 11B3000P5
5. 11B30P500

NOTE: Asking "What nine-place Primary MOS..." automatically disqualifies alternatives 1, 2, and 3 as correct choices. Delete nine-place from the stem to make this item acceptable.

11. <u>Use positive words when you write items</u>. Avoid negative questions. Students must readjust their thought patterns when they encounter negative words. They must readjust their thought pattern again when they get to the next positively phrased item. If you must use a negative question, <u>underline</u> or CAPITALIZE the negative element. If you use "**NOT"** in the stem of an item, the alternatives must use positive words.

12. Use "should" instead of "would" and "will" when developing stems.

EXAMPLE

What should you enter in Block H (Period Covered) of the DA Form 2166-7?

	FROM	THRU
1.	9309	9408
2.	9309	9409
3.	9310	9409
4.	9310	9410

13. Delete words such as "almost," "most," "few," "great," and "large." They mean different things to different people.

14. Avoid words such as "all," "always," "every," "entirely," and "never."

15. Use the same words and word order when you write the same kind of question. Suppose you ask: "How many promotion points should SGT Knox receive for Civilian Education?" Note the following examples of word order for the second question.

INCORRECT WORD ORDER	CORRECT WORD ORDER
How many promotion points for Military Training should SGT KNOX receive?	How many promotion points should SGT Knox receive for Military Training?

NOTE: The wording of the "incorrect word order" question is acceptable. If you choose to word the question this way, use the same wording for all like questions.

16. List complete information pertaining to each alternative in the item stem. Suppose you ask: "How many promotion points should SFC Glover receive for Military Education?" Note the following examples of responses.

	INCORRECT	CORRECT
a.	50 promotion points	a. 50
b.	75 promotion points	b. 75
a.	100 promotion points	c. 100

17. List at least three, and no more than five, plausible answer choices. List only one clearly correct answer for each question. You eliminate "guesser's luck" by using at least four choices. NOTE: You may use two answer choices only when the actual performance involves a choice between two alternatives (e.g., turn-on switch, turn-off switch).

18. Write responses alike in nature and closely related to the item stem. For example, suppose a question reads, "What type of correspondence should you prepare to respond to Congressman Spendar?" Note the following responses.

	INCORRECT		CORRECT
1.	Letter	1.	Letter
2.	Official	2.	Endorsement
3.	Endorsement	3.	Formal Memorandum
4.	Formal Memorandum	4.	Informal Memorandum

NOTE: "Official" is not a type of correspondence.

19. Write all alternatives of uniform length. If answer lengths must vary, avoid making the correct response always longer or shorter than the distractors. Test-wise students usually choose the longer alternative as the correct one.

20. Avoid using "All of the above" as a choice. This response forces students to rethink each alternative. If you must use "All of the above," make it the last number choice of the test item and offer it as both correct and incorrect alternatives. When you use this response, place "(ONLY)" after the <u>other</u> answer choices.

EXAMPLE

Refer to Figure 2-1. (NOTE: Assume Figure 2-1 is a Memorandum, Subject: Recommendation for Elimination from the Service, (with enclosures.) Which required document(s) is (are) missing from the elimination action?

1. Court Martial Order (ONLY)
2. Mental Status Evaluation (ONLY)
3. Report of Physical Examination (ONLY)
4. Court Martial Order and Mental Status Evaluation (ONLY)
5. All of the above

21. Distribute correct answers randomly within your test. Test-wise students watch for set patterns, such as the correct answer always being ‘C’ or ‘D’ choices. Write only two consecutive questions with the same answer placement.

22. Qualify responses that overlap or include one another,

EXAMPLE

Does PFC Amy Coe meet the mental qualifications for appointment?

1. Yes
2. No; she does not meet the GT score (ONLY)
3. No; she does not meet the FAST score (ONLY)
4. No; she does not meet either the FAST or the GT score

NOTE: Because alternatives 2 and 3 overlap alternative 4, the word “(ONLY)” must be the last word in alternatives 2 and 3.

23. Keep answer choices about the same length. If you must use choices that vary in length, arrange the choices with the shortest choice first. When the answer choices follow a logical sequence, list the choices in that sequence. When listings pertain to awards, decorations, etc., list them in order, either highest to lowest or lowest to highest sequence. Disregard the length of the alternatives.

24. List a correct response to each question. Do **NOT** use “None of the above” as an answer choice.

EXAMPLE

SFC Joan Whyde's retirement pay will be $1200 per month. She elects full coverage under the Survivor's Benefit Plan (SBP) for her husband. To what amount of SBP annuity is SFC Whyde's husband entitled?

1. $600
2. $1200
3. None of the above

If students select 3 (the correct choice), what does this mean? How do you know the student knows the correct amount of the annuity? The question only shows that the student knows that $600 and $1200 are NOT the correct amounts. Replace alternative 3 with the correct amount and sequence the alternatives as follows:

1. $600
2. $660
3. $1200

25. If a word, abbreviation, acronym or numerical sequence exists in the responses, repeat the same sequence in all alternatives.

26. Be consistent using terminology in your test/PE. For example, if you refer to a "DA Form 201," continue to use that term instead of sometimes calling it an "MPRF" to avoid confusing the student.

27. Use neutral language. Do **<u>NOT</u>** refer to SGT Mary Brown as **"**she," and to SGT John Brown as "he;' but refer to SGT Brown as "soldier" or another neutral word.

28. When space permits, leave a blank line after the stem and between each alternative.

29. Make your test easy to use! Related situations, questions, alternatives, and illustrations should appear on the same or facing pages when practicable. (Minimize having the student flip back and forth within the test booklet.)

MATCHING EXERCISE

The matching exercise consists of three parts: (1) A list of homogeneous phrases, descriptions, definitions, etc., called <u>premises;</u> (2) a list of homogeneous words or short phrases called <u>responses</u> which bear some relationship to the list of premises; and (3) the <u>directions</u>, which instruct the student what to do and explain the intended basis for matching one of the responses to one of the premises.

This type of test item, with its many variations, accurately measures the achievement of a number of closely related facts or concepts. Several advantages of the multiple-choice question apply to matching questions. You can use matching questions for testing ability to: (1) classify materials into categories; (2) arrange material in a certain sequence; and (3) make interpretations of subject matter. Matching reduces the probability of guessing, as compared to a series of multiple-choice questions covering the same material, especially if the alternatives can be used more than one time.

In addition to General Rules on page 22, follow the principles listed below to construct matching items.

1. Give specific and complete instructions.

2. Test only essential information.

3. Make all alternatives plausible, to minimize guessing by elimination.

4. Arrange alternatives in a sensible order, such as alphabetically.

5. If you use an alternative only once as a correct choice, give three or four extra choices to reduce guessing.

6. Write a list of related premises and a list of related responses. Limit premises to between three (minimum) and five (optimum). If you use each premise one time only, then add one to three responses in excess of the number of premises. This prevents students from guessing by process of elimination. If responses may be used more than once, you need not add more responses.

7. Place longer phrases or clauses (premises) in a column on the left side of the page. Place the words or shorter phrases (responses) in a column on the right side opposite the column of premises.

8. Alphabetically label each response. Place a blank space before each premise and number each premise in sequence with the entire examination. Students will use the blank space to write the alphabetical label of the response that matches the premise.

EXAMPLES OF MATCHING QUESTIONS

1. Equal columns. When using this form, always provide for some item in the response column to be used more than once or not at all, to preclude guessing by process of elimination.

DIRECTIONS: In the blank before each item in the left column, write the letter corresponding to the name of the author. Each name may be used more than once; some names may not be used at all.

____	1.	The Training of Officers	a.	Martin Van Creveld
____	2.	Men Against Fire	b.	Karl Van Clausewitz
____	3.	Nineteen Stars	c.	Douglas S. Freeman
____	4.	R. E. Lee	d.	Sun Tzu
____	5.	On War	e.	Edgar F. Puryear
____	6.	The Art of War	f.	S. L. A. Marshall

DIRECTIONS: Match the English monarch (left column) with the house/family (right column). Some names may not be used at all.

____	1.	Henry	a.	Windsor
____	2.	George IV	b.	Saxon
____	3.	Elizabeth I	c.	Norman
____	4.	George VI	d.	Plantagenet
____	5.	Anne	e.	Hanover
____	6.	William I	f.	Stuart
____	7.	Richard III	g.	Tudor

2. Unequal Columns. Generally preferable to equal columns.

DIRECTIONS: Write in the parenthesis before each statement the location number to which the statement applies. Each location may be used once, more than once, or not at all.

( ) 1. The eastern end of this island is located directly south from the far eastern part of the US.

( ) 2. Would be crossed in a direct flight from Key West to the Panama Canal.

a. Bermuda
b. Cuba
c. Haiti
d. Jamaica
e. Nicaragua

Match the circuit symbols in Column II with the names of these symbols in Column I. Each item in Column II may be used only once.

COLUMN I	COLUMN II
____ 1. Capacitor	a. 
____ 2.. Conductor	b. 
____ 3. Resistor	c. 
____ 4. Antenna	d. 
____ 5. Fuse	e. 
____ 6. Voltmeter	f. 
	g. 
	h. 

Match the transmitter block with its purpose.

( ) 1. Assigns RF carrier wave	a. Modulator
( ) 2. Impresses intelligence on RF carrier wave	b. Microphone
( ) 3. Amplifies RF Signals	c. Antenna
( ) 4. Radiates energy into space.	
( ) 5. Converts sound to electrical energy	

3. Coded alternatives for interpretation. Useful to measure and differentiate between students at the application level of learning, but only in some subject matter areas.

DIRECTIONS: Assume the facts and results are correct in the following experiment. After the description of the experiment is a numbered list of results of the experiment. Decide which interpretation (a, b, or c) is correct for each of the results (1, 2, 3, 4, & 5) listed below. Place the appropriate letter to the left of each item.

a. Reasonable interpretation of the results obtained.
b. Might possibly be true but insufficient facts are given.
c. NOT true - contradicted by results.

The Experiment: White starch was treated ten separate times with brown iodine. Each time, a blue color formed. Later, some white starch was mixed with saliva. The mixture was set aside for 30 minutes and then treated with the same brown iodine solution ten separate times. Each time, NO blue color formed.

____ 1. Saliva acted upon the iodine.
____ 2. Saliva digested the starch.
____ 3. Starch changed to sugar by saliva action.
____ 4. Saliva produced a change in the starch.
____ 5. Starch mixed with iodine solution did NOT turn blue.

Essay Test Items

Use great care when deciding to use essay test items, as they pose additional issues as test items. You must write the objective evaluation criteria that targets what the student must address to successfully answer each essay test item. You must provide grading information and a grading scale and consider the overall time consumed when grading essay items. With care and proper planning, you can create an essay test that is reliable, valid and comprehensive. Essay test items force the student to compose an extended response to a problem or question. The student's response to these items can indicate the amount of knowledge the student possesses as well as the student's nature of critical thinking and organizational ability. When writing essay test items, use different types of elements, including comparisons, relationships, explanations, analyses, illustrations, criticisms, summarizations and descriptions.

Before writing an essay item, you must know the training and background of the students to be tested and the grading criteria for objectives. (How will they be measured?) When you begin writing essay test items, follow the General Rules on pages 22 and 23 as well as the rules listed below.

1. State your essay items clearly so that students will know exactly what type of discussion you want. To determine the quality of your test item, ask several people to read the item and tell you what you want in the answer. A good test item means the same thing to all students who have achieved that level of learning. Test your items on peers and other instructors before testing your students. Revise or eliminate all items with a double meaning.

2. Increase the <u>number</u> of test items and reduce the <u>amount</u> of discussion required for each one. This makes scoring easier and usually increases the comprehensiveness of your test.

3. Suggest a time limit for each item and indicate the desired length of response. As a minimum, limit responses to a size compatible with the test objective.

4. Tell students before the test (or as part of the test instructions) the point value of each item for scoring purposes.

5. Avoid basing the solution of one problem on the correct solution to another one.

You may classify your essay test items in various ways. One classification is the type of response you expect a student to make. Study the examples of six major kinds of essay items listed below.

EXAMPLES

1. <u>Comparison</u>.

* Compare the fuel use of a jet and a prop-jet aircraft.

* Compare the effects of the initial blast, shock wave, and heat wave in a nuclear explosion.

* Compare the effects of a nuclear detonation with an airplane that breaks the sound barrier.

2. <u>Explanation of definition</u>.

* Explain the principles of airfoil lift.

* Describe the functions of each block in a field radio.

* Define the term "State of Alert."

* State the purpose of the Hawk guided missile system.

3. <u>Decision</u>.

* Which of the two methods of input is better in the following situation? Why? (Instructor describes a specific situation.)

4. <u>Causes, effects, or relationships</u>.

* What is the proper questioning technique? Why is this technique important?

* Why does the soldier data tag rather than the metal ID tag work better on the battlefield?

* What would be the effect of a starburst shot at night?

5. Summary

* In 50 words or less, summarize the peacetime and war time duties of the Army Band.

* In the space below, summarize the purpose of SURE-PAY.

6. Illustration.

* Draw the block diagram of the transmitter.

* Draw a flow chart of the field casualty reporting process.

* Illustrate, in organizational chart form, the staff positions of the Soldier Support Institute.

* Given the following situation, diagram unit areas of support. (Instructor describes the specific situation.)

Grading Essay Items

During the actual scoring procedure, certain practices will greatly increase the accuracy and uniformity of scoring. The first step is to test the validity of the pre-examination scoring guide. This can be accomplished by reading a random sample of examinee responses, and checking to see whether or not their general interpretation of the item matches yours. If there is evidence that examinees consistently misinterpreted the item, either design a new scoring guide, or toss out the item.

Responses should be graded as anonymously as possible, and strictly following the scoring guide (modified, if necessary, after sampling responses). If more than one essay item was included in the test, it is best to grade all of the responses to one item before going on to the next. This will help to ensure that the same criteria of excellence are imposed on all responses to the same item.

Grades are assigned to essay responses by specific point value. When using the point value method, specific points are assigned for specific elements of an answer, and credit is not awarded unless the specific element is covered. For example, if there were to be three elements in the answer, one point could be assigned to each element. Each student who correctly included two of the three elements would get two of the three possible points for that item.

It is a good idea to shuffle the examinations after grading each item. No matter how well-developed a scoring guide is, the process of scoring is more relative than absolute. The evaluator makes a judgment about how well each response matches the scoring guide. When grading several examinations at one sitting, this measure of "fit" is often affected by the adequacy of the previously graded responses. An evaluator who has just read an almost perfect response has the tendency to downgrade a mediocre one; the inclination is just the opposite after having read a totally inappropriate one. By shifting the sequence of papers, you reduce this "masking" effect. One examination will not consistently be treated with greater stringency or leniency because of the quality of the examination it happens to follow.

SHORT ANSWER

The short answer item is an objective form of the essay item. The student gives a single, short response to a problem or a direct question. The response may consist of a word, a phrase, or a sentence. The short answer test item primarily measures the ability to recall specific details. It can be used to measure mathematical problem-solving ability. If you use this type of test item, use simple computations or simple verbal recall for test items. This form of item tends to produce a wide variety of correct responses, which reduces objectivity in scoring the items. It requires scorers who are familiar with the subject matter.

In addition to the General Rules on pages C – 1 – 23 and C – 1 – 24, follow the principles listed below to create short answer test items.

1. Specify exactly what you expect as an answer.

2. Stick to one idea, concept or closely related set of facts with each short answer.

3. Word the item to show the student how much information to give to answer the question. Provide a limited space for the response, but not as a clue to the correct response.

Examples

1. Direct-question types. The average student finds this type of question easier than the completion item.

   * What are the two main gases found in the air?

     ______________ and _____________

   * What is the highest award in the US Army?________________

2. Short explanation type:

   * Write the primary use of the following recruiting tools:

     a. High School folder: ___________________

     b. Prequalification: _________________

* Explain in one sentence the connection between General Dwight Eisenhower and each general listed below.

  a. General Rommel

  b. General De Gaulle

  c. General Bradley

3. Identification of association type: This adapts easily to informal classroom testing.

   * After each post, write the name of the state in which it is located.

     Fort Monroe____________________
     Fort Meade_________________
     Fort Carson____________________
     Fort Bliss________________

   * After each of the tactical functions of air defense, list the major Hawk equipment items that fulfill these functions.

     a. Detect _________________________

     b. Identify ________________________

     c. Track _________________________

4. Listing Type: This adapts easily to informal classroom testing.

   * List the names of six parts on the M16.

     a. __________ d. __________

     b. __________ e. __________

     c. __________ f. __________

   * List the three equations derived from Ohm's Law.

     a. ______________________

     b. ______________________

     c.___________________ ___

* List any four types of American tanks.

a. ______________________

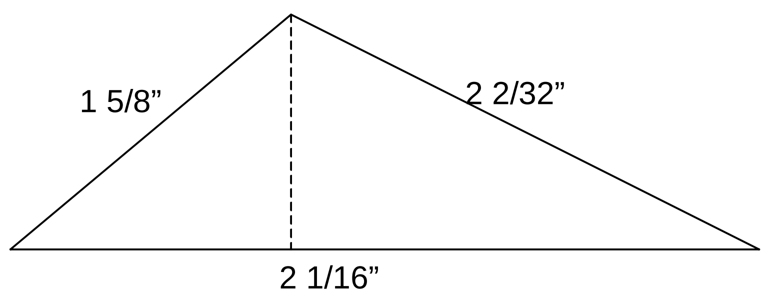
b. ______________________

c.___________________ ___

d. ______________________

5. Pictorial type: Diagrams or pictures add clarity, speed the testing process, and make testing more interesting and valid.

* Study the diagram below and write your answer to each question in the appropriate blank.



a. What is the perimeter? _____________

b. What is the area? _______________

COMPLETION ITEMS

In a completion item, the student must recall and supply the key word or words omitted from a statement. This item tests the student’s ability to make associations of the “who, what, when, and why” type. You can present completion items as sentences containing single and unrelated thoughts, or in paragraphs with several related sentences expressing one idea.

In addition to the General Rules on pages 22 and 23, follow the principles below to create completion test items.

1. Use only one blank in each sentence. Multiple blanks tend to mislead students.

2. Place the blank at the end of the statement. This way, the student gets all the information before reaching the blank. This prevents taking time to reread the statement.

3. Write the item so that only one correct response is possible.

4. Word statements for task and student understanding.

5. Make all blanks the same length. Test-wise students look for clues in adjusted response lengths.

6. Write directions that tell the students (a) to consider the length of the blanks uniform and unrelated to the length or nature of the response and (b) whether one blank always calls for one word or possibly a short phrase.

7. Ask students for one word (minimum) and three words (maximum) for a phrase. Maintain the context of the statement.

EXAMPLES

* Columbus was born in the year ________________

* The switchboard BD-70 operates on a power supply of ________________ volts.

PROBLEM—SITUATION

In a problem-situation test item, students must solve a realistic problem. Some items may only require the student to recall and select facts or basic principles while other items may require reflective thinking. Problem-situation tests can measure the following student abilities: (1) classifying data, (2) accurately interpreting data, (3) identifying relationships, (4) applying scientific principles and laws of logic to new or different situations, and (5) testing conclusions.

A problem-situation item, when properly constructed, is characterized by the advantages listed below.

1. It proves the student's degree of understanding.

2. It tests and measures the student's ability to reason, either deductively or inductively.

3. It tests the student's skill in applying principles to a new situation.

Every problem-situation item has two major parts. The situation sets the stage. It must be carefully designed to provide all the information needed to solve the problem. (Add charts, maps, sketches, or diagrams if they will increase clarity or realism. Write the second major part, the problem, in either selection or supply form.

In addition to the General Rules on pages 22 and 23, follow the basic principles below to create problem-situation items.

1. Make the situation and the problem realistic. If possible, present an actual job-related situation.

2. Be specific in the problem and situation, especially in details and student requirements.

3. Limit problem responses to an allotted time span.

4. For efficiency, construct several problems to use as many aspects of a single situation as possible.

5. Present a new situation to the student using the same principles and ideas learned in class.

6. The situation can be simple or complex, depending on the training objectives.

EXAMPLES

1. Application of general principles to a specific situation.

Essay items may pose a problem in scoring the responses, especially if different instructors score them. You can prevent this by (1) clearly limiting the responses required; (2) preparing a complete scoring key; and (3) converting the problem into multiple-choice items. Read the situation below and compare the two forms of questioning technique in the problem portion.

Situation 1

You are the comptroller at Sky High. Five months ago, the maintenance squadron commander ordered a study of the maintenance control system. You gave Captain Knight, an aggressive management analyst, the assignment. You know the officer has no maintenance experience, but you think Captain Knight can perform the job. You recently checked the progress of the study and learned the facts listed below.

a. Captain Knight started seven different studies that vary in degree of progress and completed none of them. Two more studies are in the “planning stages.” Captain Knight disagreed with two officers in charge of separate areas who nonconcurred with Captain Knight’s recommendations. These two deadlocked studies showed no progress. When you talked to the two deadlocked officers, they stated Captain Knight did not understand maintenance problems and made faulty recommendations to date. The other five studies stagnated and proved unproductive.

b. Captain Knight ordered nine temporary reports at different times when scheduling maintenance squadron activities. The activities were to provide data in various maintenance areas.

Form 1: Problems for Situation 1

1. In what respect did Captain Knight err most seriously?

2. Given the present situation, how can you best complete the two deadlocked studies?

Form 2: Multiple Choice Format

1. In the situation described, where in the analysis process did Captain Knight show the greatest weakness?

   a. Planning the analysis
   b. Establishing reports
   c. Interpreting deviations from standards
   d. Selling the final product

2. In the situation described, what action would you take concerning the studies deadlocked by nonconcurrence?

   a. Transfer Captain Knight to another comptroller area to minimize direct contact with other offices.

   b. Withdraw the analysis and give the officers a "cooling off period," then request another analysis.

   c. Request the maintenance officer and the comptroller sit down and discuss their differences.

   d. Forward the reports to the deputy for material without concurrence if they are factually correct.

3. Memo outline. The following essay item presents a realistic situation and guides the student's responses.

Situation 2

MEMORANDUM FOR COMPTROLLER

SUBJECT: Base Financial Plan

I just returned from a visit to Industries AFB. The base commander showed me a copy of his base financial plan (BFP), which he said his comptroller developed. He gave me a detailed, written explanation of a BFP. Answer my questions below.

a. What is it?

b. How is it prepared?

c. How is it used?

d. What records do you need to prepare such a plan?

e. What steps and methods do you use in developing the plan?

f. How can we benefit from this plan?

g. What steps do we take to initiate one here?

3. Interpretation of numerical data. If possible, use information the student will be using on-the-job for realism.

Situation 3

Part of your duty as the director of material of a C-124 wing includes estimating supplies needed for immediate future operation. The planning data available to you appears below.

Assigned aircraft---45
Engine hours between overhaul--------------------------------------1,000
Sortie rate per month---68
Estimated average length of sortie (in hours)-------------------------12
Gallons of fuel per airplane per hour----------------------------------400

Problems for Situation 3

Using only the quantities given in the situation, what is your estimate of monthly gasoline consumption rate in gallons?

a. 2,560,000 c. 6,912,000
b. 4,800,000 d. 7,800,000

IDENTIFICATION

In the identification exercise, students must recall the name or identify a part of a tool, symbol or object. The symbol or object may be pictured in the examination, projected on a screen, or placed before the class in actual or mock-up form. The identification exercise is best suited for measuring student ability to recall or recognize various elements of instructional content. It can also be used to measure knowledge of the functioning of certain parts of equipment or its nomenclature.

Keep the following principles in mind when preparing identification items.

1. Provide clear, simple and accurate sketches, drawings or photographs. Avoid off-scale sketches.

2. If practicable, display actual objects or parts of objects instead of sketches.

3. Provide adequate time for student response if you use actual objects or projected slides.

4. Provide actual objects or projected slides at the beginning or end of the examination period.

EXAMPLES

In the blank to the left of each symbol shown below, write the name of the element each symbol represents.

1. ________________ Ca
2. ________________ Na
3. ________________ Fe
4. ________________ Au

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C-2

CONSTRUCT A RATING FORM

OBJECTIVE:

Construct a rating form for a performance test using the approved TLO for your 45-minute presentation. Your rating form must accurately measure the TLO in action, conditions, and standards. The rating form must include the correct heading and evaluation information for the type of performance test used. The form must be without errors.

CRITERION-REFERENCED TEST:

Construct a rating form for a performance test using the approved TLO for your 45-minute presentation. Your rating form must accurately measure the TLO in action, conditions, and standards. The rating form must include the correct heading and evaluation information for the type of performance test used. The form must be without errors.

<u>CONSTRUCT A RATING FORM</u>

The purpose of the Systems Approach to Training (SAT) is to send competent, well trained soldiers to field units. To confirm that your soldiers have mastered the skills they need to perform their jobs, you must evaluate them. During the "Design Phase" of the Systems Approach to Training, you will construct a criterion-referenced test that will accurately measure the student's mastery of the terminal learning objective (TLO).

Your TLO dictates the type of test you will develop. Many military objectives require a student to perform an action; hence, a performance test. As an instructor, you can design performance tests to evaluate a process, a product, a combination of process/product, or a written action. This module helps you to evaluate different types of performance tools.

Along with the development of your performance test, you must also develop a rating form as a means to evaluate the tested performance. As you learned in Module C-2, make a checklist for a process test and a description of the final product for a product test. For tests that require a process and a product test, you will need both a checklist and a description of the final product. For a written performance test, you will need a completed, correct test to serve as a rating form.

1. <u>PROCESS TEST.</u> Constructing a Checklist.

   A. First, construct a checklist by listing the performance steps in a column on the left side of the paper. For example:

      Splint a fracture
      1. Pad the splints
      2. Tie splint
      3. Check pulse
      4. Get individual to medical help

   B. The test administrator must decide whether or not a step has been correctly performed, so you must add a standard of performance to each of the steps listed. The standards will maintain the fairness in testing by setting an objective standard for all students and eliminating administrative subjectivity. Note the standards added to the following performance steps. If the steps must be performed in a sequence, this fact must be stated and the checklist must so indicate.

Splint a fracture	PASS	FAIL
1. Put on the padded splint with the fractured bone in as normal a position as possible.	____	____
2. Tie splint securely in place.	____	____
3. Check pulse below the fractured Spot and loosen splint if necessary To insure pulse.	____	____
4. Get individual to medical help as soon as possible.	____	____

C. Now add a PASS column and a FAIL column to the right of your list (see example above). The test administrator now has a place to show how the student performed on each item.

Additionally, you must tell the test administrator how many PASSES the individual needs to pass the test. In critical, life-threatening tasks, a student must obtain a "PASS" on every item listed. In other cases, a student may only need to obtain a "PASS" on a percentage of the test items. For example, a student must perform 10 or 12, or 17 of 20. At still other times, the student may need to pass certain items, but not all of them. In this last example, you must add a statement to the instructions at the beginning of the test informing the student of the standard and whether or not the steps must be performed in sequence. Place the criterion statement for passing the test at the beginning of the test. The following are examples of criterion statements.

> "To pass this test, the student must get a PASS on 9 of the 12 items including items 3, 4, and 11."

> "To pass this test, the student must get a PASS on all five items."

D. The final step is to place the heading on the test. The heading you will use will depend on the information that you need to gather. Minimally, it will list the individual's name, the date, and a place to show whether the student passed or failed. The following example shows a completed performance test:

SPLINT A FRACTURE

NAME ____ DATE________________

PASS _________________________ FAIL _____________________

To PASS this test, you must get a PASS on ALL four items.

Splint a fracture	PASS	FAIL
1. Put on the padded splint with the fractured bone in as normal a position as possible.	____	____
2. Tie splint securely in place.	____	____
3. Check pulse below the fractured Spot and loosen splint if necessary To insure pulse.	____	____
4. Get individual to medical help as soon as possible.	____	____

Comments: ____

____

____

2. PRODUCT TEST. Constructing a Rating Form.

To construct a rating form for a product test, you create the heading first. Next, list a complete description of the product, including the standards stated in the terminal learning objective (TLO). The following example shows a completed Product Test:

CONSTRUCT A STORAGE CRATE
RATING FORM

NAME ____________________________ START TIME _____ STOP TIME _____

PASS _______________ FAIL _______________

The student will construct a storage crate four feet long, two feet deep and two feet high. These dimensions must be accurate to within ¼ inch. The joints will be smooth, tight, and square.

Comments: ____

____

____

____

____

3. PROCESS-PRODUCT TEST. The Rating Form

A process-product test combines the elements of both the process test and the product test. Completing the process in a given order is mandatory, but a product must also result from the process. For these tests, you will need a checklist **AND** a description of the final product.

4. WRITTEN PERFORMANCE TEST. The Rating Form

NOTE: This is a specialized form of a product test.

The completed test becomes the rating form for a written performance test. It must include a heading, clearly stated directions which tell the students exactly what they are to do (action, conditions and standards), and a mock situation or scenario representing a real world situation on which this task would be performed. The Soldier Support Institute uses computer programs for many of their written performance tests; instructors grade the finished work on screen. The schools also use two other types of written performance tests in addition to computer input. The example below uses an overlay as an answer key.

EXAMPLE 1

MARK MAP POINTS

SITUATION: You work in the 173d Airborne Brigade as a finance clerk. Your finance unit moved to a new location overnight that is 12 miles south of Mount Pilot due to heavy artillery barrages. You must provide this new location to other units.

DIRECTIONS: Mark three positions on a map. Use the positions listed below and the Orange County 1:50,000 map provided. Identify positions with the blue marker provided. All positions must be marked accurately to within 1/4 mile on the map. You must complete your work within 20 minutes.

1. Mark the Mount Pilot position as “Point A” on the map.

2. Mart your position as “Point B” on the map.

3. Mark the position of the town of Bentley as “Point C” on the map.

To grade this written performance test, the test administrator must have a completed, CORRECT copy of the map. To grade the map points, mark the true positions on a piece of clear acetate which overlays the map; then place the acetate over the student’s map to ensure the student marked the correct points.

The map becomes the rating form for this test, and the overlay becomes the answer key for the test. Since the laminated maps will be cleaned and reused, you will need an additional grading sheet to mark student performance. See the example on the next page.

MARK MAP POINTS

NAME ________________________ START TIME ________ STOP TIME ________

PASS _______________ FAIL _______________

EXAMPLE 2.

If you taught a class of students how to complete a DD Form 214, your test rating form would be the completed form. Distribute a blank DD Form 214 to each student, along with a separate listing of information. The students use the information to complete the DD Form 214 and submit it for grading.

In each of the written performance tests above, the material used by the students became the rating form. If a completed form will be rated, you must provide a completed, **CORRECT** form to the test administrator to use when rating students' work.

5. PERFORMANCE TEST ADMINISTRATOR'S MANUAL.

Many instructors design courses to develop manipulative skills; students usually receive evaluations based on the procedure they follow as well as the product they produce. To prevent variations when administering a test to different students or groups and to ensure fairness, you test the same way every time. For each test, prepare a Test Administrator's Manual and specify the testing procedure. Study the manual information below.

Directions to Test Administrator

A. Objective of Test. State what the test is designed to do.

B. Prior to the Test Period. Describe the tasks to be performed by the test administrator before the class period(s) scheduled for testing. Include a checklist of documents, equipment, and work materials necessary for each tested student. Explain any actions required of the test administrator prior to receiving the students. This may include special equipment configurations such as "have all switches off" or "be sure road wheel has been removed."

C. During the Test Period. Describe tasks the Test Administrator must perform during the period(s) scheduled for testing. This includes preparing students for the test and other responsibilities, such as stopping the test if the student violates a safety rule, jams the laser printer, fires a live round dangerously, etc.

D. After the Test Period. Describe the tasks the Test Administrator must perform after each test period. Include feedback to the examinees and preparation for any following test periods.

6. REVIEW

Each of the four performance tests needs a grading tool. A process test requires a checklist for a rating form. The checklist includes a heading, a list of steps with standards, a pass and fail column, and a statement of the criterion for passing the test.

A product test rating form provides a complete description of the product. A combination process/product test requires both a checklist and a product description. A written performance test requires the student to perform the task in writing. The completed test becomes the rating form. The test must include clear directions explaining what the student must do, the acceptable standard of doing it, and a scenario that represents a real world situation for task performance.

You must also develop a test administrator's manual that explains the test objective and tasks to be performed prior to the test, during the test and after the test.

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PRACTICE EXERCISE

Construct rating forms on a separate sheet for the performance-based classes listed below. Your rating form must include correct heading and evaluation information for the type of performance test used. Your work must be error free.

1. Process test. Send Radio Message. Student must complete each performance standard:

1. Listen for clear net.
2. Do not interrupt other outgoing message.
3. Call distant station using call sign.
4. Tell operator you have message for that station.
5. Receive response from distant station's operator: "ready to receive."
6. Send message using correct pro-words and correct pronunciation of letters and numbers.
7. Get receipt for message.
8. Complete all steps in sequence.

2. Product test. Dig vertical fighting position for one person. Performance standards: Student stands comfortably in armpit deep hole shaped to fir the natural cover available. Frontal parapet, either natural or made from excess dirt from the hole, which hides the student's head. Dirt parapets must be at least 18 inches thick between the student and the enemy.

Answer Key
Practice Exercise

1. SEND RADIO MESSAGE RATING FORM

NAME ______________________________________ DATE _____________________

PASS ________________ FAIL _______________

To pass this test, you must get a PASS on ALL items.

Send Radio Message	PASS	FAIL
1. Listen for clear net without Interrupting other outgoing messages	____	____
2. Call distant station using call sign.	____	____
3. Tell operator you have message for that station; Wait for response from distant station's operator; "ready to receive."	____	____
4. Send message using correct pro-words and correct Pronunciation of letters and numbers.	____	____
5. Get receipt for message before ending transmission.	____	____
6. Complete all steps in sequence.	____	____

---

2. CONSTRUCT ONE PERSON VERTICAL FIGHTING POSITION RATING FORM

NAME ____________________________ START TIME _______ STOP TIME _______

PASS _______________ FAIL _______________

The student must construct a one-person vertical fighting position, which is armpit deep. The student must stand comfortably in the hole, which is shaped to fit the natural cover available and has a frontal parapet, either natural or made from excess dirt. Dirt parapets must have at least 18 inches of dirt between the student and the enemy with excess dirt camouflaged. The parapet completely hides the student's head from enemy vision.

Comments: ____

IM-3

DEVELOP A PRACTICE EXERCISE

OBJECTIVE:

Develop a practice exercise (PE) for the Terminal Learning Objective (TLO) or for an Enabling Learning Objective (ELO) of the task you will teach in your final presentation. You will use the approved task analysis report from Module TAR-1. The practice exercise must:

- Be appropriate for the target audience.
- Match the action, conditions and standards of the TLO or ELO.
- Address the skills and knowledge identified in the task analysis report.
- Provide for immediate feedback (answer/solution key).

CRITERION-REFERENCED TEST

Develop a practice exercise to determine if the students have mastered the TLO of the task you plan to teach for your final presentation. Or, if your task had ELOs, you may develop a practice exercise for one of the ELOs. Use the approved task analysis report from Module TAR-1 to guide the development of the practice exercise.

The practice exercise you develop must:

- Be appropriate for the target audience.
- Match the action, conditions and standards of the TLO or ELO.
- Address the skills and knowledge identified in the task analysis report.
- Provide for immediate feedback (answer/solution key).

DEVELOP A PRACTICE EXERCISE

You are probably familiar with the expression, “Practice makes perfect.” We know from experience that when we learn a new skill we tend to remember and apply this new “skill if we have a chance to practice as part of the instructional process.

According to TRADOC Pamphlet 350-50, phase III – Develop, there are four general guidelines that are appropriate for most learning objectives (TLOs):

1. Inform the learner of the objectives.

2. Provide for active practice.

3. Provide guidance and props for the learner.

4. Provide feedback to the learner.

The second guideline addresses the practice exercise. This is further expanded in the pamphlet by the following statements:

- Students learn better when they actively practice new learning.

- Practice on performance can assist in learning faster, improving the learning, and retaining what is learned.

The instructional goal for personnel involved in all aspects of training is qualified students. We want competent students – able to perform all tasks identified for training.

How do we accomplish this goal? The task analysis provides the key. Remember that during the task analysis, skills and knowledge were identified after grouping and organizing steps and procedures. These major steps were further divided into substeps and/or sub-substeps when applicable. Upon completion of the task analysis, we may have identified enabling learning objectives (ELOs) based on these major steps. We would then select a learning activity for each ELO and could conclude that after training is provided for each ELO, the task or terminal learning objective (TLO) is mastered. The ELOs tell us what our practice exercises will look like in terms of what the student will have to do (action), what we will provide the student (conditions), and how well the student must perform (standards) before going on to the next instructional unit. If our task did not contain ELOs, then we would have a comprehensive practice exercise that mirrored the action, condition(s) and standard(s) of the TLO.

Let’s look at the task analysis report Module TAR-1. We will address the task “Write a Paragraph.” Notice that four instructional units or enabling learning objectives (ELOs) have been identified.

1. Construct a topic sentence.
2. Write an outline.
3. Draft a paragraph.
4. Edit for unrelated thoughts.

Look at how the first instructional unit is written. This ELO will tell us what a practice exercise should look like in terms of:

1. What the student will do – CONSTRUCT A TOPIC SENTENCE.

2. What we will provide the student – a TOPIC.

3. How well the student must do.

   – FREE OF ERRORS
   – CONTAINS ONLY ONE TOPIC OF THOUGHT
   – IS SPECIFIC ENOUGH TO LIMIT AND CONTROL THE PARAGRAPH
   – IS SPECIFIC ENOUGH IN SCOPE TO BE DEBELOPED IN ONE PARAGRAPH

Read the following example of an appropriate practice exercise for the ELO “Construct a topic sentence>”

<u>PRACTICE EXERCISE</u>

DIRECTIONS: Write a Topic Sentence for the following topic – skiing. You may use your dictionary and English Grammar textbooks as references. The Topic Sentence must contain no errors in spelling, punctuation and grammar. It must contain only one idea. This idea must be specific enough in scope and in content to limit and control the paragraph.

Let’s suppose the following topic sentences were written by students.

1. Sking is an expencive sport.

2. Physical training and safe equipment are prerequisites to success on the slopes.

3. A popular sport can be fun.

4. Breckenridge offers a special ski package in January.

Here is how you would critique these sentences and provide immediate feedback.

1. Sking is an expencive sport. This is inadequate for the following reasons: First of all two words are misspelled. “Sking” should be changed to “Skiing” and “expencive” should be changed to “expensive.” Also, this sentence is not specific enough to limit and control the paragraph since it doesn’t specify what kind of skiing.

2. Physical training and safe equipment are prerequisites for success on the slopes.

This is inadequate for the following reason. It contains more than one topic thought.

3. A popular sport can be fun.

This is inadequate since it is not specific enough in scope to be developed in one paragraph.

4. Breckenridge offers a special ski package in January.

This is adequate. The topic sentence is free of errors. It contains only one topic thought. It is specific enough to limit and control the paragraph. Also it is specific enough in scope to be developed in one paragraph.

There is not established format for the development of practice exercises. However, explicit directions and immediate feedback must be included. Also, the practice exercise must match the action, condition(s) and standard(s) specified in the TLO and any ELO's.

T–1

ADMINISTER A TEST

OBJECTIVE:

Select the correct solution to ten problem situations listed. You must apply the principles of standardized and objective test administration to obtain answers IAW Module T-1.

CRITERION-REFERENCED TEST:

You must select the correct solution to each of the ten problem situations listed by applying the principles of standardized and objective test administration. Your solutions must be IAW Module T-1.

ADMINISTER A TEST

A test's value is directly related to HOW you use it. You have taken considerable time in developing a comprehensive test that measures a student's ability to perform a terminal learning objective (TLO). Take the next step in test development by administering a test in a consistent, objective manner. Use a standard procedure every time, so that each student has the same opportunity to perform competently on a certain task.

In previous modules (C-1 & C-2), you learned to how to develop student assessment instruments and construct a rating form. The "rubber hits the road" in a true test when you combine these instruments to measure each student's level of performance.

Proper test administration maintains test validity and provides quality control; you can examine the results to validate the worth of the training program. If you administer a test correctly, you can analyze test results and compare successes and failures of a particular course, identify test deficiencies, and improve test measurement of terminal learning objectives.

As an instructor, you must master three major responsibilities to successfully administer a test:

I. Preparatory responsibilities.

II. Proctoring test sessions.

III. Test critiques.

I. <u>Preparatory Responsibilities.</u>

This area includes all of the responsibilities that precede the scheduled test session. When conducted properly, students transition from formal classroom instruction to testing in a smooth, orderly manner. You can maintain consistency in testing by following the procedures listed below.

- Always schedule a test as soon as possible after the formal instruction, while the material is still fresh in the student's minds. Allow students a reasonable amount of time (usually one evening) to study the material in preparation for the test. Whatever the time between formal instruction and student evaluation, be <u>consistent</u> in scheduling the test at the same time with each succeeding class.

- Prepare all testing materials for distribution before the test session. Thorough organization minimizes student confusion significantly. During test preparation, instructors sometimes need more copies of the test. <u>**Under no circumstances should instructors reproduce tests themselves.**</u> If you need extra copies of tests for students, take your test to the SSI Test Coordinator's Office, who will reproduce the test from a master copy on file. This procedure maintains test security and enables the Test Coordinator's Office to control the test content from the master copy. Administer the same test to every class to maintain quality control.

- Use the same test versions during initial testing for all students in a particular class. You learned in a previous module to develop enough test items for two tests: Versions A and B. Both tests must be of equal value in content. Use both versions with equal frequency by alternating their use with initial testing and retesting.

- Instructors in AIT, BNCOC and ANCOC must prepare at least two versions of each test. All versions of a test must be parallel in terms of format, coverage of subject matter, standards and (to the maximum extent possible) difficulty.

- Safeguard test booklets. They are academic security items. While in you possession, you must control the booklets and account for all of them at all times. If one copy of a test booklet disappears, you compromise your test's validity.

- Prepare mentally before going to the test site. Anticipate problems in test administration and be prepared to protect the testing situation from any unnecessary interference that may jeopardize test reliability.

- NEVER leave students unattended. It tempts dishonest students and others to disturb the test environment tranquility. If you catch a student cheating, take action IAW SSI Regulation 350-22.

- Arrive at least five minutes early at the test site to distribute supplies and materials that students need to complete the test.

- Ensure all students in all classes get the same amount of time to complete the test. This maintains fairness and allows for long-term quality control designs.

- International students may refer to an English dictionary during the test. Check with your particular school to learn of other testing policies unique to international students BEFORE conducting the test.

After distributing supplies and materials to all students, record the names of those who are absent. They must take a make-up test (separate Version of the test).

II. <u>Proctoring the Test Session.</u>

As an instructor, you must inform the students of the "rules of the game" at test time and <u>enforce them</u>. Give thorough test instructions and make no exceptions once the test begins. You may answer ONLY questions concerning test administration; do NOT answer questions pertaining to test content.

Call the students' attention to the supplies and materials you distributed to them. Refer to each item and ask students to ensure they have a complete set of testing materials; ask students to count the number of pages on the test to make sure no pages are missing. Nothing invalidates a test score faster than completion of a test with the wrong or insufficient materials.

Refer students to the answer sheet provided. Ask the students to write their names, ranks, course, class number (if applicable), date, SSN, and test number on the answer sheet. Most performance tests have that information printed on the student booklet; students need only fill in personal information and the class number. To find this information, refer to the Test Code and write it on the board.

Tell the students what they must do to complete the test. Be exact and explain carefully what the students must do to receive a passing grade. If a test contains a familiar format, be brief in explaining it; for example, "This test consists of 40 multiple-choice items. Each item has only one correct answer. The items will be counted wrong if you mark more than one answer choice. There is no penalty for guessing."

As you integrate new procedures into your teaching, you must update or rewrite your tests. Once your test is obsolete, the ONLY acceptable way to destroy it is to personally shred it. You CANNOT delegate this authority or responsibility. Refer to SSI Regulation 350-22 to destroy outdated tests.

III. Test Critique

As an instructor, you formalize the evaluation process by conducting a critique of the test. Tell the students the correct responses to test items, appraise student performance and give students the opportunity to discuss the test.

Instructional department directors will choose a faculty member to supervise the critique and as many instructors as deemed necessary to answer student questions. Instructional department directors may use any combinations of three procedures to conduct a critique:

- Schedule the critique immediately after the test.
- Delay the critique until students receive scored tests and answer sheets to review during the critique.
- Schedule two critiques, one immediately after the test and another at a later time when the students receive their scored tests and answer sheets.

If you administer a performance test which measures the ability of a single student and you are the only instructor present, critique the student immediately after the test.

If you administer a performance test which measures the ability of an entire class, you must schedule a formal class critique. The critique should cover the skills and abilities the test sought to measure.

If you plan to critique a knowledge-based test, have students clear their desks of all materials except the test booklets and read this statement to the students: "You are NOT permitted to take notes during this critique, and you may NOT discuss the answers to this test with any student who is not a member of this class." If you discover a student taking notes after your instructions, stop the student immediately, confiscate the notes and charge the student with cheating IAW SSI Regulation 350-22.

Read all items and the correct response to each.

Answer student questions. If a question is not clear, help the student clarify it. If you are qualified, answer the question. If not, turn over control to the appropriate instructor. Control returns to you after each answered question. Do NOT allow the question-and-answer session to become a debate. If you think a student's question is improper or answered inadequately, cut off discussion and advise the student to contact the appropriate instructor after the critique. Under no conditions will you or any faculty member state to class members than any test question is unfair or improper or that any response designated correct on the answer key is wrong. Handle these matters professionally within your department.

Collect all test booklets after the critique. If you distributed student response reports, collect them also. Double check test booklets to make sure you have all of them before dismissing the class.

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IM - 4

DEVELOP A LESSON PLAN

OBJECTIVE:

Develop a lesson plan for a 40-50 minute block of instruction. You will use an approved TLO, a task analysis report to include ELOs, and the Standardized Lesson Plan Job Aid as resources.

The lesson plan <u>must</u> include a practice exercise with answer key for each ELO (or if there are no ELOs, a practice exercise and answer key for the TLO), and at least two different types of training aids. The lesson plan must adhere to the guidelines of the Standardized Lesson Plan Job Aid and be appropriate for your target audience.

CRITERION REFERENCED TEST:

Develop a lesson plan for a 40 to 50 minute block of instruction:

You will use:

- an approved TLO
- an approved Task Analysis Report with ELOs
- Standardized Lesson Plan Job Aid

The lesson plan <u>MUST</u> include a practice exercise with answer key for each ELO (or if there are no ELOs, a practice exercise and answer key for the TLO) and at least two different types of training aids. The lesson plan must adhere to the guidelines of the Standardized Lesson Plan Job Aid and be appropriate for your target audience.

Prior to developing the lesson plan, you have done the following:

- selected the task or subject you will be teaching for your final presentation (Task 1):
- performed a Task Structure Analysis (TSA) for Task 1:
- written a Terminal Learning Objective (TLO) for Task 1;
- completed a Task Analysis Report for Task 1;
- written enabling learning objectives (ELOs), if applicable, based on you task analysis for Task 1;
- selected the method and media you will use when teaching Task 1;
- developed a practice exercise(s) for your ELOs or TLO.

You are now ready to "put everything together" in a lesson plan. Your TLO will appear in Section II, "Introduction," of the lesson plan. You will indicate the specific media used in Section III, "Presentation" and also in several appendices of you lesson plan. The method(s) you selected will appear both on the Cover Sheet of the lesson plan and in Section III. The task analysis report, along with any ELOs, become part of Section III. You will place the practice exercise(s) you developed at Appendix C of your lesson plan. Refer to the Standardized Lesson Plan Job Aid, pp. IM-4-6 through IM-4-32 to see how the lesson plan is organized.

Before you begin writing your lesson plan, read the lesson plan on "Type a Memorandum" at pp. IM-4-41. Note how the TLO, media used, and methods used are incorporated into the lesson plan.

Be sure to study the appendices to determine which ones apply to your lesson. You can see that if you use a slide presentation/overhead transparencies, you must include a photocopy of each at Appendix A. If you plan to use handouts, you must include a photocopy of each at Appendix D. Any other types of training aids, e.g., videotapes, slapsticks, 35mm slides, will appear at Appendix E.

REMEMBER: ALL LESSON PLANS MUST HAVE A COPY OF EACH PRACTICE EXERCISE WITH ANSWER KEY AT APPENDIX C.

You are now ready to begin writing your lesson plan for a 40-50- minutes block of instruction. Use the guidance in this module, especially the:

- Standardized Lesson Plan Job Aid.

- lesson plan of “Type a Memorandum”.

You must include all ELOs for your task in your lesson plan. When you are planning your learning steps/activities, you may find that one Learning Step/Activity or ELO, especially if it is complex, may take a 45-50 block of instruction. In this case, your lesson plan would cover more than one class period. On the other hand, it is possible that your entire subject may only cover one class period. You, as a subject matter expert, will decide how much time each learning step/activity and practice exercise will require.

A SFDE instructor will critique your lesson plan paying particular attention to the form, the introduction, the ELOs, the amount of detail, the conclusion, the practice exercise(s), and the inclusion of training aids. On pp. IM-4-___ through IM-4-___, you will find a checklist that your SFDE instructor will use to evaluate your lesson plan.

OVERVIEW

A lesson plan contains all of the items listed below. The LESSON PLAN JOB AID that follows explains how to prepare each portion. The contents of your lesson plan should include all of these items in the order they are listed. You may omit Appendix E if it does not apply to your lesson.

CONTENTS OF A LESSON PLAN

SECTION I.	- ADMINISTRATIVE DATA
SECTION II.	- INTRODUCTION
SECTION III.	- PRESENTATION
SECTION IV.	- SUMMARY
SECTION V.	- STUDENT EVALUATION

APPENDIXES

A - SLIDE PRESENTATION/OVERHEAD MASTERS

B - TEST AND TEST SOLUTION

C - PRACTICE EXERCISES AND SOLUTIONS

D - STUDENT HANDOUTS

E - OTHER TRAINING AIDS

STANDARDIZED FORMAT FOR TSP/LESSON PLAN

- Information presented in blocks is explanatory information to assist the training developer determine appropriate lesson plan content.

- Words in **bold print are standardized format requirements that cannot be altered.**

- Brackets ([ ]) indicate information that varies and must be inserted by the proponent.

- Use Arabic numbers centered on all pages after the cover page; begin numbering with the number “1”.

- Make the most efficient use of space, but maintain a readable document that any new instructor could use.

- Stay focused on the terminal learning objective (TLO).

LESSON PLAN COVER PAGE FORMAT

[**TSP NO**.]
[**DATE**:]

TRAINING SUPPORT PACKAGE FOR TASK TITLE(S): [ ]

[USE PROPONENT LOGO AS APPROPRIATE]

THIS PACKAGE HAS BEEN DEVELOPED FOR: [IDENTIFY WHO WOULD USE THE PACKAGE; E.G., AGOAC, FIOBC, 71L AIT, 75H ANCOC, 63S AIT]

PROPONENT FOR THIS TSP IS: [PROVIDE PROPONENT AND POINT OF CONTACT ADDRESS]

FOREIGN DISCLOSURE RESTRICTIONS: [APPLY APPROPRIATE RESTRICTION STATEMENT PER CHAPTER I-1, TRAINING PROJECT CLASSIFICATION AND FOREIGN DISCLOSURE (FD) RESTRICTION STATEMENTS]

LESSON PLAN TABLE OF CONTENTS FORMAT

[**DATE**]

[TASK TITLE]

TABLE OF CONTENTS

<u>LESSON PLAN PREFACE PAGE FORMAT</u>

PREFACE

This training support package provides the instructor with a standardized lesson plan for presenting instruction for:

TASK NUMBER

TASK TITLE

CONDITIONS

STANDARDS

This TSP contains a lesson plan(s): (Identify if any of the following are included in the TSP; paper masters for viewgraphs, handouts, job aids, checklists, practical exercises, etc.); **test(s), and test solution(s).**

Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

The proponent of this publication is (list the proponent school); **Send comments and recommendations on DA Form 2028 (Recommended Changes for Publications and Blank Forms) directly to** (Give the complete address, including attention line and zip code of the proponent action office).

LESSON PLAN FORMAT

[DATE]

LESSON TITLE:

TSP USER:

Identify the users of this TSP.

COURSE NUMBER(S) **COURSE TITLE(S)**

List the course number(s) and title(s) in which this lesson plan is used.

SECTION I. - ADMINISTRATIVE DATA

TASK(S) TAUGHT OR SUPPORTED IN THIS LESSON:

TASK NUMBER **TASK TITLE**

List the task numbers and titles which are taught and/or supported in this lesson.

TASK(S) REINFORCED:

TASK NUMBER **TASK TITLE**

List the task numbers and titles of tasks which this lesson will reinforce (may be more than one task.)

ACADEMIC HOURS:	**PEACETIME**				**MOBILIZATION**
	AC	**TASS Training Bns**		**AC/RC**	
	Resident	**AT/ADT**	**IDT**	**Non-res/DL**	
	HRS/MOI	**HRS/MOI**	**HRS/MOI**	**HRS/MOI**	**HRS/MOI**
	/	**/**	**/**	**/**	**/**
***TEST**	**/**	**/**	**/**	**/**	**/**
TOTAL HOURS					

***** List the summation of the training time for the various methods of instruction (MOI) listed in the lesson plan. See pp. IM-4-36 for types of instruction. * If the TLO and ELOs are tested as part of this lesson, identify the hours next to "TEST".

* If the formal test is reviewed during the lesson, identify the hours next to “TEST REVIEW”.

* Enter “o” where appropriate.

LIST THE LESSON NUMBER IN WHICH THE TERMINAL LEARNING OBJECTIVE OF THIS LESSON IS TESTED AND THE TEST RESULTS ARE REVIEWED:

	HOURS	LESSON NO.
TESTING:		
REVIEW OF TEST RESULTS:		

* If you are developing a lesson plan which will be tested and reviewed as part of another lesson, list --

   * The amount of time needed to test the terminal learning objective/enabling learning objectives (e.g., 45 minutes); see pp. IM-4__.

   * The lesson number in which the test takes place.

   * The amount of time needed to review the completed tests with students.

   * The lesson number in which the review takes place.

* Delete from the lesson format if the testing and review time were provided in the “ACADEMIC HOURS” section.

PREREQUISITE LESSON(S): (State if there are none).

* In the following table, identify all lessons by number and title that must be taught before this lesson.

* If there are none, omit the table headings.

FOREIGN RESTRICTIONS:

Apply the appropriate FD restriction number and statement per chapter I-1, Training Product Classification, Foreign Disclosure (FD) Restriction Statements, and Copyright/Proprietary Materials.

CLEARANCE AND ACCESS:

Identify the security level for the lesson plan (e.g., unclassified, secret), any special secure room requirements, and whether foreign students may attend the class.

REFERENCES:

* List all references that could provide any instructor background information which would assist in a better understanding of the subject material. * List civilian sources by type of source, (e.g., book title - Time Magazine), author, title of the article, page numbers, date of publication, publisher. * Provide an Army source to obtain listed civilian references. Make sure you include a complete mailing address to obtain the references. Telephone numbers are not acceptable substitutes for mailing addresses. ***** List required reading for instructors.

NUMBER	TITLE	DATE	ADDITIONAL INFORMATION

STUDENT STUDY ASSIGNMENTS: (State if there are none.)

* List all homework or study assignments the student must complete. Provide any document names, numbers, chapters, pages, and paragraph numbers. * Explain the assignment. * State when the assignment must be completed (e.g., prior to the completion of the class). * If the assignment must be completed prior to the beginning of the lesson, explain arrangements to distribute and explain the assignment to the students. * If the assignment will be completed after the lesson, explain arrangements to collect any materials and assess student learning.

INSTRUCTOR REQUIREMENTS:

List number of instructors, demonstrators, assistant instructors, and any special qualifications these individuals may require.

ADDITIONAL SUPPORT PERSONNEL REQUIREMENTS: (State if there are none.)

List additional support personnel and qualification requirements: e.g., bus drivers, audiovisual equipment operators.

EQUIPMENT REQUIRED FOR THE INSTRUCTION: (State none if there are none.)

* List instructional aids, such as equipment and tools needed to accomplish the instruction, e.g., audiovisual equipment, training aids, weapons systems, trucks, computers. * Provide specific quantity and nomenclature.

MATERIALS REQUIRED FOR THE INSTRUCTION:

INSTRUCTOR MATERIALS: (State none if there are none.)

* List required instructor materials that do not fit under the “Equipment Required for the Instruction” entry. These are materials the instructor must have. Examples are maps and compasses. * List required reading materials that the instructor <u>must</u> have during the instruction.

STUDENT MATERIALS: (State none if there are none.)

List materials which the instructor will provide the student before or during the class and any materials which the students are required to bring to class.

CLASSROOM, TRAINING AREA, AND/OR RANGE REQUIREMENTS:

List requirements for training; e.g., one 25 person standard classroom, a wooded training area, specialized classroom which can be totally darkened.

AMMUNITION REQUIREMENTS: (State none if there are none.)

List ammunition requirements IAW TRADOC Reg 351-1.

INSTRUCTIONAL GUIDANCE: (State none if there are none.)

List any special instructions not listed anywhere else in this lesson plan that are required to properly teach this lesson. Example: Submit request for transportation 5 days before the start of the class.

PROPONENT RESIDENT LESSON PLAN APPROVALS:

NAME	**RANK**	**POSITION**	**DATE**

* Approval authority chain is established by the proponent: however, the Branch Safety Officer must be a part of that chain for all extremely high, high, and medium risk lessons.

* For guidance on the risk assessment process, see pp. IM-4-24 through IM-4-27. * List the names, ranks, positions, and approval dates of individuals in the lesson plan.

SECTION II - INTRODUCTION

Method of instruction:_____ Instructor to student ratio is _____:_____.
Time of instruction:_____;_____ minutes.
Media:

MOTIVATOR:

ATTENTION:

* Write an attention getting strategy to focus interest on the subject of the lesson. * This may be in the form of personal experience relating to the subject, a joke, role play, testimonial, rhetorical question, etc. * An instructor may choose to use a different strategy than the one suggested in the lesson plan, but each lesson should provide a specific attention getting strategy.

MOTIVATION:

Write a short motivator:
* The motivator is a discussion or demonstration designed to gain student interest and to focus the students on what they are about to learn.

* Inform the students why this lesson is important - why they have a need to know and what the consequences on nonperformance is.

* Explain the actual job or battlefield conditions that would make learning the terminal learning objective essential for the soldier.

* Relate the motivator to the terminal learning objective.

TERMINAL LEARNING OBJECTIVE (STATEMENT OF OBJECTIVE):

* The terminal learning objective is expressed in the "ACTION, CONDITIONS, and STANDARDS" elements of the lesson plan.

* The instructor must tell the students what the terminal learning objective is.

* Write only one terminal learning objective per lesson. It must state training expectations - not field tasks, conditions, and standards.

* The terminal learning objective may be identical to the critical task being taught, or there may be a disparity between them because of training limitations versus actual field performance. Where there is a disparity, it is the terminal learning objective standard that the student must achieve to demonstrate competency for the lesson and for course completion.

* A terminal learning objective will have only <u>one</u> verb.

NOTE: Inform the students of the following terminal learning objective requirements:

At the completion of this lesson you [the student] will:

ACTION:

***** Begin the action statement with an action verb and state exactly what the student must be able to do after completing the lesson. * Use only <u>one</u> verb. * See Appendix D, TRADOC Reg 350-70 for standard verb list. Also refer to Module O-1 for additional verbs.

CONDITIONS:

* Include in the condition statement any pertinent influence upon objective performance such as the environment, equipment, manuals, assistance, or supervision required. * Use training conditions, not actual field conditions. * Ensure the condition statement relates only to the action.

STANDARDS:

Write a standard that establishes the criteria for how well the action described must be performed. * Standards must be observable and measurable. * The standard specifies how well, completely, or accurately a process must be performed or a product produced. * A product standard is expressed in terms of accuracy, tolerance, completeness, format, clarity, errors, or quantity. * A process standard is expressed in terms of sequence, completeness, accuracy, of speed.

SAFETY REQUIREMENTS: (State none if there are none.)

* Inform students of the general safety factors and requirements for this lesson. If the lesson contains a practical exercise which involves equipment, chemicals, or other potential hazards, list the safety requirements. * Use instructor "NOTES" to make specific safety points as appropriate during the actual class presentation. * Refer to pp. IM-4-___ for safety guidance.

RISK ASSESSMENT LEVEL:

* List the risk assessment level for this lesson; i.e. high, caution, medium, or low. * The risk assessment level is determined and documented during the design process by the training developer, subject matter expert, and the branch safety manager and approved by appropriate command authority. * Write a statement that the instructor will use to inform the students of the risk level if the severity level is "extremely high, high, or medium." * Example statement: This class is assigned a risk level of HIGH. POTENTIAL RISK: Seatbelts not secure while in aircraft. Rotation of rotor blades while boarding aircraft. Improper seating arrangement on aircraft. Air Sickness of students while on aircraft. Severe turbulence while in flight. Injuries sustained from aircraft crashing. Hearing - intense noise of aircraft. * For every potential risk listed in high, caution, and medium risk lessons, write an instructor "NOTE" at the appropriate place in the lesson where the risk appears. Explain what action(s) the instructor must take to reduce the risk.

ENVIRONMENTAL CONSIDERATIONS: (State none if there are none.)

* Inform the students of the general environmental factors and considerations. Address appropriate specific points during the actual class presentation. These factors include training considerations as well as task performance considerations. They focus on protecting the environment in which students train and perform their jobs, not on how the environment can affect the performance of a task.

* Environmental considerations should have been identified in the analysis and design phases of SAT; however, instructors are responsible for including any considerations that are applicable to their specific locations or installations.

* See pp. IM-4-___ for a list of environmental considerations for training development.

EVALUATION:

* Inform the students how, when, and where performance of the lesson terminal learning objective will be tested.
* Provide them with the length of the test and inform them of the minimum passing score.

INSTRUCTIONAL LEAD-IN:

* If applicable, tie the terminal learning objective to previous learning or student experiences and lead into the actual presentation. Be brief.

SECTION III - PRESENTATION

* This section contains the learning activities and steps required for the student to learn to perform the terminal learning objective to standard.

* List these activities/steps in teaching sequence order.

* Include only essential information.

* Write the contents in this section in sufficient detail to enable a new or substitute instructor to present the material with no degradation of training.

* Write the presentation material as if it were being presented to the students.

* Where appropriate, write “NOTES” to provide necessary instructor information or actions.

NOTE: Inform the students of the Enabling Learning Objective requirements.

A. ENABLING LEARNING OBJECTIVE A

* Analyze your terminal learning objective. These supporting learning objectives enable the student to perform the terminal learning objective. * Not all terminal learning objectives have enabling learning objectives. * The same rules apply for writing an enabling learning objective as for a terminal learning objective.

ACTION:

CONDITIONS:

STANDARDS:

* If there are no enabling learning objectives, omit the label in the lesson plan format and start the presentation with the first learning step/activity.

1. Learning Step/Activity 1 (A statement describing what is to be done.)
Method of instruction: __ Instructor to student ratio is __:___.

Enter the type(s) of instruction identified during the SAT design phase.

Time of instruction: ___ minutes.

* Enter the actual time it takes to teach this learning step/activity. * Express time in minutes, e.g., 20 minutes, 30 minutes, etc.

Media:_____________(State none if there are none.)

Identify media by types, titles, and numbers if applicable.

a.

* Remember that actual instruction begins at this point.

* Write the first learning activity required for the student to learn to perform the terminal or first enabling learning objective.

* Write in the active voice as much as possible.

***** Provide as much detail as needed to allow any new instructor to use this lesson plan with minimum preparation time.

* If you include instructional medium for use during the lesson, provide cues and details of what the student is to learn from the medium.

* In subparagraphs, enter detailed information absolutely required to accomplish the learning activity.

* List the detailed information in teaching sequence order.

* Insert “NOTES” as necessary to provide specific directions to the instructor.

(1)

(2)

Continue as required.

b.

Continue as required.

NOTE: Conduct a check on learning and summarize. Ask the following check questions.

* Perform a check on learning. A check on learning is an informal check to determine if students are learning. It can be as simple as asking one or two review questions or as complex as asking students to perform a skill.

* Place the “NOTE:” as a separate paragraph in the lesson body in the place where the event should take place.

* Include as many notes as needed to provide adequate “how-to” information for a substitute instructor. For example: NOTE: Show slide/overhead 1 - Terminal Learning Objective. * List questions and explanations/answers. * Review the list of sample “NOTES” on pp. IM-4-___.

LEARNING STEP/ACTIVITY 2.

For all remaining steps/activities, use the same format as for learning step/activity 1.

IM-4-19

ENABLING LEARNING OBJECTIVE 2

* Use as needed. If not needed, omit the entry title. * For all remaining enabling learning objectives, use the same format as enabling learning objective 1.

SECTION IV - SUMMARY

1. CHECK ON LEARNING.

* List specific actions required to informally evaluate student performance IAW the terminal learning objective. * Various methods can be used including, among others, the question and answer, practical exercise, and testing methods. This test/evaluation is not the formal graded examination. * List questions and answers.

Determine if students have learned the material presented by:

a. Soliciting student questions and explanations.

b. Asking questions and getting answers from the student.

c. Correcting student misunderstandings.

2. REVIEW/SUMMARIZE.

RESTATE THE OBJECTIVE:

Repeat the terminal learning objective.

SUMMARY.

* Summarize the material presented in the lesson body. The summation often provides the repetition and emphasis necessary to ensure learning and retention. * Outline the important points.

CLOSING.

* Discuss how the students will apply what they have learned. * Relate importance back to the motivation at the beginning of the lesson.

TRANSITION TO THE NEXT LESSON (if applicable)**.**

If applicable, prepare the student for the next lesson.

SECTION V - STUDENT EVALUATION

1. TESTING REQUIREMENTS:

* Criterion-referenced test items -- * Meet (match) the conditions of the terminal learning objective. * Call for the same behavior as the terminal learning objective. * Measure performance against the terminal learning objective standard. * Ensure the criterion-referenced test contains a rating/scoring device that is applicable and appropriate to the behavior being addressed. * Performance tests: * Performance tests are the preferred method of testing. * Write a full description of the examination, details on how the student will perform the test, special requirements, and grading criteria.

* Written tests:

* Do not develop and use written examinations unless dictated by constraints, e.g., lack of personnel, equipment, etc.

* If this type of examination must be used, include test items consisting of stem, correct answer, and a minimum of three distracters.

* Write a sufficient quantity of test items to prepare two tests.

    * For example, if you need 10 test items for one test, then write 20 test items.

    * Instructors need two versions of a test for retesting or for testing different sections of a class being tested at different times.

* Use common sense. Develop enough test questions to adequately measure whether the student can meet the standards of the terminal learning objective and enabling learning objectives.

* Ensure test items provide comprehensive coverage of the terminal learning objective and all enabling learning objectives.

* Do not use true/false and easy matching questions as test items.

* Use essay questions with great care.

    * Consider grading time.

    * Write objective evaluation criteria that tells the instructor what the student must address to successfully answer each essay question.

* Provide grading information and a grading scale for any test.

2. FEEDBACK REQUIREMENT:

a. Schedule and provide feedback on the evaluation and any information to help answer students' questions about the test.

b. Provide remedial training as needed.

SAFETY IN LESSON PLANS

The TRADOC standardized lesson plan format requires instructors to address safety for that lesson immediately after the terminal learning objective.

Instructors must think and address classroom/training safety at the beginning of each lesson as well as at appropriate times throughout the lesson.

Integration of safety within lesson content continues to be a requirement in addition to introductory safety remarks.

Use the following guidance when preparing lesson plans:

a. Address risk decisions for each lesson at the beginning of the lesson.

b. Specific course content that requires safety consideration will be addressed at the appropriate points throughout the lesson.

TRADOC Regulation 25-30, Figure 6-4, provides standardized safety formats for use in all training products.

RISK MANAGEMENT GUIDANCE

1. Definition

Risk management is the process of identifying the risks of mission and training requirements, sets values of the elements of risk, compares risks against training benefits, and eliminates unnecessary risks. It is an expression of potential loss in terms of hazard severity, accident probability, and exposure to hazard.

2. Responsibilities

   Training developers must - -

   a. Apply the risk management process to all activities associated with the training being developed.

   b. Coordinate training safety issues with their Branch Safety Manager. This individual works as part of the special staff that reports directly to the commander or commandant on safety issues.

   c. Determine if the training can be accomplished at a reasonable level of risk.

   d. Make a recommendation to the decision making chain whether to accept or reject residual risk that cannot be eliminated.

   e. Modify training that has unnecessary risk.

   f. Submit high risk lesson plans and TSPs to CG, TRADOC, ATTN: ATBO-SO, Fort Monroe, VA 23651-5000 for approval.

3. FM 100-14, Risk Management, provides risk management procedures.

3. SAT and Risk Management

Training developers will perform risk management in the design, development, and implementation phases of SAT. Risk management in SAT is accomplished as follows:

SAT PHASE	REQUIRED ACTIONS
Design	* Sequence a course to minimize risks (e.g., a lesson that requires the use of complicated, dangerous equipment should not immediately follow a 3-day exercise that allows students little opportunity for sleep). * Consider student level of proficiency and ability. * Perform a risk management for each lesson outline. See "Risk Management Process" below. * Assign the approved risk management level to each lesson outline (extremely high, high, medium or low).
Development	* Ensure risk management levels are transferred from the lesson outline to the lesson plan. * Ensure proper safety cautions are incorporated in the lessons.
Implementation	* Apply riska management process before any field training. * Coordinate with the Branch Safety Manager to develop application of risk management process for evaluating the training that will be implemented.

4. Training Development Risk Management Process.

A training developer, subject matter expert, and the Branch Safety Manager will review each lesson outline and assign a risk assessment level to each lesson outline using the following matrix:

RISK ASSESSMENT MATRIX

Severity Potential of Injury/Damage if it Occurred.					
LEVEL OF RISK: E = EXTREMELY HIGH H = HIGH M = MODERATE L = LOW USE COMMON SENSE WHEN DETERMINING RATINGS!	FREQUENT	REASONABLY PROBABLE	OCCASIONAL	REMOTE	IMPROBABLE
Death or permanent total disability System loss, major property damage	E	E	H	H	M
Severe injury, permanent partial disability, temporary total disability Significant property damage	E	H	H	M	L
Minor injury, lost workday accident Minor system impairment	H	M	M	L	L
First aid or less required	M	L	L	L	L

RISK ASSESSMENT PROCESS (continued)

a. Review each lesson outline.

b. Using the Risk Management Matrix that follows, assign a risk assessment level to each lesson outline.

(1) The Branch Safety Manager will make the final rating decision.

(2) Disagreements among the raters may be documented and submitted with the ratings to the approving authority.

(3) Only rarely should a lesson plan contain residual risk that makes it high risk (e.g. waiving a mandatory/regulatory safety requirement).

(4) Controls imposed should normally bring risk down to medium or low rating.

c. Submit ratings for approval as follows:

If the risk assessment level is . . .	Then the associated risk for the lesson plan must be approved by the . . .
Extremely High	CG TRADOC * Send request to: HQ TRADOC ATTN: ATBO-SO Fort Monroe, VA 35651 * Include supporting documentation and rationale. * Include Commandant's/Commander's position on risk acceptability. * Have correspondence signed by commander or commandant.
High	Commander/Commandant
Moderate	Director, Training Department
Low	Division Chief, Training Department

TRAINING DEVELOPMENT ENVIRONMENTAL REQUIREMENTS

1. Philosophy

The training community must recognize its important responsibility toward preserving the areas in which we train and operate. The Army has closed or restricted training areas because of failure to observe environmental protection measures. Installations have paid fines for pollution violations, making fewer resources available for training support. Individuals charged or convicted of environmental violations have major adverse effects on their mission accomplished.

a. Environmental awareness training is necessary for everyone. It will usually be accomplished at the installation.

b. Environmental schoolhouse training will be limited to tasks, skills, and knowledges associated with critical tasks.

c. Like safety, environmental compliance is both a commander's and a manager's responsibility.

d. Trainers must - -

(1) Coordinate with the local Environmental Office, typically in the Directorate of Logistics and Housing (DLE).

(2) Ensure training operations are conducted in compliance with environmental laws.

2. Awareness Training

Trainers must - -

a. Be aware of and comply with local environmental restrictions (e.g. endangered species protection, oil and hazardous waste disposal.

b. Integrate environmental awareness training into training and training materials where appropriate.

c. Ensure no separate lessons on environmental awareness training are taught unless: (1) A critical task of a skill or knowledge supporting a critical task was identified by the SAT analysis process, or (2) A command directive dictates adding such training. Such directives should be documented in the audit trail to include who gave the directive, when it was directed, and what, if any, was the accompanying rationale.

d. Accomplish most awareness training through such means as orientation briefings, officer/NCO professional development, and command information program.

3. SAT and Environmental Training

Integrate environmental considerations into all phases of SAT.

SAT PHASE	SAT REQUIREMENT
Analysis	* Identify all environmental considerations for each task. See TRADOC Pamphlet 351-3.
Design	* Design all training to - - * Comply with environmental laws. * Have the least amount of negative impact on the environment while still maintaining realistic training. * Use simulations, simulators, and training devices as tools to reduce negative environmental impact. * Ensure environmental statements in Technical Manuals are incorporated into appropriate lesson plans.
Development	* Ensure environmental considerations identified during task analysis are incorporated into training materials. * During the review/revision cycle of training materials, ensure environmental compliance requirements have been integrated. * Coordinate with the local environmental coordinator for technical advice on environmental issues. * Use the U.S. Army Center for Health Promotion and Preventative Medecine (CHPPM) as an environmental consultant. * CHPPM assistance will be provided by the Special Projects Branch of the environmental Compliance Division. * CHPPM POC mailing address is: ATTN: CETHA-EC-S, Aberdeen Proving Ground, MD 21010-5401.

Implementation	* Ensure staff and faculty are aware of local environmental training restrictions and legal requirements. * Ensure trainees are informed of environmental issues and comply with environmental requirements.
Evaluation	Ensure environmental considerations are being integrated into training and training materials.

4. Hazardous Materials and Hazardous Waste Training

Military personnel who handle hazardous wastes and materials are required by law to receive specialized training.

a. Handlers or managers of hazardous waste and their supervisors require initial training prior to unsupervised work, and they need refresher training thereafter. For information on local compliance, contact the local installation environmental coordinator.

b. Personnel who sign manifests for shipments of hazardous materials or waste over any public highway or by air, rail, or vessel must be certified IAW AR 55-355. See TM 38-250 for information regarding training sources and certification procedures.

c. Personnel who work with hazardous materials in nonmilitary unique jobs (e.g. maintenance operations in maintenance shops and motor pools) require one-time Hazardous Communication training. Contact the installation safety office for information.

d. Personnel removing asbestos-containing materials, responding to spills of oil or hazardous substances, or applying restricted pest control chemicals must receive specialized training. Contact the installation environmental coordinator or the USATHAMA POC for further information.

5. Environmental Considerations for Training Developers.

The following table on pages 31 through 33 lists environmental considerations which every training developer should consider when developing training and training products.

a. This list is not all inclusive.

b. Contact the local environmental coordinator at your installation or the CHPPM POC for additional information.

ENVIRONMENTAL AREA	CONSIDER

Air Pollution Abatement	* Dust or smoke caused by training activities (e.g. by-products of activities or machinery, combat cover). * Smoke and Obscurants from testing or training * Propellant, explosive, and pyrotechnic materials (PEP) disposal (e.g. Explosive Ordnance Disposal (EOD), Open Burning/Open Detonation (OB/OD). * Vehicle maintenance (e.g. exhaust emissions) * Utility plant operations (e.g. boilers, incinerators). * Vehicle refurbishing (e.g. sanding, welding, spray painting (oil-based) or chemical agent resistant coating (CARC).
Water Resource Management	* Waste Water Treatment Plant (WWTP) operations in support of peacetime soldier care. * Field water purification systems (training and combat). * Field sanitation (training during peacetime and combat). * Discharges or spills to streams during combat or peacetime (e.g. fuels, petroleum, oil, and lubricants (POL). * Sludge disposal. * Industrial operations (e.g. metal plating, spray painting). * Wetlands disturbance during training, testing, or construction. * Army watercraft discharges. * Construction, dredging, or filling in or near waterways.

ENVIRONMENTAL AREA	CONSIDER
Noise Abatement	* Aircraft traffic over public places (peacetime) and during combat training; includes non-Army air support. * Weapons training or testing (e.g. ranges). * Amphibious vehicles. * Training exercises (e.g. noise that identifies soldiers' presence).
Natural and Cultural Resource	* Archeological sites (historic value during peacetime and tactical value during combat). * Soil erosion. * Siltation of streams. * Endangered plants and animals. * Area clearing. * Structure demolition. * Restoration of sites (e.g. tank traps, fox holes). * Waste disposal from field exercises (e.g. meals ready to eat (MRE) containers, commo wire, etc.—wildlife value in peacetime, tactical value in combat). * Fire control.
Pesticide Management	* Application of chemical controls (e.g. rodent and insect control, lawn maintenance) during peacetime and combat.

ENVIRONMENTAL AREA	CONSIDER
Hazardous Material Handling	* Adverse health effects of materials on soldiers. Combat effectiveness, peacetime performance and learning affected. * Warehouse storage (e.g. safety, shelf life). * Transportation of fuels or chemicals. * Usage (e.g. parts degreasing, painting, de-fueling). * Unit storage. * Materials selection (i.e. non-hazardous for hazardous).
Hazardous Waste	* Management directed requirements (e.g. in support of host nation regulations/agreement). * Identification and disposal/reclamation (e.g. spent or used chemicals). * Equipment maintenance and rework (e.g. motor pools, vehicle rebuild). * Propellant, explosives, and pyrotechnics (PEP) materials manufacturing and use (e.g. central points for EOD or OB/OD; load, assemble and pack (LAP) operations). * Research and Development (R&D). * Test and evaluation. * Chemical or fuels analysis laboratory. * Photography Lab. * Printing. * Disposal at site during simulated combat training (e.g. petroleum, oils, and lubricants (POL), solvents, batteries).

SAMPLE NOTES FOR LESSON PLANS

A note prompts the instructor to perform a specific action at the specific point in the lesson where the note is positioned. Write the note in sufficient detail to ensure the instructor (to include any substitute instructor) knows what to do. The following are sample notes. These notes should be written when the lesson is designed.

NOTE: Distribute practical exercise sheet No. _____, Title ________________

NOTE: Distribute case study No. _____, Title __________________________

NOTE: Summarize the learning activity and check on learning.

NOTE: Show slide No. _________

NOTE: Show overhead transparency No. _____, Title ___________________

NOTE: Show video tape No. _______, Title _________________________
Running Time ________. Explain what the students are to learn from the tape.

NOTE: Issue course critique sheets.

NOTE: Divide the students into small groups and have them discuss the purpose of having NCOERs.

NOTE: Explain the purpose for and use of the course critique sheets.

NOTE: CAUTION! Ensure all students are wearing hearing protection equipment.

NOTE: WARNING! Do not demonstrate the operation of the K-20 camera without film or dark slide installed.

NOTE: DANGER! Tell the students that during the installation, the M57 firing device must be kept in the possession of the individual installing the mine to prevent accidental firing by another individual.

Safety Notes
Caution, warning and danger are defined as follows:
* CAUTION - Notice should alert users to the possibility of personal injury or damage to equipment that may result from long-term failure to follow correct procedures.

* WARNING - Notice should alert users to the possibility of immediate personal injury or damage to equipment.

* DANGER - Notice should alert users to the possibility of immediate death or permanent injury. Although damage to equipment may occur, the major concern is the probability of death or permanent injury if the warning is ignored.

CLASSIFYING TYPES OF INSTRUCTION

The following chart summarizes how to match the instructional methods described in Module CP-1 with the types in instruction recognized by the Training and Doctrine Command (TRADOC). TRADOC types of instruction are listed in Appendix H, TRADOC Regulation 350-70.

Instructional Method from Module CP-1	TRADOC SYMBOL
Lecture	LE
Conference	CO
Controlled Practice Exercise	CO
Developmental Conference (Seminar)	SE
Practice (Coach and Pupil) (See note at the end of this chart)	PE1 PE2 PE3
Practice (Independent) (See note at the end of this chart)	PE1 PE2 PE3
Team Practice (See note at the end of this chart)	PE1 PE2 PE3
Role Play	RP
Incident Process	CO
Case Study	CS
Demonstration	DM
Study Assignment	SA
Tutorial	TU
Programmed Instruction	PG

NOTE:

PE1 - Hardware oriented. This category includes performance-oriented training with Army or Army Associated equipment.

PE2 – Non-hardware oriented. This category includes practical application, outside the typical classroom setting, using techniques not involving practice in the use of specific equipment items.

PE3 - Classroom. This category encompasses all student performance in the classroom area, except that involving practice in the use of specific items.

HOW TO PREPARE APPENDIXES

Appendix A - Slide Presentation/Overhead Transparencies

1. Prepare a cover sheet that says "Appendix A"

2. Prepare an index that list all slides/overheads in the order that they will be shown to the students. Example:

   Slide Presentation/Overhead Transparencies

   1. Title of slide/overhead #1

   2. Title of slide/overhead #2

3. Place a photocopy of each slide/overhead after the index. Write the number of each slide/overhead in the lower right corner so that it corresponds with the number given in the index.

Appendix B - Test and Test Solutions

1. Prepare a cover sheet that says "Appendix B"

2. If you are preparing a Common Core TSP or TATS TSP, place a copy of the test and solution behind the cover sheet.

3. If you are preparing an internal lesson plan, do not include a copy of the test and solution behind the cover sheet. Indicate the test number and title on the cover sheet.

Appendix C - Practice Exercises and Solutions

1. Prepare a cover sheet that says "Appendix C"

2. Place a copy of the practice exercise THAT INCLUDES DIRECTIONS TO THE STUDENTS behind the cover sheet. The directions should state what the students will be using (equipment, supplies, references, forms, etc.), what the student must do, standards of performance required to get a "go", and time allotted.

3. Next place a copy of any handouts that the students must have in order to complete the PE. For example, they may need a copy of a form, an extract of a regulation, or other information for reference.

4. Place a copy of the answer key to the PE behind the PE.

Appendix D - Handouts

1. Prepare a cover sheet that says “Appendix D”.

2. Prepare an index that lists all handouts in the order that they will be given to the students. Example:

Student Handouts

1. Title of Handout #1

2. Title of Handout #2

3. Place a copy of each handout after the cover sheet. Write the number of each handout on the lower right corner of each so that it corresponds with the number given in the index.

Appendix E - Other Training Aids

If you will be using training aids other that slides/overheads and handouts, they must be listed in Appendix E. Examples include 35mm slides, videotapes, slapsticks, etc. List each different type of training aid in order of use. Example:

35mm Slides

1. Title of first 35mm slide shown

2. Title of second 35mm slide shown

DO NOT CHANGE THE LETTERING SYSTEM FOR APPENDIXES. FOR EXAMPLE, IF YOUR TSP/LESSON PLAN DOES NOT CONTAIN SLIDES/OVERHEADS, OMIT APPENDIX A. YOUR TEST AND SOLUTION WOULD STILL APPEAR AT APPENDIX B.

Foreign Disclosure (FD)
Restriction Statements

All existing and new training courses, products, and literature must have disclosure adjudication and application of appropriate restriction statement prior to release of training to foreign nationals.

All training/TATS Courses are Controlled Unclassified Information (CUI) unless marked “Classified” or “Unclassified.” They may also have FD restrictions. the applicable FD restriction statement (including number) should appear (as shown below) on the cover of every Training/TATS Course TSP which contains Classified Military Information (CMI) or CUI and is used for training of any foreign student. See Paragraph below for restriction statements for TSP sub-components (e.g. lesson plan, POI, course management materials, etc.) or stand-alone training products.

FD1. The materials contained in this course have been reviewed by the course developers in coordination with the (installation/activity name) foreign disclosure authority. This course is releasable to students from all requesting foreign countries without restrictions.

FD2. The materials contained in this course have been reviewed by the course developers in coordination with the (installation/activity name) foreign disclosure authority. This course is releasable to military students from foreign countries on a case-by-case basis. Foreign countries desiring to place students in this course must meet the following criteria: (1) Own (a specific piece of equipment); (2) Have a signed Letter of Intent (LOI); (3) Waiver from HQDA; (4) USG release for training; (5) etc.

FD3. The materials contained in this course have been reviewed by the course developers in coordination with the (installation/activity name) foreign authority. This course is NOT releasable to students from foreign countries.

FD4. The materials contained in this course have been reviewed by the course developers in coordination with the (installation/activity name) foreign disclosure authority. Some component(s) of this course is (are) NOT releasable to students from foreign countries. See each Training/TATS Course TSP sub-component/ product for applicable FD restriction statement.

One of the following FD numbers and restriction statements should appear on the cover of any TSP sub-component (e.g. lesson plan, Program of Instruction, course management materials, etc.; stand-alone training products; and training literature containing CUI or CMI information. These restriction statements are in addition to the distribution statements on Army-wide Doctrinal and Training Literature

Program (ADTLP) publications (see TR 350-70, Chapter II-4, ADTLP Product Management).

FD5. This product/publication has been reviewed by the product developers in coordination with the (installation/activity name) foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

FD6. This product/publication has been reviewed by the product developers in coordination with the (installation/activity name) foreign disclosure authority. This product is releasable to students from foreign countries on a case-by-case basis.

FD7. This product/publication has been reviewed by the product developers in coordination with the (installation/activity name) foreign disclosure authority. This product is NOT releasable to students from foreign countries.

TSP NO: 121-04-1202
DATE: June 1998

TRAINING SUPPORT PACKAGE FOR TASK TITLE:

TYPE A MEMORANDUM

71L ADMINISTRATIVE SPECIALIST

THE ADJUTANT GENERAL SCHOOL

ADVANCED INDIVIDUAL TRAINING

THIS PACKAGE HAS BEEN DEVELOPED FOR: Administrative Specialist Course, 71L Advanced Individual Training

PROPONENT FOR THIS TSP IS: The Adjutant General School, ATTN: ATSG-AGS-N, Fort Jackson, South Carolina 29207-7040

FOREIGN DISCLOSURE RESTRICTIONS: FD5. This product has been reviewed by the product developers in coordination with the Soldier Support Institute foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

TYPE A MEMORANDUM

TABLE OF CONTENTS

PREFACE

This training support package provides the instructor with a standardized lesson plan for presenting instruction for:

TASK NUMBER: 121-004-1202

TASK TITLE: Type A Memorandum

CONDITIONS: Given a draft memorandum, typewriter/computer, AR 25-50,

AR 310-50, student handout (Type a Memorandum) and standard office supplies and equipment to include a dictionary.

STANDARDS:
1. Type the Letterhead
2. Type the Heading
3. Type the Body
4. Type the Closing
5. Type the Continuation Page

IAW AR 25-50.

SECTION I. ADMINISTRATIVE DATA

All courses Including this Lesson	COURSE NUMBER(S)	COURSE TITLE(S)
	510-71L10	Administrative Specialist - 71L10

Task(s) Taught or Supported	TASK NUMBER(S)	TASK TITLE(s)
	121-004-1202	Type A Memorandum

Reinforced Task(s)	TASK NUMBER(S)	TASK TITLE(S)
	121-004-1232	Type Straight Copy Material

Academic Hours: The academic hours required to teach this lesson are as follows:

	PEACETIME				MOB
	AC	TASS Training Bns		AC/RC	
	Resident	AT/ADT	IDT	Non-res/DL	
	HRS/MOI	HRS/MOI	HRS/MOI	HRS/MOI	HRS/MOI
	2.0/CO				2.0/CO
	12.0/PE3				12.0/PE3
TEST	2.0/TE-TR				2.0/TE-TR
TOTAL HOURS	16.0				16.0

Prerequisite Lesson(s)	LESSON NUMBER(S)	LESSON TITLE(S)
	None	

Foreign Restrictions	FD5. This product/publication has been reviewed by the product developers in coordination with the Soldier Support Institute foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.
Clearance and Access	Unclassified. Enlisted personnel meeting prerequisites may attend.

References

Number	Title	Date	Additional Information
AR25-50	Preparing and Managing Correspondence	21 Nov 88	All
AR310-50	Authorized Abbreviations , Brevity Codes, and Acronyms	15 Nov 83	All

Student Study Assignments	None
Instructor Require-ments.	One instructor per class during conference, practice exercise, and examination. Class consists of 10-30 students
Additional Support Personnel Requirements	None
Equipment Required	Overhead projector/transparencies (optional), and whiteboard/chalkboard/chalk

Materials Required	INSTRUCTOR MATERIALS: AR25-50, AR 310-50 STUDENT MATERIALS: AR25-50, AR 310-50, computer/printer or typewriter and typing paper, standard office dictionary, pen, pencil correction tape/fluid and eraser if using a typewriter and student handout (Type A Memorandum)
Classroom, Training Area, and Range Requirements	General Purpose 30 person classroom or computer room.
Ammunition Requirements	None
Instructional Guidance	**Note: Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.**

Proponent Lesson Plan Approval	Name	Rank	Position	Date
	TERRY R. KELLAR	GS11	Training Specialist	Dec 97

SECTION II. INTRODUCTION

Method of instruction: CO Instructor to student ratio is 1 : 30 .
Time of instruction :05 minutes.
Media: Slide Presentation/Overhead

Motivator: ATTENTION: Imagine yourself in the office of the Chief of Staff and he has just handed you a handwritten draft of a memorandum for signature by the Commanding General. He informs you that the document must be error free.

MOTIVATION: One of your jobs will be to determine the proper format and provide your supervisor with the best finished product you can.

Terminal Learning Objective

Note: Inform the students of the following terminal learning objective requirements.

At the completion of this lesson, you (the student) will:

ACTION:	Type A Memorandum
CONDITION:	Given a draft memorandum, a typewriter or computer, AR 25-50, AR 310-50, student handout (Type a Memorandum) and standard office supplies and equipment, to include a dictionary.
STANDARD:	1. Type the Letterhead 2. Type the Heading 3. Type the Body 4. Type the Closing 5. Type the Continuation Page In accordance with AR 25-50 and AR 310-50

Safety Requirements — Use precautions with electrical equipment during thunderstorms/ electrical storms.

Risk Assessment Level — Low

Environmental Considerations — None

Evaluation — There will be a series of instructor-graded practice exercises to complete at the conclusion of the instruction and then a graded examination. The minimum passing score on the examination is 90 percent. Leaving out a major element or making more than three typing errors will result in a NO GO on the practice exercises and the test.

Instructional Lead-in — One of your jobs will be to determine the proper format for correspondence. The first type of correspondence you will learn about is called the Memorandum.

NOTE: AS YOU ARE PRESENTING THE MATERIAL IN THIS LESSON PLAN, REFER STUDENTS TO THE APPROPRIATE PARAGRAPH AND/OR FIGURE IN AR 25-50. PASS OUT THE STUDENT HANDOUT (TYPE A MEMORANDUM)

SECTION III - PRESENTATION

1. Learning Step/Activity 1 - Type the Letterhead
Method of instruction: __C__ Instructor to student ratio is _1_: _30_.
Time of instruction: __:20_ minutes: _____.___ hours.
Media: Handout, overhead slides.
References N/A
Security Classification N/A

a. LETTERHEAD: The letterhead is the top part of the formal memorandum. It identifies the organization that prepared the memorandum. The letterhead will have a minimum of three (but no more than four) lines, and each line will be centered on the page. Type the letterhead using single spacing. Do not use abbreviations.

b. LETTERHEAD USAGE: While a formal memorandum requires a letterhead, an informal memorandum (which is internal to the headquarters, command, organization, etc.) does not.

c. MARGINS: Set the left and right margins 1 inch from the outside edges of the paper.

d. ELEMENTS OF THE LETTERHEAD: **NOTE: REFER TO HANDOUT - LETTERHEAD.**

(1) The letterhead is the top part of the formal memorandum. The first line of the letterhead begins on the fifth line from the top edge of the page. The first line consists of “DEPARTMENT OF THE ARMY” typed in upper case letters.

(2) The second line identifies the organization preparing the memorandum. If the entire unit or organization will not fit on one line without violating the margins, enter the major unit or organization on the third line, e.g., 55th Mechanized Infantry Division. This entry may be in upper and lower case letters or upper case letters. Do not use abbreviations.

NOTE: REMEMBER, CENTER ALL LINES OF THE LETTERHEAD AND DO NOT USE ANY PUNCTUATION AT THE END OF A LINE. LINE ONE MUST BE TYPED IN CAPITAL LETTERS AND CAPITALIZATION IN LINES TWO, THREE, AND FOUR MUST BE CONSISTENT.

(3) Enter the location of the organization of unit on the last line. Leave two spaces between the state, APO or FPO, and the ZIP Code. This line may be in all upper case or lower and upper case letters as are line(s) two and three.

NOTE: **Conduct a check on learning and summarize the learning activity. Ask the following questions.**

1. The letterhead consists of how many lines? Normally three, but may include four if the organization will not all fit on one line.

2. Must lines 2 - 4 be typed in upper case? No - they may be in upper or lower case. But must be consistent.

3. Must the informal memorandum have a letterhead? No

4. Does the letterhead begin on the 5th line from the top edge of the page 1 inch from the left edge? No - it starts on the 5th line from the top, but must be centered, not 1 inch from the left edge.

NOTE: ALLOW STUDENTS TIME TO PRACTICE DOING A LETTERHEAD USING THE SAMPLES IN THE HANDOUT. SPOT CHECK STUDENTS' WORK AND ANSWER QUESTIONS/RESOLVE PROBLEMS AS THEY ARISE.

2. Learning Step/Activity 2 - Type the Heading.
Method of instruction: CO Instructor to student ratio is 1 to 30.
Time of instruction: 20 minutes.
Media: Handout, overhead slides
References: N/A
Security Classification: N/A

a. OFFICE SYMBOL: **NOTE: REFER TO STUDENT HANDOUT - HEADING OF MEMORANDUM:** The first element of the heading is the office symbol. It is in all capital letters. On a formal memorandum, it begins at the left margin on the second line below the seal or fourth line below the last line of the letterhead if there is not seal. On an informal memorandum, the office symbol is entered at the left margin beginning on the eighth line from the top edge of the page. There is not letterhead or seal on an informal memorandum.

b. MARKS NUMBER: The MARKS number is entered in parentheses two spaces to the right of the office symbol.

c. CURRENT DATE: The date is entered on the same line as the office symbol and MARKS number and ends at the right margin. The order for entering the date is the day, month, and year. It may be with the month spelled out and all four digits of the year; or the month may be abbreviated and only the last two digits of the year. Do not separate elements of the date between lines.

d. SUSPENSE DATE: Use a suspense date if a reply is needed by a certain date. Enter the suspense date two lines above the office symbol, ending at the right margin. The suspense date is preceded by a capital "S" and colon ":" with two spaces between the colon and the date, in the same format as the current date. You may also include suspense dates in the body of the correspondence, usually in the same paragraph that identifies what needs to be done.

e. MEMORANDUM FOR line: On the third line below the office symbol, at the left margin, enter "MEMORANDUM FOR." Address correspondence as directly as possible to the office(s) expected to take action. The abbreviation (MECH) is authorized here. The state (GA or Georgia) can be abbreviated also, but be consistent throughout. Do not hyphenate parts of an address. Allow two spaces between the state and the ZIP Code.

(1) SINGLE ADDRESS MEMORANDUM: Begin the address one space after the word “FOR.” Type the address in either upper and lower case or all in upper case letters. If the single address takes more than one line, begin the second line under the third letter of the first word in the address.

(2) MULTIPLE ADDRESSES MEMORANDUM: **NOTE: REFER TO HANDOUT - MULTIPLE ADDRESS:** Begin typing the addresses on the second line below the “MEMORANDUM FOR’ line, indent the second line two spaces and begin at the third space. Addresses may be in either upper and lower case or in all upper case letters. Whichever way you choose, it must be consistent throughout.

(3) SEE DISTRIBUTION: **NOTE: REFER TO HANDOUT - SEE DISTRIBUTION:** If more than five addresses are used, enter the words “SEE DISTRIBUTION” in all capital letters, one space after “MEMORANDUM FOR.” On the second line below the last line of the signature block or enclosure listing, whichever is lower, at the left margin, enter the word “DISTRIBUTION” followed by a colon. List each address on the next line beginning at the left margin. If an address takes more than one line, indent the second line two spaces and begin at the third space. Distribution listings may be continued on a second page.

(4) THRU ADDRESS: **NOTE: REFER TO HANDOUT - THRU ADDRESS:** Use a “THRU” memorandum to keep the “THRU” addressee(s) informed or to provide the person with the opportunity to comment or approve. Depending on the situation, use one of the following types of “THRU” addresses:

(a) SINGLE “THRU” ADDRESS: On the third line below the office symbol, at the left margin, enter ‘MEMORANDUM THRU.” Begin the “THRU” address one space after the word “THRU.” If the address extends beyond one line, start the second line under the third letter of the first word after “THRU.”

(b) MULTIPLE THRU ADDRESSES: **NOTE: REFER TO STUDENT HANDOUT - MULTIPLE THRU ADDRESS:** On the third line below the office symbol, at the left margin, enter 'MEMORANDUM THRU." On the second line below the "MEMORANDUM THRU" line, enter the first address at the left margin. enter the next address at the left margin on the second line below the last line of the first address. Should an address extend beyond one line, start the second line under the third letter of the previous line.

(c) FOR: On the second line below the last thru address, at the left margin, enter "FOR." Skip one space and enter the address.

f. SUBJECT: On the second line below the last address, at the left margin, enter "SUBJECT" followed by a colon, skip two spaces and enter the subject. If the subject line is to long, begin the second line at the left margin.

NOTE: Conduct a check on learning and summarize the learning activity. Ask the following questions.

1. When do you use a suspense date? When a reply is required by a certain date.

2. How is the date entered? Day, month, year. If the month is abbreviated, only show the last two digits of the year. If the month is spelled out, enter all four digits of the year.

3. Is the first element of the heading the MARKS number? No, the office symbol is.

4. When do you use "SEE DISTRIBUTION"? When there are more than five addressees.

5. Does the subject begin on the third line after the last address? No, the second line.

NOTE: Allow students time to practice preparing and typing the heading using the examples in the handout. Spot check their work and answer questions/resolve problems as they arise.

3. Learning Step/Activity 3 - Type the Body
Method of instruction: C Instructor to student ratio is 1 to 30.
Time of instruction: 20 minutes.
Media: Handout, overhead slides
References: N/A
Security Classification: N/A

a. PARAGRAPHS: **NOTE: REFER TO HANDOUT - BODY OF A MEMORANDUM.** The body of the memorandum contains the message to be passed on to the addressees. It may contain one or more paragraphs giving or asking for information.

(1) Begin the first paragraph at the left margin on the third line below the last line of the subject.

(2) Single space the text of a memorandum.

(3) Double space between paragraphs and subparagraphs. If a memorandum has more than one paragraph, number the paragraphs consecutively.

(4) A subdivided paragraph must have at least two subparagraphs. If there is a subparagraph “a” then there must also be a subparagraph “b”. Indent four spaces and identify the first subdivisions of a paragraph with lower case letters, followed by a period. Skip two spaces and begin the text.

(5) Identify the second subdivision of a paragraph with numbers in parentheses four spaces to the right of the first subdivision, i.e., (1), (2), etc. Skip two spaces and begin the text.

(6) Identify the third subdivision of a paragraph with lower case letters in parentheses at the same place as the second subdivision (do not indent any further), i.e., (a), (b), etc. Then skip two spaces and begin the text. Do not use second and third subdivisions unless absolutely necessary.

(7) Do not subparagraph memorandums beyond the third subdivision.

NOTE: Conduct a check on learning and summarize the learning activity. Ask the following check questions.

1. Does the body of the memorandum begin on the 3d line below the subject? Yes.

2. May paragraphs be subdivided as many times as it takes to get information across? No, no more than three subdivisions.

3. Should the left margin be set a 1" and the right margin set at 1/2". No, both margins should be set at 1".

NOTE: ALLOW STUDENTS TIME TO PRACTICE DOING THE BODY USING THE EXAMPLES IN THE HANDOUT. SPOT CHECK THEIR WORK AND ANSWER QUESTIONS/RESOLVE PROBLEMS AS THEY ARISE.

4. Learning Step/Activity 4 - Type the Closing
Method of instruction: <u>CO</u> Instructor to student ratio is <u>1</u> to <u>30</u>.
Time of instruction: <u>20</u> minutes.
Media: Student Handout and overhead slides
References: N/A
Security Classification: N/A

a. AUTHORITY LINE: **NOTE: REFER TO HANDOUT - CLOSING OF A MEMORANDUM.** The authority line is used by people designated to sign for the commander, head of an office, commandant, chief of staff, etc. When used, it is typed in upper case letters beginning on the second line below the last line of the text at the left margin and is followed by a colon. You will be told whether an authority line is needed or not

b. ENCLOSURES: Enclosures are supporting documents necessary to complete the action and to keep the body of the memorandum as brief and concise as possible, e.g., maps, rosters, schedules, etc. Attach them to the basic memorandum and number them consecutively. In the lower right corner of each enclosure, enter the enclosure number in pencil.

(1) Enter the enclosure listing beginning at the left margin on the fifth line below the authority line or the last line of the text if an authority line is not used.

(2) If enclosures <u>are identified</u> in the body of the correspondence, account for them by indicating the total number (e.g., 4 Encls). For clarity, use the abbreviation "as" (as stated) when listing multiple enclosures. If there is a single enclosure, do not use a number nor the abbreviation "as." It is best if enclosures are identified within the body of the memorandum.

(3) If <u>enclosures are not identified</u> within the body of the memorandum, account for them by indicating the total number (e.g.,

4 Encls). List each by number, and describe them briefly. If there is only one, do not put a 1 in front of “Encl.”

(4) Abbreviate “enclosure” to "Encl” for a single enclosure and “Encls” for multiple enclosures. Always capitalize the first letter.

(5) Use only authorized abbreviations when identifying enclosures.

c. SIGNATURE BLOCK: The signature block consists of the name, rank, branch of service, and title of the person signing the correspondence. The signature block begins at the center of the page on the fifth line below the authority line or the last line of the text if the authority line is not used.

(1) The first line of the signature block is the name line and is typed in upper case.

(2) The second line consists of the abbreviated or spelled out rank and branch of service. Always spell out a general officer’s rank.

(3) The third line is the title line. If more than one line is required, begin the next line of text under the third letter of the previous line.

d. DISTRIBUTION: **NOTE: REFER TO STUDENT HANDOUT - DISTRIBUTION.** Remember, if a memorandum is being sent to more than five addressees, type “SEE DISTRIBUTION” one space after the “MEMORANDUM FOR” the beginning of the memorandum. Addresses will be typed in upper case or upper and lower case. Whichever is used, be consistent throughout.

(1) On the second line below the last line of the signature block or enclosure listing, whichever is lower, type “DISTRIBUTION” followed by a colon and begin entering the address on the next line at the left margin. If more than one line is needed, begin the next line under the third letter of the previous line.

(2) The distribution list may be continued on a continuation page if necessary. Enter “continued” only when the distribution list is being continued, not because the content is being continued.

(3) If the address title, e.g., commander, commandant, chief, etc., is the same on more than one address, it only needs to be entered at the beginning of each listing. Enter the address title in singular form, e.g., <u>commander not commanders.</u>

e. COPIES FURNISHED: **NOTE: REFER TO HANDOUT - COPIES FURNISHED.** This option is used to keep activities other than the addressee(s) informed of the subject matter, but does not require these other activities to take any action.

(1) Enter “CF” (copies furnished) followed by a colon on the second line below the last line of the signature block, enclosure listing, or distribution listing, whichever is lowest.

(2) Enter each addressee on a single line under the “CF.” Should a second line be necessary, indent two spaces from the left margin. Copies furnished may be with or without the enclosures and this must be so indicated.

(3) Use only authorized abbreviations.

NOTE: Conduct a check on learning and summarize the learning activity. Ask the following questions.

1. Is the authority line used on all memorandums? No, only when a designated individual is signing the correspondence for someone else.

2. May enclosures be identified in the body or must they be listed as part of the enclosure block? Either way is acceptable.

3. Is the signature block centered on the page? No, the signature block begins at the center of the page.

4. Is a “copy furnished” addressee expected to take action and respond the same as other addressees? No, a copy of the correspondence is provided for information only.

NOTE: ALLOW STUDENTS TIME TO PRACTICE DOING THE CLOSING USING THE SAMPLES IN THE HANDOUT. SPOT CHECK STUDENTS’ WORK AND ANSWER QUESTIONS/RESOLVE PROBLEMS AS THEY ARISE.

5. Learning Step/Activity 5 - Type the Continuation Page
Method of instruction: <u>CO</u> Instructor to student ratio is <u>1</u> to <u>30</u>.
Time of instruction: <u>20</u> minutes.
Media: Handout, overhead slides
References: N/A
Security Classification: N/A

a. CONTINUATION PAGE: **NOTE: REFER TO STUDENT HANDOUT-CONTINUATION PAGE OF A MEMORANDUM.**

(1) If the content of the body or the distribution will not all fit on the first page, a continuation page may be used. Do not divide paragraphs of three lines or less. At least two lines of a paragraph must appear on each page.

(2) Using plain bond paper, beginning on the eighth line from the top edge of the paper, enter the office symbol at the left margin.

(3) On the next line at the left margin, enter "SUBJECT" followed by a colon, skip two spaces, and enter the subject of the memorandum.

(4) On the third line below the last line of the subject, begin typing the continuation of the memorandum starting at the left margin. The same procedures for formatting apply to the continuation page as were used on the first page.

b. PAGE NUMBERING: Center and type the page number approximately 1 to 1 1/2 inches from the bottom of the page and begin numbering on the second page with number 2. **NOTE: THERE WILL BE NO PAGE NUMBER ON THE FIRST PAGE OF A MEMORANDUM.**

NOTE: Conduct a check on learning and summarize the learning activity. Ask the following questions.

NOTE: ALLOW STUDENTS TIME TO PRACTICE DOING THE CONTINUATION PAGE USING THE SAMPLES IN THE HANDOUT. SPOT CHECK STUDENTS' WORK AND ANSWER QUESTIONS/RESOLVE PROBLEMS AS THEY ARISE.

6. Learning Step/Activity 6 - Type an Informal Memorandum
Type of instruction: CO Instructor to student ratio is **1** to 30.
Time of instruction: 20 minutes.
Media: Handout, overhead slides
References: N/A
Security Classification: N/A

The informal memorandum is the most frequent used format in correspondence. It is used to provide or ask for information within a unit, headquarters, installation, etc. It has the same format as the formal memorandum, except that it does not have a letterhead or seal, and is prepared on plain bond paper.

NOTE: AT THIS TIME, GO OVER THE HANDOUT, POINTING OUT THE PARTS OF THE INFORMAL MEMORANDUM, AND ANSWER STUDENT QUESTIONS IF ANY. ALLOW 15 MINUTES TO PRACTICE THE INFORMAL MEMORANDUM USING THE EXAMPLE IN THE HANDOUT. SPOT CHECK STUDENTS' WORK AND ANSWER QUESTIONS/RESOLVE PROBLEMS AS THEY ARISE.

7. Learning Step/Activity 7 - Practice Exercise
Type of Insttuction: CO Instructor to student ratio is 1 to 30.
Time of instruction: ____ minutes.
Media: Practice Exercise and Solutions

NOTE: ADMINISTER PRACTICE EXERCISE 1 AND HAVE THE STUDENTS STOP AFTER THEY HAVE COMPLETED IT. WHEN ALL STUDENTS HAVE COMPLETED IT, PASS OUT THE HANDOUT ON PROOFREADING AND GO OVER IT WITH THEM. THEN HAVE THE STUDENTS COMPLETE THE PROOFREADING PE AND GO OVER IT WHEN THEY HAVE ALL COMPLETED IT. NEXT HAVE THEM PROOFREAD PRACTICE EXERCISE 1. IMPRESS ON THE STUDENTS THAT THEY SHOULD GO THROUGH THIS PROCEDURE FOR ALL THE CORRESPONDENCE TASKS THEY COMPLETE. HAVE THE STUDENTS CONTINUE WITH THE REMAINING PRACTICE EXERCISES ALLOWING ONE PERIOD FOR EACH PRACTICE EXERCISE. REMIND STUDENTS THAT LEAVING OUT A MAJOR ELEMENT OR MAKING MORE THAN THREE TYPING ERRORS WILL RESULT IN A NO GO ON THE PRACTICE EXERCISES AND THE TEST.

a. Administer and critique the Practice Exercises:

NOTE: HAVE STUDENTS COMPLETE PEs 1 THROUGH 5 BEFORE TAKING THE TEST ON “SINGLE-PAGE, INFORMAL MEMORANDUM” AND PEs 6 THROUGH 8 BEFORE TAKING THE TEST ON “MULTI-PAGE, FORMAL MEMORANDUM.”

(1) Provide the PE booklets to the students.

(2) Go over the PE instructions (located in the PE booklet) with the students.

REMIND STUDENTS TO READ EACH EXERCISE BEFORE THEY BEGIN TYPING AND TO CHECK THEIR WORK BEFORE THEY TURN IT IN FOR GRADING. WHILE THE INFORMATION THEY NEED TO COMPLETE EACH EXERCISE IS THERE, IT IS NOT NECESSARILY IN THE ORDER OR FORMAT THAT IS REQUIRED. IT IS THEIR RESPONSIBILITY TO DETERMINE WHAT AND WHERE ITEMS SHOULD GO.

b. Score students completed PE instructions against the solution keys located in the PRACTICE EXERCISE SOLUTION KEYS booklet) and IAW the standards in the SCORING GUIDE FOR CORRESPONDENCE.

c. Determine where students are having problems, ask for student questions, and conduct retraining on problem areas if necessary. Ensure that students understand their mistakes before proceeding to the next PE.

d. When the final PE is completed, ensure that students are ready to pass the performance test. Provide remediation as necessary to include retraining, peer instruction, completion of additional PEs, etc.

NOTE: CRITIQUE AFTER EACH PE AND RESOLVE STUDENT QUESTIONS.

SECTION IV - SUMMARY

Method of instruction: CO Instructor to student ratio is 1 to 30.
Time of instruction 5 minutes.
Media: None

Check-on Learning

Determine if students have learned the material presented by -

a. Soliciting student questions and explanations.

b. Asking questions and getting answers from the students.

c. Correcting student misunderstandings.

RESTATE TLO:

ACTION:	Type A Memorandum
CONDITION:	Given a draft memorandum, a typewriter or computer, AR 25-50, AR 310-50, student handout (Type a Memorandum) and standard office supplies and equipment, to include a dictionary.
STANDARD:	1. Type the Letterhead 2. Type the Heading 3. Type the Body 4. Type the Closing 5. Type the Continuation Page In accordance with AR 25-50 and AR 310-50

Review/ Summarize Lesson

SUMMARY: This lesson instructed you in the proper format and correct composition of a memorandum. This knowledge will prove invaluable in whatever military office you may be working.

CLOSING: It is imperative for any administrative specialist to be able to prepare every type of memorandum. Memorandums are useful communication tools and are often official documents of extreme importance.

Transition to the Next Lesson	Your next class will be to Type and Endorsement. Much of the information you learned in this class such as formatting, elements, etc. will be used in the next class.

SECTION V - STUDENT EVALUATION

NOTE: REMIND STUDENTS TO READ ALL INSTRUCTIONS BEFORE THEY BEGIN TYPING AND TO REVIEW THEIR WORK BEFORE THEY TURN IT IN FOR GRADING. ALL THE INFORMATION NEEDED TO COMPLETE THE EXAM IS GIVEN, BUT IT IS THEIR RESPONSIBILITY TO DETERMINE THE FORMAT THAT SHOULD BE USED.

Testing Requirements

a. Administer and score the performance test IAW directions in the ADMINISTRATION AND SCORING INSTRUCTIONS FOR PERFORMANCE TESTS-CORRESPONDENCE.

b. Test Versions A and B should be used with roughly equal frequency over time. That is, for one class use Version A as the initial test and Version B as the retest. Use the reverse order with the next class.

TESTING REQUIREMENTS: The PASS/FAIL criterion is 90 percent IAW standards included in the SCORING GUIDE FOR CORRESPONDENCE.

(1) Performance examination: Versions A and B. The examination is maintained at USASSI, Fort Jackson, SC 29207-7040.

(2) Written examination: None.

Note: Refer student to the Student Evaluation Plan.

Feedback Requirement

a. Schedule and provide feedback on the evaluation and any information to help answer students' questions about the test.
b. Provide remedial training as needed.

Note: Rapid, immediate feedback is essential to effective learning.

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APPENDIX A

VIEWGRAPH MASTERS
FOR
TYPE A MEMORANDUM

OT 1 **Letterhead**
OT 2 **Heading - Office Symbol, MARKS Number, Suspense Date, Current Date, Address Line, Subject**
OT 3 **Heading - Multiple Address**
OT 4 **Heading - See Distribution**
OT 5 **Heading - Single Thru Address**
OT 6 **Heading - Multiple Thru Address**
OT 7 **Body**
OT 8 **Closing - Authority Line, Enclosure Listing, Signature Block, Copies Furnished**
OT 9 **Closing - Copies Furnished**
OT 10 **Continuation Page**
OT 11 **Informal Memorandum**

DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH INFANTRY DIVISION (MECHANIZED)
FORT STEWART, GEORGIA 31314-9000

OR

DEPARTMENT OF THE ARMY
Headquarters, 55th Infantry Division (Mechanized)
Fort Stewart, Georgia 31314-9000

OT 1- LETTERHEAD

DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH INFANTRY DIVISION (MECHANIZED)
FORT STEWART, GEORGIA 31314-9000

S: 2 August 2004

ATSG-AGT (25-50) **15 July 2004**

MEMORANDUM FOR Commander, Company A, 55th Engineer Battalion, Fort Stewart, Georgia 31314-9000

SUBJECT: Preparing a Memorandum

OT 2 - HEADING - OFFICE SYMBOL/MARKS NUMBER/SUSPENSE DATE/CURRENT DATE/ADDRESS LINE/SUBJECT

DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH INFANTRY DIVISION (MECHANIZED)
FORT STEWART, GEORGIA 31314-9000

S: 2 August 2004

ATSG-AGT (25-50) **15 July 2004**

MEMORANDUM FOR

Commander, 2d Battalion, 77th Infantry Regiment, 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000
Commander, 3d Battalion, 77th Infantry Regiment, 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000
Commander, 4th Battalion, 77th Infantry Regiment, 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000

SUBJECT: Multiple-Addressed Memorandum

OT 3 - HEADING OF MEMORANDUM - MULTIPLE ADDRESS

DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH INFANTRY DIVISION (MECHANIZED)
FORT STEWART, GEORGIA 31314-9000

S: 2 August 2004

ATSG-AGT (25-50) **15 July 2004**

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: "SEE DISTRIBUTION" Memorandum

1. Xxxxxx xxxxxxxxxxxxx xxxxxxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxx xxxxxx.

2. Xxxxxxxxxxx xxx xxxxxxxxx xxxxxxx xxxxxx xxx xxxxxx xxx xxxxxxxxxxxx.

XXXXXX X. XXXXXXXXX
Xxx, XX
Xxxxxxxxxxxx

DISTRIBUTION:
Commander
1st Bn, 55th IN Div
2d Bn, 55th IN Div
3d Bn, 55th IN Div
4th Bn, 55th IN Div
5th Bn, 55th IN Div
6th Bn, 55th IN Div

OT 4 - HEADING OF MEMORANDUM - SEE DISTRIBUTION

4
5 **DEPARTMENT OF THE ARMY**
HEADQUARTERS, 55TH INFANTRY DIVISION (MECHANIZED)
FORT STEWART, GEORGIA 31314-9000

1
2 **S: 2 August 2004**
1
2 **ATSG-AGT (25-50)** **15 July 2004**
1
2
3 **MEMORANDUM THRU Commander, 3d Battalion, 77th Infantry Regiment, Fort Stewart, Georgia 31314-9000**
1
2 **FOR Commander, 2d Battalion, 77th Infantry Regiment, 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000**

1
2 **SUBJECT: Single-Addressed "THRU MEMORANDUM"**

OT 5 - HEADING OF MEMORANDUM - SINGLE THRU ADDRESS

1
2
3
4

5 **DEPARTMENT OF THE ARMY**
HEADQUARTERS, 55TH INFANTRY DIVISION (MECHANIZED)
FORT STEWART, GEORGIA 31314-9000

1
2 **S: 2 August 2004**
1
2 **ATSG-AGT (25-50)** **15 July 2004**
1
2
3 **MEMORANDUM THRU**
1
2 **Commander, 77th Infantry Regiment, Fort Stewart, Georgia 31314-9000**
1
2 **Commander, 3d Battalion, 77th Infantry Regiment, Fort Stewart, Georgia 31314-9000**
1
2 **FOR Commander, Company A, 3d Battalion, 77th Infantry Regiment, Fort Stewart, Georgia 31314-9000**
1
2 **SUBJECT: Multiple-Addressed “THRU MEMORANDUM”**

OT 6 - HEADING OF MEMORANDUM - MULTIPLE THRU ADDRESS

1 **SUBJECT: Use and Preparation of a Memorandum**
1
2
3 **1. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx.**

2. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxx.

a. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

b. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(1) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(2) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(a) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(b) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxx.

3. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

OT 7 - BODY OF A MEMORANDUM

3. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

FOR THE COMMANDER:

4
5 Encl

JAMES G. SMITH
LTC, AG
Adjutant General

1
2 CF:
CDR, 3d Bn, 55th Inf Div (Mech) (w/encl)
Transportation Officer (w/o encl)

OT 8 - CLOSING OF MEMORANDUM - AUTHORITY LINE/ENCLOSURE LISTING/SIGNATURE BLOCK/COPIES FURNISHED

3. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.
1
2 FOR THE COMMANDER:
1
2
3
4
5 Encl

JAMES G. SMITH

AR 25-15

LTC, AG
Adjutant General

1
2 CF: (w/encl)
CDR, 55th Inf Div (Mech)

OT 9 - CLOSING OF MEMORANDUM - COPIES FURNISHED

1
2
3
4
5
6
7
8 ATSG-AGT
1 SUBJECT: Continuing a Memorandum
1

2
3 5. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

6. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.
1
2
3
4
5 Xxxx **XXXXX X. XXXXX**
XXX, XX
Xxxxxxxx Xxxxxxx

2

OT 10 - CONTINUATION PAGE OF A MEMORANDUM

1
2
3
4
5
6 **S: 24 Mar 04**
7
8 ATSG-AGT (25-50) **15 Mar 04**
1
2
3 MEMORANDUM FOR XXX, XXXX XXX XXXXX, XXXX XXXXX, XX, XXXXX-XXXX
1
2 SUBJECT: Informal Memorandum

1
2
3 Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Xxxxxxxxxxxxxxxxxxxxx.
1
2 a. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.
1
2 b. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.
1
2 (1) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.
1
2 (2) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.
1
2 (a) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.
1
2 (b) Xxxxxxxxxxxxxxxxxxxxxxx.
1
2
3
4
5 Xxxx XXXXX X. XXXXXXXXX
XXX, XX
Xxxxxxxxxxxxxxxx
1
2 CF (w/encls)
XXX, XXXXXXXXXX, XXXXXX

APPENDIX B

PERFORMANCE TESTS AND SOLUTIONS

FOR

TYPE A MEMORANDUM

INCLUDES

ADMINISTRATION INSTRUCTIONS, ANSWER KEYS, SCORING INSTRUCTIONS, SCORING GUIDE

PERFORMANCE TEST

ADMINISTRATION INSTRUCTIONS

1. Ensure students have only the following materials:

   a. Performance Test Booklet.

   b. Regulations: AR 25-50 and AR 310-50.

   c. Computer/typewriter.

   d. Computer/typing paper.

   e. Standard Dictionary.

   f. Standard office supplies (correction tape/fluid, eraser, pen and/or pencil).

   g. Student handout.

2. Direct students to open their test booklets and follow along as you read the instructions aloud.

3. Explain that you will answer <u>only</u> questions of an administrative nature (e.g., regarding legibility of the materials). You will <u>not</u> answer questions of a technical nature. Ask if there are any questions at this time and answer any legitimate questions.

4. Write the test START and STOP times on the chalk/whiteboard and tell the students to begin work.

GENERAL INSTRUCTIONS

1. **<u>READ ALL DIRECTIONS.</u>** Before beginning the test, please read this page and the next page very carefully. If you have an questions, ask them before you begin.

2. **<u>WORK ALONE.</u>** Disciplinary action will be taken against any student who gives or accepts unauthorized help on this test.

3. **<u>DO NOT WRITE IN THE TEST BOOKLET.</u>** Other students will use this booklet. Do not write in it.

4. **<u>TIME LIMIT.</u>** You have 50 minutes to complete this test.

5. **<u>WHEN COMPLETED:</u>**

a. Write your name, test version (A or B), and class number in the top right corner of your test product.

b. Check your product against the standards located on the back cover of this test booklet. Make any corrections necessary to ensure that your product meets these standards.

c. Turn in your product, this test booklet, and all other materials to your instructor.

TYPE A MEMORANDUM (SINGLE-PAGE)

OBJECTIVE. This is a test to see if your can properly type a single-page memorandum.

MATERIALS REQUIRED. You may use only these materials:

1. AR 25-50 (Preparing and Managing Correspondence)

2. AR 310-50 (Authorized Abbreviations, Brevity Codes, and Acronyms)

3. Computer/typewriter.

4. Computer/typing paper

5. Standard Dictionary

6. Standard office supplies (to include correction tape/fluid, eraser, pen and/or pencil)

7. Student Handout (Type a Memorandum - Formats)

SITUATION. You are working in an office located in the headquarters of the 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000. Your supervisor has just handed you a draft memorandum (on the next page) to type in final form.

REQUIREMENT. Type the memorandum in accordance with AR 25-50.

NOTE: The draft memorandum is handwritten. If there are places where you cannot read the handwriting, you may ask your instructor for clarification.

TURN THIS PAGE AND BEGIN THE TEST

STANDARDS

Ask yourself the following questions EVERY TIME you complete a piece of correspondence and BEFORE you turn in your test product:

1. Are the following elements present IF they apply to the situation?

- Letterhead
- Office symbol
- MARKS Number
- Suspense Date
- Current Date
- Address(es)
- Subject
- Body/text
- Authority Line
- Signature Block
- Enclosure Listing
- Distribution Listing
- Copies Furnished
- Page Number

2. Is every element correct in terms of the following?

- Content
- Spelling
- Punctuation
- Capitalization
- Abbreviations (IAW AR 310-50)
- Placement

3. Are my MARGINS correct in accordance with AR 25-50?

4. Is the letterhead (if used) centered?

5. Have I neatly corrected my typing errors?

ACADEMIC SECURITY

5

GENERAL INSTRUCTIONS

1. **READ ALL DIRECTIONS.** Before beginning the test, please read this page and the next page very carefully. If you have an questions, ask them before you begin.

2. **WORK ALONE.** Disciplinary action will be taken against any student who gives or accepts unauthorized help on this test.

3. **DO NOT WRITE IN THE TEST BOOKLET.** Other students will use this booklet. Do not write in it.

4. **TIME LIMIT.** You have 50 minutes to complete this test.

5. **WHEN COMPLETED:**

a. Write your name, test version (A or B), and class number in the top right corner of your test product.

b. Check your product against the standards located on the back cover of this test booklet. Make any corrections necessary to ensure that your product meets these standards.

c. Turn in your product, this test booklet, and all other materials to your instructor.

PERFORMANCE TEST - VERSION **A**

TYPE A MEMORANDUM (SINGLE-PAGE)

OBJECTIVE. This is a test to see if your can properly type a single-page memorandum.

MATERIALS REQUIRED. You may use only these materials:

1. AR 25-50 (Preparing and Managing Correspondence)

2. AR 310-50 (Authorized Abbreviations, Brevity Codes, and Acronyms)

3. Computer/typewriter.

4. Computer/typing paper

5. Standard Dictionary

6. Standard office supplies (to include correction tape/fluid, eraser, pen and/or pencil)

7. Student Handout (Type a Memorandum - Formats)

SITUATION. You are working in an office located in the headquarters of the 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000. Your supervisor has just handed you a draft memorandum (on the next page) to type in final form.

REQUIREMENT. Type the memorandum in accordance with AR 25-50.

NOTE: The draft memorandum is handwritten. If there are places where you cannot read the handwriting, you may ask your instructor for clarification.

TURN THIS PAGE AND BEGIN THE TEST

ACADEMIC SECURITY

STANDARDS

Ask yourself the following questions EVERY TIME you complete a piece of correspondence and BEFORE you turn in your test product:

1. Are the following elements present IF they apply to the situation?

   - Letterhead
   - Office symbol
   - MARKS Number
   - Suspense Date
   - Current Date
   - Address(es)
   - Subject
   - Body/text
   - Authority Line
   - Signature Block
   - Enclosure Listing
   - Distribution Listing
   - Copies Furnished
   - Page Number

2. Is every element correct in terms of the following?

   - Content
   - Spelling
   - Punctuation
   - Capitalization
   - Abbreviations (IAW AR 310-50)
   - Placement

3. Are my MARGINS correct in accordance with AR 25-50?

4. Is the letterhead (if used) centered?

5. Have I neatly corrected my typing errors?

ACADEMIC SECURITY

PERFORMANCE TEST
SCORING INSTRUCTIONS

NOTE: The test standard for each correspondence task is 90%. (i.e., If total points deducted for a piece of correspondence exceeds ten, the student receives a "NO GO" for the entire test.)

1. The SCORING GUIDE FOR CORRESPONDENCE specifies standards for each kind of correspondence. Locate the appropriate section of the SCORING GUIDE FOR CORRESPONDENCE before proceeding.

2. Compare the student's completed test product with the applicable solution located in this booklet. Mark any errors on the student's product in whatever method you desire, provided you can define those errors for the student.

a. Check to see that all major elements applicable to the piece of correspondence are present. (Major elements are those marked with an asterisk in the SCORING GUIDE FOR CORRESPONDENCE.) If any applicable major element is missing, note this on the student's product and deduct 11 points.

NOTE: Even though the student has now received a "NO GO" on the test, continue to score the product so the student will be aware of all errors.

b. Check to see if the student included any major element(s) that should not have been included. If so, note this on the student's product and deduct 11 points. Continue scoring.

c. Check each major element against the applicable standards in the SCORING GUIDE FOR CORRESPONDENCE. For each incorrect major element, deduct 11 points (except as specified in the SCORING GUIDE FOR CORRESPONDENCE).

d. Check to see that all minor elements applicable to the piece of correspondence are present. (Minor elements are those appearing without an asterisk in the SCORING GUIDE FOR CORRESPONDENCE). Deduct 6 points for each minor element that is missing or inappropriately added. Continue scoring.

e. Check each minor element against the applicable standards in the SCORING GUIDE FOR CORRESPONDENCE. For each incorrect minor element, deduct 6 points (except as specified in the SCORING GUIDE FOR CORRESPONDENCE).

f. Check the margins on the student's product against the standards in the SCORING GUIDE FOR CORRESPONDENCE. If margins are not acceptable, note this on the student's product and deduct 11 points, Continue scoring.

g. Check the student's product for typographical errors. (See the SCORING GUIDE FOR CORRESPONDENCE for a definition of typographical errors.) Deduct 3 points for each typo. Continue scoring.

NOTE: Multiple instances of a single error may, in some cases, be counted as only one error. For example, if a student consistently misspells the word "sergeant" three times, this would count as one spelling error (-3 points), not as three errors (-9 points). this approach also applies to cases when one error automatically causes additional errors. For example, if a student incorrectly indents a subparagraph, thereby causing subsequent indentation to be incorrect, this counts as only one error. Unavoidably, such situations will require "judgment calls" on the part of the scorer.

h. Check the student's product for capitalization, punctuation, and spelling errors. Deduct 3 points for each such error. (See the SCORING GUIDE FOR CORRESPONDENCE.)

3. If you have deducted no more than 10 points from the student's product, record a "GO" for the test at the tip of the product. If you have deducted 11 or more points, record a " NO GO."

4. Explain any errors to the student.

NOTE: If the student has received a "NO GO" for the test, they will retest (when ready) on the other version of the Performance Test.

5. File the corrected test products.

MEMORANDUM

SCORING GUIDE

MEMORANDUM

ELEMENT	STANDARDS
Letterhead * (11 points if missing)	It must: 1. Contain correct content as given.

2. begin on the 5th line from the top of the top of the page.
   NOTE: If it begins on the 4th or 6th line, deduct 1 point.

3. Be centered in the middle of the page (plus or minus 1 character).
   NOTE: If it is 2 to 5 characters to the left or right of center, deduct 3 points.

4. Be single spaced.

In other areas, deduct 3 points per error up to a max of 11 points.

Office Symbol (3 points)	It must: 1. Appear on the 4th line below the last line of the letterhead on a formal memorandum. NOTE: If it appears on the 3d or 5th line, deduct 3 points. 2. Appear on the 8th line from the top of the page on an informal memorandum. NOTE: If it appears on the 7th or 9th line, deduct 3 points. 3. Appear on the 8th line from the top of the page on a continuation page. NOTE: If it appears on the 7th or 9th line, deduct 3 points. 4. Contain correct content as given. 5. Appear in upper case letters. 6. Be correctly hyphenated, if applicable. DO NOT CONSIDER HORIZONTAL PLACEMENT. (SEE “MARGINS”) **Deduct 3 points per error unless indicated elsewise.
MARKS Number (3 points)	It must: 1. Contain correct content as given. 2. Appear in parenthesis at the 3d space

following the office or reference symbol.

3. Contain upper and/or lower case letters, as applicable.

4. Be correctly hyphenated, if applicable.

**Deduct 3 points per error unless indicated otherwise.

Current Date * (3 points if missing)	It must: 1. Appear on the same line as the office symbol and MARKS number. 2. Contain correct content as given. 3. Appear in one of these two formats: Example: 15 June 2004 15 Jun 04 4. End at the right margin (SEE "MARGINS'). 5. Appear on one line (not be split) if the month is abbreviated. **In other areas, deduct 3 points per error.
Suspense Date * (3 points if missing)	It must: 1. Begin on the 2d line below the last line of the letterhead. NOTE: If it appears on the 1st or 3d line, deduct 1 point. 2. Contain correct content as given. 3. Appear in one of these two formats: S: 15 June 2004 S: 15 Jun 04 4. End at the right margin (SEE "MARGINS").

	**In other areas, deduct 3 points per error.
Address(es)* (6 points)	It must: 1. Begin on the 3d line below the office symbol. NOTE: If it/they begin(s) on the 2d or 4th line, deduct 3 points. ATTN: If missing, deduct 3 points. 2. Appear in the appropriate block style format(s) as follows: <u>MEMORANDUM FOR</u> MEMORANDUM FOR DIRECTOR OF PERSONNEL <u>USE OF AN ATTENTION LINE</u> MEMORANDUM FOR DIRECTOR OF PERSONNEL, ATTN: DAPE-SPZ (MR. BROWN) <u>MULTIPLE ADDRESS MEMORANDUM</u> (2 - 5 ADDRESSES) MEMORANDUM FOR 1 <u>2</u> DEPUTY CHIEF OF STAFF FOR INTELLIGENCE DEPUTY CHIEF OF STAFF FOR PERSONNEL DEPUTY CHIEF OF STAFF FOR LOGISTICS <u>MEMORANDUM THRU/FOR ADDRESS</u> MEMORANDUM THRU COMMANDER, 26TH SUPPORT GROUP 1 <u>2</u> CDR, 55TH INFANTRY DIVISION

(MECHANIZED)

MULTIPLE THRU ADDRESSES

MEMORANDUM THRU
1
2 CDR, 55th IN Div (Mech)
Fort Stewart, GA 31314-9000
1
2 CDR, 1st Bn, 55th IN Div (Mech)
Fort Stewart, GA 31314-9000
1
2 FOR CDR, Co C, 1st Bn, 55th IN Div
(Mech), Fort Stewart, GA 31314-9000

SEE DISTRIBUTION ADDRESSES
(MORE THAN 5 ADDRESSES)

The words "SEE DISTRIBUTION" appear on the 3d line below the subject line.

The addresses are formatted below the signature block. See the element, "Distribution Listing."

3. Include correct abbreviations are used, and reflect consistent use throughout.

4. Appear entirely in upper case letters or entirely in upper and lower case.

DO NOT CONSIDER HORIZONTAL PLACEMENT.
(SEE "MARGINS")

Subject Line* (6 points)	It must: 1. Appear on the 2d line below the address (es). NOTE: If it appears on the 1st or 3d line, deduct 3 points. 2. Appear on the first line below the office symbol on a continuation page. NOTE: If it appears on the 2d line, deduct

	3 points. 3. Contain correct content as given. 4. Appear in this format: Example: SUBJECT: Debits DO NOT CONSIDER HORIZONTAL PLACEMENT. (SEE "MARGINS")
Body/Text * (6 points if missing)	It must: 1. Begin on the 3d line below the subject line. NOTE: If it begins on the 2d or 4th line, deduct 3 points. 2. Contain correct content as given. 3. Contain correct indention of subparagraphs, when applicable. (One-paragraph memos will not be indented.) 4. Include correct numbering/lettering of paragraphs and subparagraphs. 5. Be single spaced with double spacing between paragraphs and subparagraphs. 6. Reflect consistent use of abbreviations (if applicable.) DO NOT CONSIDER HORIZONTAL PLACEMENT OF PARAGRAPHS. (SEE "MARGINS")
Authority Line (3 points if missing)	It must: 1. Appear on the 2d line below the last line of body/text. NOTE: If it appears on the 1st or 3d line, deduct 3 points. 2. Contain correct content as given.

3. Appear in upper case letters.

4. Be included only if appropriate.

DO NOT CONSIDER HORIZONTAL PLACEMENT. (SEE "MARGINS")

Enclosure Listing (6 points)	It must: 1. Begin on the same line as the 1st line of the signature block. NOTE: If it begins 1 line above or below the signature block, deduct 3 points. 2. Contain correct content as given. 3. Be stated in full or correctly abbreviated. DO NOT CONSIDER HORIZONTAL PLACEMENT. (SEE "MARGINS")
Signature Block* (6 points)	It must: 1. Begin on the 5th line below the authority line (if present) or on the 5th line below the last line of the body/text. NOTE: If it begins on the 4th or 6th line, deduct 3 points. 2. Begin at the center of the page (plus or minus 1 character). NOTE: If it begins 2 - 5 characters to the left or right of center, deduct 3 points.
Distribution Listing* (6 points)	It must: 1. Include the word "DISTRIBUTION" on the 2d line below the last line of either the signature block or the enclosure listing (whichever is spaced further down the

page.)
NOTE: If it appears on the 1st or 3d line, deduct 3 points.

2. Include address beginning on the 1st line below the word "DISTRIBUTION."
NOTE: If addresses begin on the 2d line, deduct 3 points.

3. Contain correct content as given.

4. Appear in the following format:

DISTRIBUTION:	<u>or</u>	DISTRIBUTION:
CDR, 54th IN Div		Commander
CDR, 55th IN Div		54th Infantry Division
CDR, 56th IN Div		55th Infantry Division
CDR, 57th IN Div		56th Infantry Division
CDR, 58th IN Div		57th Infantry Division
CDR, 59th IN Div		58th Infantry Division

DO NOT CONSIDER HORIZONTAL PLACEMENT.
(SEE "MARGINS")

Copies Furnished Listing (3 points)

It must:

1. Include the abbreviation "CF."

2. Begin on the 2d line below the last line of either the signature block, the enclosure listing, or the distribution listing, whichever is spaced further down the page.
NOTE: If it begins on the 1st or 3d line, deduct 3 points.

3. Contain correct content as given.

4. appear in block-style format.

5. Include the list of offices/commands which receive the furnished copies - either stated in full or correctly abbreviated.

DO NOT CONSIDER HORIZONTAL PLACEMENT.
(SEE "MARGINS")

Page Number (3 points)	It must: 1. Appear on second page with the number "2" approximately 1 - 1 1/2 inches from the bottom edge of the page. 2. Appear in the center of the page (plus or minus 1 character.) NOTE: If it appears 2 - 5 characters to the left or right of center, deduct 3 points.
Margins (3 points)	1. The left and right margins must fall 1 inch (plus or minus 1 character) from the edges of the paper. This includes all elements which begin at the left margin and those which end at the right margin. However, the body/text may extend into the right margin as much as 3 typed characters. 2. All elements which begin at the left margin must be blocked. 3. The bottom margin on the first page of a multi-page memorandum must be at least 1 1 1/2 inches.

<table>
<tr><td>Typographical
Accuracy
(3 points
per error)</td><td>Typographical errors include:

1. Strike-overs.

2. Transposed letters.

3. Repeated letters.

4. Omitted letters (or omitted words which do not affect the meaning of the element).

5. Incorrect horizontal spacing between words and/or sentences.

Product may include <u>neatly</u> corrected typos (correction tape, fluid, ink, pencil, or retyped corrections that would be acceptable on the job.)

Product must <u>not</u> include:

1. Improper erasures where legibility is obscured or where holes appear in the paper.

2. More than <u>3</u> <u>uncorrected</u> typos.</td></tr>
<tr><td>Capitalization,
Punctuation,
& Spelling
(3 points
per error)</td><td>Product must <u>not</u> include more than 3 errors from this category.
NOTE: Capitalization errors are not counted by the letter, but rather by the word (or word group for a phrase, name, title, etc.)
Examples: The date “30 January 1996” would count as 1 error, not 6. the entry “colonel, ag” in a signature block would count a 1 error, not 3.</td></tr>
</table>

APPENDIX C
PRACTICE EXERCISES

TYPE A MEMORANDUM

OBJECTIVE: This booklet contain practice exercises to see if you can properly type a memorandum.

MATERIALS REQUIRED. You may use only these materials:

1. AR 25-50 (Preparing and Managing Correspondence)

2. AR 310-50 (Authorized Abbreviations, Brevity Codes, and Acronyms)

3. Computer/typewriter

4. Computer/typing paper

5. Standard Dictionary

6. Standard office supplies (to include correction tape/fluid, eraser, pen and/or pencil)

7. Student Handout (Type a Memorandum - Formats)

SITUATION: You are working in an office located in the headquarters of the 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000. Your supervisor has just handed you some draft memorandums (beginning on the next page) to type in final form.

REQUIREMENT: Type the memorandums in accordance with AR 25-50.

NOTE: The draft memorandums are handwritten. It there are places where you cannot read the handwriting, you may ask your instructor for clarification.

TURN THIS PAGE AND BEGIN THE FIRST PRACTICE EXERCISE

PRACTICE EXERCISE 1

Below is the draft memorandum your supervisor has given you. The subject is Line of Duty Investigation.

The enclosed DA Form 4187 pertains to PVT John A. Jones, formerly of the 54th Chemical Company. We are forwarding it for inclusion with the Line of Duty Investigation.

Current regulations require submission of Line of Duty Investigations within 48 hours after an injury.

Not later than 30 January 2004, please explain your delay in submission of this investigation.

GO ON TO THE NEXT PAGE

PRACTICE EXERCISE 1

The following is additional information you will need:

1. The memorandum is <u>FOR</u> the Commander, Third United States Army, Fort Stewart, Georgia 31314-9000.

2. It will be signed for your commander by Charles R. Minton; Major, AG, Deputy Adjutant.

3. Your office symbol is AJJAG.

4. The MARKS number is 600-8-1j.

5. Today's date is 15 January 2004. Your supervisor wants a response to the memo by 30 January 2004.

6. There is one enclosure as identified in the body of the memorandum.

CHECK YOUR WORK AGAINST THE STANDARDS ON BACK COVER

PRACTICE EXERCISE 2

Below is the draft memorandum your supervisor has given you. The subject is Staff Meeting.

We have postponed the monthly staff meeting and rescheduled it for 25 March 2004. We will hold the meeting in the command conference room of this headquarters at 0900.

GO TO THE NEXT PAGE

PRACTICE EXERCISE 2

The following is additional information you will need:

1. The memorandum is <u>FOR</u> the Commander of the 1st Brigade, 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000 and the commander of the 2d Brigade, 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000.

2. It will be signed by George Shafter; Colonel, AG; Adjutant.

3. Your office symbol is AJJAG-A.

4. The MARKS number is 5.

5. Today's date is 25 February 2004.

6. This is an informal memorandum.

CHECK YOUR WORK AGAINST STANDARDS ON BACK COVER

PRACTICE EXERCISE 3

Below is the draft memorandum your supervisor has given you. The subject is Wood for Fuel Heating.

There is a large supply of dry wood and scrap lumber near the Southern Pacific Railroad yard. We request that your organization remove the wood from the present site and report back not later that 31 January 2004.

GO ON TO THE NEXT PAGE

PRACTICE EXERCISE 3

The following is additional information you will need:

1. The memorandum is FOR the Commander of the 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000. It is to go THRU the commander, Division Troop Brigade, Fort Stewart, Georgia 31314-9000.

2. It will be signed by Charles H. Brown; Major; EN; Director of Engineering and Housing.

3. Your office symbol is AJJEN.

4. The MARKS number is 420-17e.

5. Today's date is 14 January 2004. Your supervisor wants a response to the memo no later than 31 January 2004.

6. There is one enclosure, a strip map.

7. This is an informal memo.

CHECK YOUR WORK AGAINST STANDARDS ON BACK COVER

PRACTICE EXERCISE 4

Below is the draft memorandum your supervisor has given you. The subject is Delay in Submission or Report.

Personnel requisitions of the month of December failed to arrive at this headquarters by the second day of the month. Please note the following:

This is a requirement of Fort Stewart Regulation 24-4.

We must consolidate requisitions from all subordinate units and forward them by the fifth day of each month.

Please ensure that future reports arrive by the date specified.

GO TO THE NEXT PAGE

PRACTICE EXERCISE 4

The following is additional information you will need:

1. The memorandum is <u>FOR</u> six addressees. They are the commanders of: 3d Battalion, 77th Infantry, 2d Armor; 3d Battalion, 3d Armor; 3d Battalion, 80th Infantry; 3d Battalion, 81st Infantry; and 3d Battalion, 25th Armor.

2. It will be signed by James R. Franklin; Major General, USA; Commanding.

3. Your office symbol is AJJCG.

4. The MARKS number is 610a.

5. Today's date is 15 January 2004.

6. This is an informal memorandum.

7. Your supervisor wants you to furnish a copy of the memorandum to the Chief of Staff.

CHECK YOUR WORK AGAINST STANDARDS ON BACK COVER

PRACTICE EXERCISE 5

Below is the draft memorandum your supervisor has given your. The subject is Lost Baggage.

The baggage belonging to SSG James R. Hunt, 999-74-3586, a member of this command has not arrived. This baggage consists of: One foot locker, claim check number R35-07-91. One duffel bag, claim check number R35-08-92. SSG Hunt turned in his baggage to the transportation warehouse at Fort Stewart on 1 March 2004. Please conduct a search for his baggage and reply to this headquarters by 5 April 2004.

GO TO THE NEXT PAGE

PRACTICE EXERCISE 5

The following additional information you will need:

1. The memorandum is <u>FOR</u> the Commander, Soldier Support Center, ATTN: ATZI-TI, Fort Stewart, Georgia 31314-9000. It is to go <u>THRU</u> the Commander, 3d Battalion, 77th Infantry, 55th Mechanized Infantry, Fort Stewart, Georgia 31314-9000.

2. It will be signed for you commander by Robert J. Craga; CPT; TC; Transportation Officer.

3. Your office symbol is AJJTC.

4. The MARKS number is 55-355FRTee.

5. Today's date is 22 March 2004. Your supervisor wants a response to the memo by 5 April 2004.

6. Your supervisor wants you to furnish a copy of this memorandum to the Commander, Company B, 3d Battalion, 77th Infantry.

CHECK YOUR WORK AGAINST STANDARDS ON BACK COVER

PRACTICE EXERCISE 6

Below is the draft memorandum your supervisor has given you. The subject is Pay Inquiry.

> Reference your memorandum, AJJFC, 15 July 2004, subject: Pay Inquiry.
>
> Private First Class Roger M. Elkhart, who is assigned to this command has not yet received his end-of-month pay for 2 months. Please note the following:
>
> PFC Elkhart's social security number is 999-20-4444.
>
> He has selected the check-to-unit option.
>
> We request that you take immediate action to rectify this problem as it is causing an undue hardship on the soldier.

GO TO THE NEXT PAGE

PRACTICE EXERCISE 6

The following is additional information you will need:

1. The memorandum is FOR the Commander, Defense Finance and Accounting Center-Indianapolis, ATTN: FINCP-O, Indianapolis, Indiana 46236-5000. It is to go THRU the Commander, 3d Battalion, 77th Infantry, 55th Mechanized Infantry Division, Fort Stewart, Georgia 31314-9000.

2. It will be signed for your commander by Alice J. Latouterre; Major; AG; Adjutant.

3. Your office symbol is AJJAG-A.

4. The MARKS number is 37-105g.

5. Today's date is 20 October 2004.

6. Your supervisor wants you to furnish a copy of this memorandum to the Finance Officer.

CHECK YOUR WORK AGAINST STANDARDS ON BACK COVER

PRACTICE EXERCISE 7

Below is the draft memorandum your supervisor has given you. The subject is Course Schedule. This memorandum will not fit on one page. You will need to prepare a continuation page to finish the memorandum.

We have enclosed the recommended course schedule for the newly-developed Senior Enlisted Manager Course (SEMC). This training is scheduled to begin 1 November 2004. Please not the following:

Training hours will be 0800-1600.
Participants will be allowed one hour for lunch.
Class may finish early on Friday afternoon.
Location of the training will be building 400, wing B, classroom 215.

We request that you review the schedule in terms of the topics to be covered, the time estimate for each, and the sequencing of topics. Please provide the following information to this headquarters not later than 5 April 2004.

Recommended changes in content:
Topics to be added
Topics to be expanded
Topics to be deleted
Recommended changes in training times:
Not enough time devoted
Too much time devoted
Recommended changes in sequencing.

Point of contact is SGM Turner, extension 4705.

GO TO THE NEXT PAGE

PRACTICE EXERCISE 7

The following is additional information you will need:

1. The memorandum is <u>FOR</u> six addressees. They are the commanders of: 1st Mechanized Brigade; 2d Mechanized Brigade; 3d Armor Brigade; 54th Cavalry Brigade; Division Artillery; and Division Troop Brigade.

2. It will be signed by Melvin D. Anderson; Brigadier General; USA; Asst. Div. Cdr. (Plans).

3. Your office symbol is AJJAG.

4. The MARKS number is 351c.

5. today's date is 7 March 2004. Your supervisor wants a response to the memo by 5 April 2004.

6. There is one enclosure as identified in the body of the memorandum.

7. This is an informal memorandum.

CHECK YOUR WORK AGAINST STANDARDS ON BACK COVER

PRACTICE EXERCISE 8

Below is the draft memorandum your supervisor has given you. The subject is Energy Conservation Conference. This memorandum will not fit on one page. You will need to prepare a continuation page to finish the memorandum.

On 3 May 2004 this command will host the Federal Energy Conservation Conference (FECC).

We have not firmly established the program's agenda at this time. However, we expect that the conference will last two days and will include topics on heat conservation and solar power. See the proposal agenda enclosed.

Please review this tentative agenda and provide us the following information by 15 March 2004.

Topics you feel should be:

Added.
Deleted.
Expanded.
Reduced.

Recommend changes regarding the suggested training times.

Recommendations concerning the proposed sequencing of topics.

Point of contact at this headquarters *is Major* Edward Ewing, DSN 539-7812.

GO TO THE NEXT PAGE

PRACTICE EXERCISE 8

The following is additional information you will need:

1. The memorandum is FOR seven addressees. They are the commanders of: U.S. Army Engineer Center, U.S. Army Academy of Health Sciences, U.S. Army Logistics Center, U.S. Army Quartermaster Center, U.S. Army Ordnance Center, U.S. Army Intelligence Center, and U.S. Army Soldier Support Institute.

2. It will be signed for your commander by Audrey L. Hanley; Captain; IN' Asst. Chief of Staff.

3. Your office symbol is AJKDF.

4. The MARKS number is 11-27b.

5. Today's date is 21 February 2004. Your supervisor wants a response to the memo by 15 March 2004.

6. there is one enclosure as identified in the body of the memorandum.

SOLUTIONS

FOR

PRACTICE EXERCISES

1 - 8

SOLUTION FOR PRACTICE EXERCISE 1

DEPARTMENT OF THE ARMY
Headquarters, 55th Infantry Division (Mechanized)
Fort Stewart, Georgia 31314-9000

S: 30 January 2004

AJJAG (600-8-1j) 15 January 2004

MEMORANDUM FOR Commander, Third United States Army, Fort Stewart, Georgia 31314-9000

SUBJECT: Line of Duty Investigation

1. The enclosed DA Form 4187 pertains to PVT John A. Jones, formerly of the 54th Chemical Company. We are forwarding it for inclusion with the Line of Duty Investigation.

2. Current regulations require submission of Line of Duty Investigations within 48 hours after an injury.

3. Not later that 30 January 2004, please explain your delay in submission of this investigation.

FOR THE COMMANDER:

Encl

CHARLES R. MINTON
MAJ, AG
Deputy Adjutant

SOLUTION FOR PRACTICE EXERCISE 2

AJJAG-A (5) 25 February 2004

MEMORANDUM FOR

Commander, 1st Brigade, 55th Infantry Division (Mechanized), Fort Stewart, Georgia 31314-9000

Commander, 2d Brigade, 55th Infantry Division (Mechanized), Fort Stewart, Georgia 31314-9000

SUBJECT: Staff Meeting

We have postponed the monthly staff meeting and rescheduled it for 25 March 2004. We will hold the meeting in the command conference room of this headquarters at 0900.

GEORGE SHAFTER
COL, AG
Adjutant

SOLUTION FOR PRACTICE EXERCISE 3

S: 31 January 2004

AJJEN (420-17e) 14 January 2004

MEMORANDUM THRU Commander, Division Troop Brigade, Fort Stewart, Georgia 31314-9000

FOR Commander, 55th Infantry Division (Mechanized), Fort Stewart, Georgia 31314-9000

SUBJECT: Wood for Fuel Heating

1. There is a large supply of dry wood and scrap lumber near the Southern Pacific Railroad yard.

2. We request that your organization remove the wood from the present site and report back not later than 31 January 2004.

Encl
1. Strip Map

CHARLES H. BROWN
MAJ, EN
Director, Engineering and Housing

SOLUTION FOR PRACTICE EXERCISE 4

AJJCG (610a) 15 January 2004

MEMORANDUM FOR

Commanders
3d Battalion, 77th Infantry, 2d Armor
3d Battalion, 3d Armor
3d Battalion, 80th Infantry
3d Battalion, 81st Infantry
3d Battalion, 25th Armor

SUBJECT: Delay in Submission of Report

1. Personnel requisitions of the month of December failed to arrive at this headquarters by the second day of the month. Please note the following:

a. This is a requirement of Fort Stewart Regulation 24-4.

b. We must consolidate requisitions from all subordinate units and forward them by the fifth day of each month.

2. Please ensure that future reports arrive by the date specified.

JAMES R. FRANKLIN
Major General, USA
Commanding

SOLUTION FOR PRACTICE EXERCISE 5

S: 5 April 2004

AJJTC (55-355FRTee) 22 March 2004

MEMORANDUM THRU Commander, 3d Battalion, 77th Infantry, 55th Infantry Division (Mechanized), Fort Stewart, Georgia 31314-9000

FOR Commander, Soldier Support Center, ATTN: ATZI-TI, Fort Stewart, Georgia 31314-9000

SUBJECT: Lost Baggage

1. The baggage belonging to SSG James R. Hunt, 999-74-3586, a member of this command has not arrived.

2. This baggage consists of:

   a. One foot locker, claim check number R35-07-91.

   b. One duffel bag, claim check number R35-08-92.

3. SSG Hunt turned in his baggage to the transportation warehouse at Fort Stewart on 1 March 2004.

4. Please conduct a search for his baggage and reply to this headquarters by 5 April 2004.

FOR THE COMMANDER:

ROBERT J. CRAGA
CPT, TC
Transportation Officer

CF:
Commander, Company B, 3d Battalion
77th Infantry

SOLUTION FOR PRACTICE EXERCISE 6

DEPARTMENT OF THE ARMY
Headquarters, 55th Infantry Division (Mechanized)
Fort Stewart, Georgia 31314-9000

AJJAG-A (37-105a) 20 October 2004

MEMORANDUM THRU Commander, 3d Battalion, 77th Infantry, 55th Infantry Division (Mechanized), Fort Stewart, Georgia 31314-9000

FOR Commander, Defense Finance and Accounting Center-Indianapolis, ATTN: FINCP-O, Indianapolis, Indiana 46236-5000

SUBJECT: Pay Inquiry

1. Reference your memorandum, AJJFC, 15 July 2004, subject: Pay Inquiry.

2. Private First Class Roger M. Elkhart, who is assigned to this command has not yet received his end-on-month par for 2 months. Please note the following:

a. PFC Elkhart's social security number is 999-20-4444.

b. He has selected to check-to-unit option.

3. We request you take immediate action to rectifvy this problem as it is causing an undue hardship on the soldier.

FOR THE COMMANDER:

ALICE J. LATOUTERRE
Major, AG
Adjutant

SOLUTION FOR PRACTICE EXERCISE 7

S: 5 April 2004

AJJAG (351c) 7 March 2004

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Course Schedule

1. We have enclosed the recommended course schedule for the newly-developed Senior Enlisted Manager Course (SSMC). This training is scheduled to begin 1 November 2004. Please note the following:

a. Training hours will be 0800-1600.

(1) Participants will be allowed one hour for lunch.

(2) Class may finish early on Friday afternoon.

b. Location of the training will be building 400, wing E, classroom 215.

2. We request you review the schedule in terms of the topics to be covered, the time estimate for each, and the sequencing of topics. Please provide the following information to this headquarters not later than 5 April 2004:

a. Recommended changes in content:

(1) Topics to be added.

(2) Topics to be expanded.

(3) Topics to be deleted.

b. Recommended changes in training times:

(1) Not enough time devoted.

AJJAG

(2) Too much time devoted.

c. Recommended changes in sequencing.

Encl

MELVIN D. ANDERSON
Brigadier General, USAA
Assistant Division Commander (Plans)

DISTRIBUTION:
Commanders
1st Mechanized Brigade
2d Mechanized Brigade
3d Armor Brigade
54th Cavalry Brigade
Division Artillery
Division Troop Brigade

SOLUTION FOR PRACTICE EXERCISE 8

S: 15 March 2004

AJKDF (11-27b) 21 February 2004

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Energy Conservation Conference

1. On 3 May 2004 this command will host the Federal Energy Conservation Conference (FECC).

2. We have not firmly established the program's agenda at this time. However, we expect that the conference will last two days and will include topics on heat conservation and solar power. See the proposal agenda enclosed.

3. Please review this tentative agenda and provide us the following information by 15 March 2004.

a. Topics you feel should be:

(1) Added.

(2) Deleted.

(3) Expanded.

(4) Reduced.

b. Recommend changes regarding the suggested training times.

c. Recommendations concerning the proposed sequencing of topics.

4. Point of contact at this headquarters is Major Edward Ewing, DSN 539-7812.

FOR THE COMMANDER:

AJKDG
SUBJECT: Energy Conservation Conference

Encl AUDREY L. HANLEY

Captain, IN
Assistant Chief of Staff

DISTRIBUTION:
Commanders
U.S. Army Engineer Center
U.S. Army Academy of Health Sciences
U.S. Army Logistics Center
U.S. Army Quartermaster Center
U.S. Army Ordnance Center
U.S. Army Intelligence Center
U.S. Army Soldier Support Institute

CHECK YOUR WORK AGAINST STANDARDS ON BACK COVER

STANDARDS

Ask yourself the following questions EVERY time you complete a piece of correspondence and BEFORE you turn in your practice exercise product:

1. Are the following elements present IF they apply to the situation:

    - Letterhead
    - Office Symbol
    - MARKS Number
    - Suspense Date
    - Current Date
    - Address(es)
    - Subject Line
    - Body/Text
    - Authority Line
    - Signature Block
    - Enclosure Listing
    - Distribution Listing
    - Copies Furnished
    - Page Number

2. Is every element correct in terms of the following?

    - Content
    - Spelling
    - Punctuation
    - Capitalization
    - Abbreviations (IAW AR 310-50)
    - Placement

3. Are my MARGINS correct in accordance with AR 25-50?

4. Is the letterhead (if used) centered?

5. Have I neatly corrected my typing errors?

PRACTICE EXERCISE

PROOFREAD A MEMORANDUM

INSTRUCTOR GUIDANCE FOR THE PE, PROOFREAD A MEMORANDUM

1. This practice exercise is to be completed after the soldiers have typed the first PE for Type a Memorandum and before they turn it in for grading.

2. Make sure that all the soldiers have finished typing the memorandum for PE number 1. Have them hold their completed product until after completing the PE, Proofread a Memorandum.

3. Distribute the handout, Some Suggestions for Proofreading, and have the soldiers read it. Also distribute the PE, Proofread a Memorandum.

4. Go over each point in the handout and, where applicable, point out where in AR 25-50 it is discussed.

5. Have the soldiers complete the PE, Proofread a Memorandum. Allow them 15 minutes to mark the errors.

6. After the soldiers have marked the errors, go over the exercise in such a manner that the soldiers recognize all the errors and how to correct these errors. We suggest that you have a soldier describe an error and its correction one at a time. Have different soldiers discuss different errors. Continue this process until all the errors and their corrections have been reviewed. DO NOT HAVE THE SOLDIERS TYPE A CORRECTED COPY OF THIS MEMORANDUM. However, you may want to have this memorandum typed as corrected as a supplemental exercise later in the course.

NOTE: Using an overhead projector with a transparency of the memorandum and marking the errors as the soldiers identify them is an effective instructional method.

7. At the conclusion of this PE have the soldiers apply the proofreading techniques practiced to their completed first PE for Type a Memorandum and correct all the errors before turning in that PE for grading. Subsequently, require all soldiers to practice and apply proofreading for all correspondence PEs and tests before they turn in their products for grading. This process is also applicable to any task that requires typing.

ERROR IDENTIFICATION
FOR
PROOFREAD A MEMORANDUM

The margins at the top, right, and left are not correct.

LINE	ERROR
1	none
2	none
3	“I” in “indiana” should be capitalized.
4	none
5	none
6	Should have “:” after “S” and should have the year “2004.”
7	none
8	MARKS number should be in parentheses, and the month typed in upper and lower case ending at the right margin.
9	none
10	Should be on line 11, third line below the office symbol. Should not have “:” after “THRU” and should have a single space between “THRU” and “Commandant.”
11	Should be on line 123. Should be indented to start below the first “m” of “Commandant” and have two spaces between the state and zip code.
12	none
13	none
14	Should be indented to start below the first “m” of “Commander.” Need a hyphen in the zip code.
15	none
16	Should have the first “p” in “preparing” capitalized. No period at the end.

Error Identification (continued)

LINE	ERROR
17	none
18	The first paragraph should start on the third line below the subject line. should not have “of AR 25-50.”
19	none
20	“test” should be “text” and “spacing” should be “spacing.”
21	none
22	none
23	none
24	“consecutively” should be “consecutively”. There should be 2 spaces between the end on one sentence and the beginning of another.
25	none
26	none
27	none
28	Should have “,” after “subdivided.”
29	none
30	none
31	“a”, should be “a,”
32	none
33	Should have 2 spaces between “(1)’ and “Designate.”
34	Need a comma after “example.”
35	none

Error Identification (continued)

LINE	ERROR
36	Should have 2 spaces between "(2)" and "Do."
37	Should double space between subdivision of paragraphs. Incorrect indenting, "a" should be directly below "(2)." (Do not further indent third subdivision.)
38	none
39	Should double space between subdivisions of paragraphs. Incorrect indenting. Added "NOT." Omitted "procedure" after "indentation."
40	none
41	none
42	Should have the authority line.
43	none
44	Authority line should be on the second line below the last line of the body of the memorandum.
45	none
46	none
47	none
48	Should be on the fifth line below the authority line. "e" in "encl" should be capitalized. No ":" needed after "encl." Signature block should start at the center. Name should be in all caps.
49	"ltc" should be all caps followed by a come.
50	none
51	"Doctrine" should be indented one more space.
52	"CF" should be on the second line below the last line of the signature block followed by a colon.
53	none

DEPARTMENT OF THE ARMY
United States Army Soldier Support Institute
Fort Jackson, South Carolina 29207-7035

S: 18 September 2004

ATZI-DTI-R (350) 10 AUGUST 2004

MEMORANDUM THRU: Commandant, Adjutant General School, ATTN: ATZI-AGT, Fort Jackson, South Carolina 29207-5000

FOR Commander, 369th Adjutant General Battalion, ATTN: ATZI-C-G-CO, Fort Jackson, South Carolina 292907-6320

SUBJECT: Using and preparing a Memorandum.

1. Paragraph 2-2 of AR 25-50 defines the use of a memorandum.

2. Single-space the test of the memorandum; double spacing between paragraphs.

3. When a memorandum has more than one paragraph, number the paragraphs consecutively. When paragraphs are subdivided, designate first subdivisions by the letters of the alphabet and indent them as shown below.

a. When a paragraph is subdivided; there must be a least two subparagraphs.

b. If there is a subparagraph “a”, there must be a “b.”

(1) Designate second subdivisions by numbers in parentheses, for example (1), (2), and (3).

(2) Do not subdivide beyond the third subdivision.

(a) However, do not indent any further than for the second subdivision.

(b) this is NOT an example of the proper indentation for a third subdivision.

FOR THE COMMANDER:

encl.: Oscar A. Overman

Ltc. AG

Director, Training and Doctrine

CF

Comdt, NCO Academy

STANDARDS

Ask yourself the following questions EVERY time you complete a piece of correspondence and BEFORE you turn in your practice exercise product:

1. Are the following elements present IF they apply to the situation:

- Letterhead
- Office Symbol
- MARKS Number
- Suspense Date
- Current Date
- Address(es)
- Subject Line
- Body/Text
- Authority Line
- Signature Block
- Enclosure Listing
- Distribution Listing
- Copies Furnished
- Page Number

2. Is every element correct in terms of the following?

- Content
- Spelling
- Punctuation
- Capitalization
- Abbreviations (IAW AR 310-50)
- Placement

3. Are my MARGINS correct in accordance with AR 25-50?

4. Is the letterhead (if used) centered?

5. Have I neatly corrected my typing errors?

PROOFREAD A MEMORANDUM

OBJECTIVE: This exercise is designed to provide an experience in proofreading a typed document that contains errors.

MATERIALS REQUIRED: You may use the following materials:

1. AR 25-50 (Preparing and Managing Correspondence)

2. AR 310-50 (Authorized Abbreviations, Brevity Codes, and Acronyms)

3. Standard Dictionary

4. Student Handout (Some Suggestions for Proofreading)

5. Student Handout (Type a Memorandum - Formats)

6. A pen or pencil

SITUATION: You have just finished typing the memorandum. Before submitting it for signature, you are to proofread it and make the necessary corrections.

1. You are to assume that the content of the document from the letterhead to the SUBJECT is correct. You will need to check for correct formatting, spelling, punctuating, spacing, proper use of capital letters, etc.

2. The source document for the body of the memorandum from the SUBJECT to the AUTHORITY LINE is AR 25-50, Figure 2-1. Refer to this when verifying the correctness/completeness of the content only. You will also need to check for correct formatting, spelling, punctuating, spacing, proper use of capital letters, etc.

3. You are to assume that the content of all the parts of the closing is correct. However, you will need to check for correct formatting, spelling, punctuating, spacing, proper use of capital letters, etc.

DIRECTIONS: Using your pen or pencil, mark ALL the errors so that you can identify them. You are not only expected to identify the error, but you must be able to tell what the correct condition should be. Under real conditions, you would be expected to make all the corrections and retype the document before submitting it for signature. You will be allowed 15 minutes to mark all the errors. You are to use the above materials to help you identify errors. You will not retype the memorandum.

SOME SUGGESTIONS FOR PROOFREADING

As a 71L, one of your responsibilities is to ensure that any correspondence you prepare is free of errors. In order for you to pass along a piece of correspondence that is error free, you MUST thoroughly review the document and make any necessary corrections. This process of reviewing and identifying errors is called proofreading.

The task of proofreading is demanding, time consuming, and frustrating. It requires considerable concentration and attention to detail. We all dislike reviewing something that we have painstakingly prepared because this takes time -- time we would prefer spending doing something else. All of us have prepared correspondence that we though was error free because we were very careful in its preparation. Upon having it returned for correction, we became frustrated because the errors, which were now obvious, were previously overlooked by us.

The person who proofreads normally checks for proper grammar, mechanics, correct word usage, and structure. At this point in your training we do not expect you to be accomplished in these skills. However, as you progress in your Army career in this MOS, you will be required to review correspondence to ensure that errors in these categories are not present.

To simplify the training requirements, we have NOT purposely created any errors in the source documents that you will be using in any of the practice exercises or tests.

Our experience with AIT soldiers indicates that the errors appearing in their finished products are format errors and typing mistakes. For you to produce documents that are error free, you need to thoroughly proofread each one. Here are some suggestions to help you proofread your documents:

1. Check for typing errors.

a. Check the last word of each line and the first word in the next line to verify that you did not repeat the same word.

b. Check carefully for words that are very similar such as word and work, from and form, four and pour, etc.

c. Check the sequence of numbers and letters to be certain that “1-2-3-4-5-6” is not “1-2-4-5-6” or that “a-b-c-d-e-f” is not “a-b-c-e-d-f.”

d. Verify that you have not omitted or added any words as given in the source material. You can do this by first reading a few words, four or five, in you prepared document and then reading these same words in the source document.

e. Look for transposed letters and words.

f. Check for misspelled words. At this point in your training, most misspelled words are the result of careless typing. An effective method to check for misspelled words is to begin the last word on the page and read backward a word at a time. In this way you see each word out of its normal sequence and thus in isolation. It is a tedious procedure, but it is also an effective way to catch misspelled words. If there is any doubt concerning the spelling, consult the source document. and, if doubt continues, consult the dictionary.

2. Check all punctuation.

a. Make sure that parentheses are opened and closed. the Army requires certain portions of correspondence to be in parentheses, e.g., MARKS numbers, sub-paragraph numbers, and in endorsements, the office symbol and date of the basic memorandum.

b. Verify that all quotation marks are opened and closed.

c. Check that all punctuation marks given in the source document are in you typed copy. Also check to see that you have not added extra punctuation except for that required for proper formatting as specified in AR 25-50.

d. Ensure that you have properly punctuated all paragraph and enclosure numbering and lettering.

e. Review for proper use of the colon. The Army specifies that a colon be used in specific places, e.g., following the “S” for suspense date, after “SUBJECT” in the subject line, at the end of the authority line, after “CF” in the copies furnished notation, and after “DISTRIBUTION” when listing multiple addresses at the end of the document.

3. Check character and line spacing.

a. Make sure that there is a single space between words.

b. Ensure that there are two spaces between:

(1) A colon and any other typed material.

(2) Sentences in a paragraph.

(3) The state and zip code in addresses.

(4) The paragraph's number/letter punctuation and the first character of the paragraph's text.

(5) The elements in the identification line (first line) on an endorsement except between "End" and the writer's of space needed to ensure that the writer's identification or portion thereof ends at the right margin.

c. Verify that the line spacing is correct between the various sections/parts as specified in AR 25-50. The handouts provide excellent examples of proper line spacing.

4. Check for proper use of capital letters.

a. AR 25-50 specifies that certain elements are always typed in capital letters, e.g., OFFICE SYMBOLS. Verify that you have properly capitalized these elements.

b. Verify that capital letters used in the source document are also present in your typed copy.

5. Check all abbreviations.

a. AR 310-50, Authorized Abbreviations, Brevity Codes, and Acronyms, specifies what abbreviations you may use. If you use abbreviations, make sure they are the proper ones. Also make sure that you use capital letters as specified in authorized abbreviations.

b. If you use abbreviations (where acceptable), make sure that you use them with consistency in similar type entries such as in addresses.

6. Check all margins. There are specific requirements spelled out in AR 25-50 for all margins. The size of the margins is dependent upon the type of correspondence being prepared and also the page being typed. Very little variance is allowed. (Note: For training purposes left and right margins will be 1 inch for <u>all</u> kinds of correspondence, to include the letter.) Therefore, you need to make sure that you have installed the proper print commands in the computer and that the paper is in the proper position in your printer.

7. Check for the positioning of those elements that are to be centered.

a. If you are required to type a letterhead, each line of the letterhead must be centered from left to right on the page.

b. The signature block of memorandums, endorsements, and letters must <u>start</u> at the center of the page from left to right. The signature block is <u>not</u> centered on the page.

8. Check for proper indenting. AR 25-50 specifies that certain portions of various elements are to be indented, e.g., second and any subsequent line(s) of addresses, subparagraphs, and sub-subparagraphs. The regulation gives several examples and the handout provided for the training has additional examples.

The above suggestions are not all-inclusive, but do provide a basic proofreading guide for correspondence. By applying these suggestions, the probability that you will turn in an error-free product will be greatly enhanced.

PROOFREAD A MEMORANDUM

OBJECTIVE: This exercise is designed to provide an experience in proofreading a typed document that contains errors.

MATERIALS REQUIRED: You may use the following materials:

1. AR 25-50 (Preparing and Managing Correspondence)

2. AR 310-50 (Authorized Abbreviations, Brevity Codes, and Acronyms)

3. Standard Dictionary

4. Student Handout (Some Suggestions for Proofreading)

5. Student Handout (Type a Memorandum - Formats)

6. A pen or pencil

SITUATION: You have just finished typing the memorandum. Before submitting it for signature, you are to proofread it and make the necessary corrections.

1. You are to assume that the content of the document fro the letterhead to the SUBJECT is correct formatting, spelling, punctuating, spacing, proper use of capital letters, etc.

2. The source document for the body of the memorandum from the SUBJECT to the AUTHORITY LINE is AR 25-50, Figure 2-1. Refer to this when verifying the correctness/completeness of the content only. You will also need to check for correct formatting, spelling, punctuation, spacing, proper use of capital letters, etc.

3. You are to assume that the content of all the parts of the closing is correct. However, you will need to check for correct formatting, spelling, punctuation, spacing, proper use capital letters, etc.

DIRECTIONS: Using your pen or pencil, mark ALL the errors so that you can identity them. You are not only expected to identify the errors, but you must also be able to tell what the correct condition should be. Under real conditions, you would be expected to make all the corrections and retype the document before submitting it for signature. You will be allowed 15 minutes to mark all the errors. You are to use the above materials to help you identify errors. You will **NOT** retype the memorandum.

DEPARTMENT OF THE ARMY
United States Army Soldier Support Institute
Fort Stewart, Georgia 31314-9000

S; 18 September 04

ATZI-DTI-R 350 10 AUGUST 2004

MEMORANDUM THRU: Commandant Adjutant General School, ATTN: ATZI-AGT, Fort Stewart, Georgia 31314-9000

FOR Commander, 369th Adjutant General Battalion, ATTN: ATZI-C-G-CO, Fort Jackson, South Carolina 29207-6320

SUBJECT: Using and preparing a Memorandum

1. Paragraph 2-2 of AR 25-50 defines the use of a memorandum.

2. Single-space the test of the memorandum; double spacing between paragraphs.

3. When a memorandum has more than one paragraph, number the paragraphs consecutively. When paragraphs are subdivided, designate first subdivisions by the letters of the alphabet and indent them as shown below.

a. When a paragraph is subdivided; there must be at least two subparagraphs.

b. If there is a subparagraph "a", there must be a "b."

(1) Designate second subdivisions by numbers in parentheses, for example (1), (2), (3), etc.

(2) Do not subdivide beyond the third subdivision.
(a) However, do not indent any further than for the second subdivision.
(b) This is NOT an example of the proper indentation for a third subdivision.

FOR THE COMMANDER:

encl:

Oscar A. Overman
Ltc. AG
Director, Training and
Doctrine

CF:
Comdt, NCO Academy

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APPENDIX D

STUDENT HANDOUT

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STUDENT HANDOUT

FOR

TYPE A MEMORANDUM

LETTERHEAD

DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH MECHANIZED INFANTRY DIVISION
FORT STEWART, GEORGIA 31314-9000

OR

DEPARTMENT OF THE ARMY
Headquarters, 55th Mechanized Infantry Division
Fort Stewart, Georgia 31314-9000

HEADING OF MEMORANDUM
OFFICE SYMBOL
MARKS NUMBER
SUSPENSE DATE
CURRENT DATE
ADDRESS LINE
SUBJECT

1
2
3
4
5 DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH MECHANIZED INFANTRY DIVISION
FORT STEWART, GEORGIA 31314-9000
1
2 S: 2 August 2004
1
2 ATSG-AGT (25-50) 15 July 2004
1
2
3 MEMORANDUM FOR Commander, Company A, 55th Engineer Battalion,
Fort Stewart, Georgia 31314-9000
1
2 SUBJECT: Preparing a Memorandum

HEADING OF MEMORANDUM
MULTIPLE ADDRESS

DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH MECHANIZED INFANTRY DIVISION
FORT STEWART, GEORGIA 31314-9000

S: 2 August 2004

ATSG-AGT (350) 15 July 2004

MEMORANDUM FOR

Commander, 2d Battalion, 77th Infantry, 55th Mechanized Infantry Division,
Fort Stewart, Georgia 31314-9000
Commander, 3d Battalion, 77th Infantry, 55th Mechanized Infantry Division,
Fort Stewart, Georgia 31314-9000
Commander, 4th Battalion, 77th Infantry, 55th Mechanized Infantry Division,
Fort Stewart, Georgia 31314-9000

SUBJECT: Multiple-Addressed Memorandum

HEADING OF MEMORANDUM
SEE DISTRIBUTION

DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH MECHANIZED INFANTRY DIVISION
FORT STEWART, GEORGIA 31314-9000

S: 2 August 2004

ATSG-AGT (350)   15 July 2004

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Preparing a “SEE DISTRIBUTION” Addressed Memorandum

1. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

2. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

XXXXX X. XXXXXXX
XXX, XX
Xxxxxxxxxxxxxxx Xxxxxxxxxxxxxxxx

DISTRIBUTION:
Commander
1st Bn, 55th IN Div
2d Bn, 55th IN Div
3d Bn, 55th IN Div
4th Bn, 55th IN Div
5th Bn, 55th IN Div
6th Bn, 55th IN Div

HEADING OF MEMORANDUM
MULTIPLE THRU ADDRESS

1
2
3
4
5 DEPARTMENT OF THE ARMY
HEADQUARTERS, 55TH MECHANIZED INFANTRY DIVISION
FORT STEWART, GEORGIA 31314-9000
1
2 S: 2 August 2004
1
2 ATSG-AGT (25-50) 15 July 2004
1
2
3 MEMORANDUM THRU
1
2 Commander, 77th Infantry, Fort Stewart, Georgia 31314-9000
1
2 Commander, 3d Battalion, 77th Infantry, Fort Stewart, Georgia 31314-9000
1
2 FOR Commander, Company A, 3d Battalion, 77th Infantry, Fort Stewart, Georgia
31314-9000
1
2 SUBJECT: A Multiple Addressed “THRU MEMORANDUM”

BODY OF A MEMORANDUM

SUBJECT: Use and Preparation of a Memorandum

1

2

3 1. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 2. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 a. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 b. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 (1) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 (2) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 (a) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 (b) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1

2 3. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

CLOSING OF A MEMORANDUM
AUTHORITY LINE
ENCLOSURE LISTING
SIGNATURE BLOCK
COPIES FURNISHED

4. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1
2 FOR THE COMMANDER:
1
2
3
4
5 Encl JAMES E. SMITH
LTC, AG
Adjutant General
1
2 CF:
CDR, 3d Bn, 55th Mech Inf Div (w/encl)
Transportation Officer (wo/encl)

CLOSING OF A MEMORANDUM
COPIES FURNISHED

3. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

1
2 FOR THE COMMANDER:
1
2
3
4
5 Encl JAMES E. SMITH
AR 25-50 LTC, AG
Adjutant General
1
2 CF (w/encl):
CDR, 55th Mech Inf Div

CONTINUATION PAGE OF A MEMORANDUM

AJJGC

SUBJECT: Continuing a Memorandum

5. Xxxxxxxxxxxxxxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

6. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

XXX XXX XXXXXXXXX:

Xxxx

XXXXX X.XXXXX
XXX, XX
Xxxxxxxxxxxxx Xxxxxxxxxxx

INFORMAL MEMORANDUM
SINGLE PARAGRAPH
W/SUBPARAGRAPHS

S: 24 Mar 04

ATSG-AGT (25-50) 15 Mar 04

MEMORANDUM FOR XXX,XXXX XXX XXXXXX, XXXX XXXXXXX, XX XXXXX

SUBJECT: Informal Memorandum

Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

a. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

b. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(1) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(2) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(a) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

(b) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

Xxxx

XXXXX X. XXXXX
XXX, XX
Xxxxxxx Xxxxxxxxx

CF (w/encl):
XXX, XXXXXXXXX, XXXXXX

AFTER ACTION REVIEW
(AAR)

OBJECTIVE:

Conduct an After Action Review (AAR) using a Modified AAR Evaluation Form and a 20-minute student presentation. The AAR leader must restate the class objective, maintain order, ask open-ended questions, encourage participation and avoid giving a critique or lecture IAW FM 25-100 and FM 25-101.

CRITERION-REFERENCED TEST:

You must conduct an After Action Review using the Modified AAR Evaluation Form and a 20-minute student presentation. The AAR Leader must restate the objective of the class, maintain order, ask open-ended questions, encourage participation and avoid giving a critique or lecture IAW FM 25-100 and FM 25-101.

AAR

AFTER ACTION REVIEW

As an instructor, you must measure the performance of your soldiers both during and after training. At the end of training, you performance-based test accurately evaluates the abilities and skills of your soldiers against a specific standard. During training exercises, your immediate feedback helps soldiers to identify successes and shortcomings, both individually and collectively. Your feedback identifies performance areas they need to improve to meet a standard. This ensures that everyone receives training value from significant events occurring during training. For all performance-oriented training, you will use the after action review (AAR) as a tool to provide immediate feedback as part of the evaluation phase of the Systems Approach to Training (SAT) process.

An AAR is a review of training that allows soldiers, leaders and units to discover personally what happened during the training and why. This professional discussion includes the training participants and focuses on the training objectives and their link to the METL (mission essential task list) and wartime mission. If a positive, non-threatening environment, you solicit and discuss ways to improve training performance. As an instructor, you use AARs to tell a story about what was planned, what happened during the training, and why is happened, and what could have been done differently to improve performance.

By asking open-ended questions, you guide discussion that allow soldiers and subordinate leaders to personally discover important learning points. Soldiers learn much more when they identify for themselves what went right and wrong than when you point them out.

AARs always:

- Reinforce and increase lessons learned from a training exercise.
- Increase soldier and leader interest and motivation.
- Identify and analyze both strengths and weaknesses.
- Involve all participants.
- Help to achieve learning objectives.
- Link lesson learned to subsequent training.

Instructors and trainers use both formal and informal AARs to improve performance. Formal AARs require more detailed planning, preparation and resources before using them as part of external and internal evaluations. Informal AARs require less planning and preparation than formal AARs and are often on-the-spot reviews of soldier and collective training performance at crew, squad and platoon level.

FORMAL

Usually, formal AARs begin at company level and above; however, when a training event focuses at squad or platoon level, <u>and resources are available,</u> you can use formal AARs to gain maximum training benefit. Externally evaluated lane training, small-unit ARTEPS (Army Training and Evaluation Program), and tank and BFV (Bradley Fighting Vehicle) gunnery tables are prime examples of formal AARs. Prior to company and higher-echelon formal AARs, conduct informal crew, squad, and platoon AARs.

As an AAR leader (evaluator), you must provide an exercise overview and lead a discussion of events and activities that focuses on the training objectives. Be sure to include use of the terrain, integration of key BOS (Battlefield Operating Systems), and leader actions to bring our specific points. If used, also examine the weapons systems and doctrine used by the enemy during the exercise. At the end, summarize the comments from the observers, covering strengths and weaknesses discussed during the AAR and what the unit needs to do to fix the weaknesses.

INFORMAL

Informal AARs work effectively for soldier and crew, squad and platoon-level training or when resources are not available to conduct a formal review. Lower echelons often hold and informal AAR prior to formal company or higher level AARs. Informal AARs may also be conducted at company level. Informal AARs always involve all soldiers and leaders in the participating unit. The formal company AARs for th training event depend on these thorough, informal reviews. The AAR Handout is an example of an informal AAR done in a classroom environment.

Conduct informal AARs similar to formal AARs in either large or small units as part of a scheduled AAR or as on-the-spot reviews during the training. Consider recording discussion comments to use in follow-on AARs or to immediately apply the lesson learned in a repeated exercise.

PLAN, PREPARE, CONDUCT

Formal and informal AARs follow the same general sequence. You must plan and prepare before you can conduct an effective AAR. The amount of planning and preparation depends on the type of AAR you choose.

PLAN.

Establish Objectives

To promote learning, your AAR must accomplish the objective. Through planning, you provide the foundation for a successful AAR and create a positive climate for training and evaluating subordinate soldiers, leaders and units.

As a minimum, include the following in your AAR plan:

- Who will observe the training and conduct the AAR.
- What the observers should evaluate (T&EO).
- Who is to attend the AAR.
- When and where the AAR will be conducted.
- What training aids will be used during the AAR.

Select Qualified Observers

Those selected as qualified observers must concentrate fully on observing the actions during the exercise, taking notes on the observations and writing questions for the AAR discussion. They should neither be involved in the training not have other duties which detract from their observation and evaluation of the training. If this cannot be done, your chain of command should evaluate subordinate elements and conduct the AARs. Ask squad leaders to evaluate their soldiers' performance and limit the AAR discussion to their actions. Leaders at each level repeat the procedure for their unit. The observers you select must be:

- Able to perform the tasks to be trained.
- Experienced in the duties they must evaluate.
- Knowledgeable in the current doctrine.

If you select external observers, choose a soldier of at least equal rank to the leader of the unit being evaluated. If you must choose between experience and rank, choose experience. A sergeant who has experience as a TOW section leader can evaluate the section better than a platoon sergeant who has no TOW experience.

Set aside additional time to train your observers; watch them as they observe soldiers or collective training. Each observer will conduct a specified portion of the AAR and provide input to the AAR for the next higher echelon. After your observers conduct their AARs, help them to improve their technique and procedures by conducting an AAR on their performance as observers. Arrange for new observers to assist an experienced AAR leader and sit in on the other AARs whenever possible.

Observers must be familiar with the unit's METL or soldier and collective tasks they will be observing. They must know the training objectives and be proficient in the tasks themselves. By knowing up front what the training involves, observers can concentrate on the specific tasks considered to be mission essential and provide critical feedback concerning the unit's performance.

Review Training and Evaluation Plan

Review the Training and Evaluation Plan with observers and participants at all levels. Although the overall plan may be clear to you, restating will help soldiers focus on the total outcome of the exercise and how their actions will be evaluated.

Identify Participants

The commander specifies who must attend each AAR. As an AAR leader, you can recommend additional participants, based on specific observations. Select as many participants, including OPFOR (opposing forces) leaders, as can reasonably be handled at the AAR site. At each echelon, the AAR will have its own primary set of participants. At crew, squad and platoon level, everyone should attend and participate. At the company level, this may be impractical. Insufficient space at the AAR site of continuous training mission may preclude some unit soldiers from attending. In this case, leaders and key players may be the only participants.

The OPFOR will provide valuable feedback on the training based on their own observations. While the unit's leaders and evaluators see the training from one point of view, the OPFOR can provide healthy insights on:

- OPFOR doctrine and plans.
- The unit's actions.
- OPFOR reactions to what the unit did.

Plan Stops During Exercises

An observer cannot see everything each soldier does during an exercise; likewise, for other than a brief exercise, the observer cannot review the entire exercise at one AAR. In planning the training, allow time to conduct AARs as an integrated part of the training; give additional time at the end of each essential task or major event. Plan stopping points; for example, after a unit arrives at a new position or after it consolidates on an objective.

Conduct AARs as soon as possible after the event and before another operation begins. For planning purposes, allow approximately one hour for platoon-level AARs and one and one-half to two hours for company and higher level AARs. The additional time required to conduct the AARs may result in fewer missions or drills. The increased effectiveness of training, however, will more than make up for this loss of training time. With AARs, soldiers receive better feedback on their performance and remember lessons learned longer.

Make Potential Site Selections

Plan several potential AAR sites throughout an exercise area to reduce preparation time. Preposition equipment and diagram the layout to allow for shorter movement time to the selected site; the diagram permits the setup to begin before the AAR leader arrives. In most cases, you will conduct AARs at the training site when possible.

Select Trainings Aids

Training aids add to the AAR's effectiveness and must support the training discussion. They must be large enough, and positioned so that everyone can see. Models of units, behicles and personnel make discussions clearer. To learn more about training aids, see Module IA-2 (Develop Media).

Draft the AAR Plan

After deciding the "who, when and where" of the AAR plan, choose natural stopping points to review training and conduct AARs. Formalize the discussion points and address changes in objectives, plans and participants. Write out your plan.

Review Unit Training Plans and Objectives

Your plan is a living product. Reviewing your unit's training plans helps you to maintain an effective AAR plan. Update your own plan to match changes in your unit's training plans and objectives. Adjust your plan when necessary, such as placing an observer or incorporating new objectives or training materials. Stay current!

PREPARE.

Review Training Objectives, Orders and Doctrine

Focus your observations and your AAR on the training objectives. Consult appropriate regulations and tables for the proper action, conditions, and standards of a task. All OPORDs (operations orders) issued prior to and during the event establish the initial conditions for the tasks and direct the action during the training. Your knowledge of the current doctrine will increase your effectiveness in the field.

Observe the Training

Observe critical events needed to accomplish the mission, such as issue of OPORDs, initial contact with OPFOR, re-supply and reconstitution operations and acquisition of intelligence. Monitor the unit's communications nets to hear messages and OPFOR information. In the field, find high ground where you can observe the action or camouflage yourself along the unit's route so you can observe without being observed. Do NOT compromise the unit's position or tactical play. TAKE DETAILED NOTES. The poorest note is better than the sharpest memory! Record your observation time and a quick description of what happened. Later, you can review your notes and fill in information. Use a small notebook, cards, etc. to record your observations.

Organize the Selected AAR Site(s)

As you plan training and training sites, watch for possible AAR sites which are free from outside distracters. The AAR leader must see all seated participants; they must also be in easy sight and hearing range of the leader and the actual terrain or training aid used. Support any special training aids requirements. Choose clean, orderly, well-lit places where soldiers can feel comfortable and protected. If possible, serve coffee, soup, and juice to help create the proper atmosphere, especially after time in the field during night or adverse weather conditions.

Collect Information From Other Observers

While the unit leaders and soldiers move to the selected AAR site, get feedback from other observers. Get a complete picture of what happened in the training, and base your AAR comments on the information provided by observers, evaluators, OPFOR personnel and individual unit members.

Develop a Discussion Outline

Prior to conducting an AAR, use your AAR plan to develop a discussion outline before the training begins and flesh it out as the training progresses.

Organize and Rehearse

Place notes and observations from the training in chronological sequence. Select the most critical ones and sequence them as they relate to the exercise training objectives. A guideline to organization appears below:

- Introduction
- Presentation of commander's and OPFOR's plan
- Summary of recent events
- Discussion of key issues
- Analysis of key BOS (what happened when the battle was joined)
- Discussion of training to sustain or improve
- Conclusion

CONDUCT

The following is an example of how to conduct an AAR. Squads have just finished an FTX which the platoon leader observed and evaluated. AAR preparation is complete and squad leaders have assembled the soldiers.

Before starting the AAR, the platoon leader ensures all participants are present and ready. The soldier who is absent or late may have information critical to reconstructing what happened. The platoon leader insists that all key players attend, including OPFOR leaders. The AAR must NOT start until the leader accounts for all players.

Restate Unit's Mission and Events Training Objective(s)

The AAR leader for the platoon focuses the AAR by briefly restating the specific exercise or training objectives. Next, the leader encourages unit participation by asking a squad leader to summarize the OPORD. (Another technique is to have each squad leader restate a portion of the OPORD.)

Generate Discussion

From this point on, the AAR leader guides the discussion, focusing on the objectives in a logical sequence. Initially, the leader only asks open-ended questions why certain actions were taken, how personnel reacted to situations, and when actions were initiated. The leader avoids turning the discussion into a critique or lecture by entering the discussion only when necessary.

Orient the Training Objectives

The AAR leader takes three actions: sustains the AAR, refocuses the discussion to the right track (if needed), and brings out new points.

As an instructor, you can use several techniques to guide student discussion of training objectives. Six techniques appear below.

1. Ask questions that begin with the words "who, what, why, when, where and how." Known as the "5Ws and an H," these words guarantee the answer will contain more information.

2. Ask leading and thought-provoking questions that focus on the training objectives. Ask squad leaders what METT-T factors influenced their decisions.

3. Ask unit members to describe what happened in their own words and from their own point of view. Encourage them to discuss not only what took place, but also why it took place.

4. Relate tactical events to subsequent results.

5. Explore alternative courses of action that might have been more effective. (How could you have done it better?)

6. Avoid detailed examination of events not directly related to major training objectives unless the squad leader wants to go into greater detail.

Discuss Leader Mistakes

Many times the discussion focuses on leader mistakes. A normal part of the AAR, this frank discussion emphasizes positive points so leaders learn “how to think” and gain valuable experience in a non-threatening atmosphere of support.

As the AAR leader, you shape this portion of the AAR by asking the leader about a particular course of action or factors of METT-T which influenced the decision. Others can learn from a mistake and gain an appreciation for the difficulties involved in leading. Perhaps some key information was missing because a subordinate leader or soldier didn’t think it was important. Remind unit members that combat casualties can make them leaders quickly, as they must learn to make decisions.

Seek Maximum Participation

During the discussions of what happened and why, watch for nonverbal behavior for acceptance or exception. Be open to head nods or head shakes and looks of surprise or confusion. Ask for input from those soldiers, as well as the ones who volunteer to speak. If you established a non-threatening environment early in the AAR, soldiers will be more willing to speak about points of confusion. Continue telling soldiers that AARs help to improve performance; that your unit seeks answers and not blame. Remain neutral when receiving feedback and encourage lively discussion of training objectives.

Continually Summarize

Always summarize a main discussion point before proceeding to your next point. Summarizing a point of emphasizes a learning point and clarifies the discussion and any decisions reached. Summarize again after three, four or five discussion points to further imbed learning points.

Once you complete discussion on all the key points and link them to future training, you, as the AAR leader, must summarize the learning points and leave the immediate area. This allows the unit leader and soldiers to discuss the events privately as a team and returns control to the unit leader, who will decide when to end the AAR.

The AAR process involves several leader functions requiring skill, training and good judgment. As the AAR leader, you observe performance and then evaluate the quality of what you see. You decide what observations to include in the AAR and what questions to ask. Your open-ended questions force your soldiers to compare their own performance with established Army standards. They can examine poor performance in great detail by focusing on what happened and why without undue damage to self-esteem or cohesion.

By the end of the AAR, soldiers must clearly understand what was good and what needs improvement in their performances. Because they participated in analyzing their performance, they often accept more responsibility in improving that same performance in future training. They KNOW where they stand and what they must do to improve their performance, both individually and as a unit.

CRITERION-REFERENCED TEST

AFTER ACTION REVIEW
(AAR)

Conduct an After Action Review (AAR) using a Modified AAR Evaluation Form and a 20-minute student demonstration, a 20-minute student developmental conference and a 20-minute student mini-class presentation. The AAR leader must restate the objective of the class, maintain order, ask open-ended questions, encourage participation and avoid giving a critique or lecture IAW this Module and FMs 25-100 and 25-101.

TRAINING AID

SPEECH EVALUATION

This material is appropriate for CP–2, CP–3, CP–4 and CP–5. You will want to read this material before you do any of your presentations.

The following points are covered:

- The Voice.
- Platform Behavior
- Personality Traits

THE VOICE

You have been talking a lot since you were born! In fact, you probably speak about 20,000 words per day (some of you can think of people you know who are only getting warmed up at the amount!) Sure, you say – so what do I have to learn about speech?

The fact is, though, that most of us do not use our voice as well as we can, or as well as we should, even in normal conversations. As an instructor, your voice is a <u>teaching</u> tool – part of the learning process – and you must use it to communicate your knowledge to other persons who do not have that know-how. <u>Communication</u> comes from the Latin word communis, which means common. So we are looking for mutual understanding, a breakdown to the barriers of common interaction – a true communion. And that's different from discussing sport or politics over a cup of coffee in the snack bar.

Two more things. First your voice is not the only part to effective speaking. Your personality traits and platform technique are part of it, too. We will look at them next. Second, reading about effective speaking isn't going to make you an effective speaker. You are going to do that by practice. But, when you practice there are things about the voice you should know. Consider them now.

<u>ARTICULATION</u>

A five-syllable, two-bit word. It means opening your mouth, moving your lips, using your tongue and teeth to form words that other people can understand. They will be operating on the breath stream coming through your larynx. Our speech has vowel sounds – a, e, i, o, u and sometimes y – sound them out if you want to. All the rest of the sounds are consonants. These two basic types of sound are produced and combined to make up intelligible speech. You'll produce and combine them correctly if you work at it, but this won't automatically happen. How many times a day, here or at home, do you say, "What did you say?" or, "Say again, please"? Well, if 10, 20 or 30 students are out in front of you continually saying that as you speak, then obviously there will be little flow of information. Be distinct in your speech; don't mumble; don't slur your words.

<u>PRONUNCIATION</u>

Pronunciation is producing a word with the correct sound and the correct accent where it is supposed to be, as good (or current) usage says it should be. For example, many people say "Ad-ver-TIZE-ment" instead of the correct "Ad-VER-tiz-ment". The difference is not very important, because most of us would recognize the word pronounced either way. However, a lady from Baltimore who asked a California drug store clerk for "baby earl" got nothing but a blank stare and an incredulous "What?" from the clerk; "oil" and "earl" were not the same to him (incidentally the same lady also said "Ball-i-mer" for Ball-ti-more", an no one understood that either!)

Ignorance of correct pronunciation can be overcome by (1) listening to good, knowledgeable speakers (TV announcers are generally very good) and (2) using the dictionary when you are in doubt.

Incidentally, a regional accent can be a plus, and you probably will not be able to change it anyway. It's part of your personality – just make sure that people from other parts of the country can understand you.

GRAMMAR

Grammar is the way that the different classes of words – nouns, pronouns, verbs, adjectives, etc. – are put together to form phrases, clauses, and sentences. Putting words together comes more from listening to well-spoken people and reading good writing than memorizing rules. Most important, you must take pride in saying things right. Your ability to do it will come from experience and practice.

Remember too that, although words can be put together in what seems to be a correct manner, the meaning intended can be interpreted falsely. For example, the command "Get lost!" spoken to a person today would not have been interpreted by one of our Pilgrim forefathers in the same way. **The warning? Be careful of the overuse of slang expressions.**

RATE

Rate of speech is the speaker's speed of delivery. Most people speak at a rate of 120 to 150 words per minute. Actually, we can understand good speech in a much faster rate than that. The problem is that most people cannot produce good speech faster than that – articulation, pronunciation, and grammar can suffer to the point of being unintelligible. There is no standard for proper rate of speech. As a general rule, speak fast enough to be interesting and to move your instruction along, but speak slow enough to be understood. However, vary your speech in rate; be governed by your emotions. Slow down for emphasis; speed up to convey an idea that is moving along rapidly. Rate will be tied in with enthusiasm and force, which we will discuss later. The things to avoid are:

- Slow ponderous speech. Do not put your audience to sleep. And this is easy to do in the afternoon after your students have been to lunch.

- Fast "machinegun" delivery. Three major points here: (1) your articulation, and thus clarity, may suffer; (2) the students may be unable to grasp complex ideas at a high rate of speech; and (3) they may be unable to take adequate notes, annotate schematics, or perform operations on or with equipment properly.

- "Chopping up" your speech. Good grammar and understandable speech is partially dependent upon a smooth delivery. Try to speak in complete sentences so as not to split up the idea you're trying to get across. Breathe properly, and relax enough to eliminate tenseness – these will come with practice and experience.

PAUSE

Pauses are the punctuation marks of speech. They serve basically four purposes: (1) they give your listeners a chance to evaluate and absorb your ideas; (2) they give emphasis and help convey the correct meaning of your ideas; (3) they help you relax and breathe properly; and (4) they let you think about what you are going to say next. Common difficulties, or errors, are (1) too many pauses, or too long (make sure you know your subject matter and rehearse properly) (2) not enough pauses ("rattling on" speech) (3) too many "uhs" or "ahs" (keep quiet during a pause) and (4) try not to break up ideas by unnecessary pauses (nervousness and poor breathing usually cause these).

INFLECTION

Inflection is the change of pitch, or tone of your voice as you speak. It helps make your speech more interesting and meaningful; it gives you "color" and "variety" to your speech. It, like correct pauses, helps punctuate speech; it places question marks and exclamation marks where they belong; it prevents monotone, uninteresting, dull speech.

FORCE

Forceful speech results from a combination of proper volume of voice power with an effective modulation of volume. Your students must be able to hear you. Classes will vary in size; make sure the students farthest away are being reached. You must not blast your students through the rear wall of the classroom, but neither must they strain to hear you. They won't anyway; they'll go to sleep. Emphasizing certain words or phrases by increasing voice volume can help stress importance also. Force involves rate, pauses, and inflection; it cannot really be separated into something itself. Certainly a well-modulated, forceful delivery aids in establishing confidence in the students that the instructor is competent. It also aids in increasing the self-confidence of the instructor.

AND FINALLY . . .

These are the major areas of speech production that warrant your attention both in your presentation in this course and throughout your tour of instructional duty. Indeed, throughout your years of military service, a good speaking voice is an asset everywhere, any time. Again, remember that you will not learn to be an effective speaker by reading about it.

PLATFORM BEHAVIOR

In addition to your voice, your body movements also speak. And if you'll think a minute, you'll realize that for truly effective speech, the voice alone is not enough. Most of us are not old enough to remember the great and famous radio dramas (although some of them are reappearing in radio reruns) such as "The Shadow", "Fu Manchu", "One Man's Family", "Lights Out", etc. The scriptwriters of those productions had a nice advantage, aside from the low cost of production. They could strive for voice and sounds effects alone, allowing the listener's imagination to supply the rest to the limit of his ability to conjure images of people and situations. But, this happy state of affairs for drama is an extremely unhappy state of affairs for instruction. The imperfect communication of sound alone that can heighten drama does not provide the perfection we would like or the transfer of information in instruction.

If a speaker uses his body to reinforce and emphasize his voice delivery, he can add a great deal to the accuracy of his communication. In fact, skilled pantomime performers can communicate just about any idea or act by using body movement and expression alone.

POSTURE

Posture is your stance upon the platform. A “military” posture can be described in many words, but most of us have a fairly accurate picture in our mind of what this means. You do not have to assume your best parade ground position while on the platform; yet it is essentially your basic position, slightly more relaxed. Your weight will be balanced on both feet; your legs, spine, and neck comfortably erect. Do not lean on anything: the whiteboard/chalkboard rail, a training aid, a table, or the lectern/podium – especially the lectern/podium. Get it of your way. It is good for many things; small aids can be placed on it; your platform notes and the class roster can be placed on it; erasers, chalk, and markers can be placed on it. However, it is not your haven of position on the platform, and it is not your crutch. Stay away from it until you need it. Use it quickly; then get away from it again.

Stand erect with the confidence of a person who is competent and in complete command of his subject matter. Your class will sense this, and it will affect the way your students receive your instruction.

MOVEMENT

Movement is the motion of your body as you move around the presentation area (or, sometimes do not move). You really do not want to get anchored to one spot; that tends to make you tense, and to make your voice delivery sound “canned” or monotone. Speakers at a convention, or even the President at one of his new conferences, operate under a handicap; television lighting and camera coverage considerations restrict their movement. This places an additional burden upon their communicative skills.

Movement should be smooth and purposeful. Smooth means gliding motion at the right speed. Do not cross your feet over when moving from side to side. Moving to the whiteboard/chalkboard or other aids can give your motion purpose, but so can moving from one side of the platform to the other so as to have better eye contact with a student to whom you have asked a question.

Be moderate in movement. You must not get anchored; but you must not keep yourself in motion all the time, either. As you become more experienced and confident, you will find effective movement becoming more and more automatic and natural.

GESTURES

A gesture is the movement of a part of the body to show emotion, or reinforce speech. While you can use leg, shoulder, or head movement, usually we are talking about movement of the arms and hands.

Except for an unusual need for emphasis, keep arm and hand movements between the waist and the shoulder. On the campus of Notre Dame University there is a fine statue of a man with one arm and finger pointing heavenward in emphasis; his if know as “Fair Catch Fairly”. Well, you leave “Fair Catch” and the Statue of Liberty with their arm raised purposefully; keep yours down. You are the instructor, not an evangelist.

Gestures should be spontaneous, not planned. They should blend naturally with the use of your voice as it is modulated for emphasis and interest. Actually, you should not be thinking too much about what your arms and hands are going to be doing; your major attention should be focused on your subject matter. If you deliver your speech with proper volume, modulation, color and variety, and enthusiasm, then you can reasonably expect that your gestures will take care of themselves.

FACIAL EXPRESSION

The expression on your face as you instruct is also a gesture, a very important one, since most students will be following your eyes with their eyes – the face and eyes are the focus of human beings (and most animals) as they communicate.

During World War II, the training film came into widespread use. Several Hollywood motion picture stars, who were in the service, were used to produce some of these films – not because they were famous, but because of their ability to speak, move, and portray emotion with great effect – these persons were professionals at communications. All used their talent with skill, and you can be assured that none at any time could be in a "dead-pan", monotone style. You may never be a "movie star", but you can attempt a page from their book. Use facial expression to aid rapport with your class. Although there is proper time for each of them, generally try to project a pleasant, confident demeanor – and SMILE!

CONTACT

Some of you have probably listened to speakers with excellent voices and a well prepared message, yet they always seemed to be looking somewhere other than at their audience – over heads, out the window, at the lectern or at the platform, or worse yet, at their feet or at the ceiling. As this continued over a period of time, the audience began to feel that they might as well be listening to a tape recording or a radio broadcast. As a result, attention, interest, and transfer of ideas and information was seriously affected. Remember that your audience, or class, generally wants to be with you. You are going to have to make sure that they can be with you by gaining and maintaining eye contact with them.

When you are in conversation with a friend, you expect to look at him and you expect him to look at you. It is not necessary to fix him with a stare, but you expect eye-to-eye contact part of the time. The same is expected in the classroom. Look at your students. Focus on them. Don't flick your eyes around too quickly. Look at someone in the left rear; in the center; in the right front. If you ask a student a question, or if he asks you one, move smoothly and purposefully to that part of the platform that is closest to him and look at him as you talk to each other. You want your students to know that you are interested in them – that you care. Incidentally, if you are really looking at your class, you'll be able to tell from their expressions whether they understand you or the subject matter or whether they don't. Distribute your contact. Do not favor any one student, or group. Try some contact at all times when you are facing your class.

Sometimes, however, you will not be facing your class; you will be moving to, or using the whiteboard/chalkboard or another aid. Or you will be moving to the lectern to consult your notes. On these occasions when there is a necessity to break eye contact, continue to speak. Keep the train of thought intact. If you are working with an aid, or writing on the whiteboard/chalkboard, maintain voice contact; indeed, increase the volume of your delivery slightly to be sure that your are heard.

NERVOUSNESS

Almost every instructor (or speaker) has asked more than once, “How can I get rid of nervousness?” The answer is, “You won’t” – at least not before you begin to instruct, or speak. All athletes, no matter what their experience, have that anxious, tense feeling before the first whistle blows, or first pitch comes in, or the starting gun goes off. This is good – for them and you. This is the way the body and mind prepare themselves for maximum effort. Since nervousness is going to be there, the thing to do is to control it; to make it work for you. Some things you can do are . . .

- Be prepared – know your stuff. Master your material and your plan for teaching it. You should know your subject matter to a depth greater than you will need to teach it. If you don’t have such knowledge, then get it as fast as you can. The greatest percentage of the instructional battle is won by being competent and confident in your knowledge. If you are prepared, you need not fear student reaction to what you say and do. That anxious feeling you have is a direct result of your fear of what your students are going to think of you.

- Know what you’re going to say first. The first few moments are usually the most difficult. We will discuss preparation of the introduction later, but you should “know it cold”. You shouldn’t memorize it; you will sound “canned”, or mechanical. But, you should rehearse it enough so that you can deliver it without notes, smoothly, and without leaving anything out. Get past these first moments and you’ll be on your way.

- Don’t lose your sense of humor. You needn’t be a stand-up comic, but be pleasant – and SMILE! It will help you stay relaxed.

- Finally, rehearse, rehearse, REHEARSE! When you open your mouth to speak you should be reasonable sure what is going to come out. Try your stuff until you get it where you want it. Change it when necessary. Rehearse, at least partly, before somebody, preferably someone who knows as much about the subject matter as you do. Rehearse in the place you will instruct – it’s different than rehearsing in your barracks or your living room. There is no substitute for knowing exactly what you are going to do.

O.K., you’re going to be up there instructing. Behave yourself properly on the platform by an awareness of, and a practice of, good posture, meaningful movement, smooth, coordinated gestures, animated facial expression, proper eye and voice contact, and controlled nervousness. You can do it – persons with a lot less talent than you have done very will.

PERSONALITY TRAITS

You are aware of the happy-go-lucky, laughing, out-going persons. They are the ones that get elected "most popular" by their high school classmates. Now, we cannot all be "most popular", but we had better not be robots either. Otherwise, a written lesson assignment will be about as good as we can do; or possibly we can put a tape recording upon the lectern and turn up the volume. All of you undoubtedly have had experience with dull, uninteresting speakers and, hopefully, some exposure to very interesting speakers also. Then, as we consider the primary personality traits of a good instructor, you can relate them to your experience with both types.

Some persons are naturally jovial and animated; we call them extroverts. Some persons are naturally shy and retiring; we call them introverts. Most of us fall in between these two, and wherever that is becomes our "personality". Motion picture actors were mentioned as being good communicators, and part of that talent is due to a unique, distinct personality. Most of us cannot, and should not, try to become motion picture or TV personalities; that's not our job. But we should continually try to improve upon whatever talent we have, for our job is the same – to communicate.

ENTHUSIASM

We have seen this word before talking about effective speaking. This is natural, for enthusiasm is the most important personality trait. An excellent supervisor of instruction once said, "Give me a man with enthusiasm, and I'll give you an instructor, sooner or later, no matter faults he may have!" This is true – with enthusiasm you can overcome other deficiencies in speech techniques.

Well, what is it? You say, "I know it when I see it, but it's hard to describe it." This is true to some extent, because it can consist of some complex acts and emotions. However, from the viewpoint of a speaker (one can write enthusiastically, also, picking emotional, powerful words and phrases) enthusiasm can be defined as a strong personal excitement or feeling about a course or subject. Of course, this is still a general description. Following are some do's and don'ts in generating and displaying enthusiasm on the platform:

- Determine the most important, true, and exciting main points of your subject matter – when they are discussed hammer them home with conviction, animation and force.

- Continually modulate your voice in volume to emphasize key points. Do not shout, except perhaps for a momentary special effect. You can't shout for 45-minutes, for four periods, or for eight periods anyway.

- Vary your rate of speech – speak more rapidly through less important transitions; slow down for more complex, difficult, or important key points. Work for color and variety in your delivery.

- Keep gestures reasonable and coordinate them with your speech; do not overuse gestures; e.g., wildly waving your arms around. But do not get your arms and hands anchored anywhere either.

- Do not get your body anchored – move purposefully. A moving speaker helps attract student attention. Do not lean on things; do not slouch; do not detract from the air of alertness you want to create.

- Vary the inflection in your voice – avoid a monotone delivery at all costs.

- Keep your eye contact moving around.

Now, all of these things have been discussed before, but all of them operating together serve to convey to your students your personal, intense involvement with all of them and your subject matter. Your entire demeanor should be saying to your students: "There may be something more important that you could be doing at this moment, but I don't know what it is!"

SINCERITY

You have heard the statement: "He (or she) is very sincere in what he does (or believes, etc.)". And you have the feeling, "Yes that's true, or no, that isn't true", and you know exactly why you feel that way. Here again is a trait somewhat difficult to pin a specific definition on. However, sincerity from the point of view of an instructor can be said to be an outward, earnest desire to convince the students of the truth and value of an idea.

So, sincerity stems from two things: (1) you believe in the truth of everything you say about your subject, and (2) you believe in the value of your subject matter to your students. If you do not know what is true (or untrue) about your subject matter, then find out as quickly as you can. Employ the same concept for the value of your material.

Honesty is directly related to sincerity. The instructor who makes the statement, "This subject is the most important thing you will learn in the Army. Your life will depend on it . . ."almost assuredly is not being honest, and his sincerity will be questioned from then on. If you are asked a question that you cannot answer, admit it (and say that you will answer it later when you find the answer – then do it!) Do not pad our a guessed-at solution. You'll be caught quickly in such deception; and again, your students' belief in your sincerity will suffer.

Since sincerity must project outward from you and be felt by your students, you must be overt and purposeful in making sure it shows. Be direct; be as simple, yet thorough, as you can; keep your enthusiasm up; distinguish between those key points that are essential and those that simply elaborate or illustrate.

HUMOR

Humor is the quality that show you to be a relaxed, confident human being. And it will help make you one. A sense of humor helps destroy a false dignity and fights nervousness. It helps establish rapport (that feeling between the instructor and his students of "me-an-you-together"). Jokes are a part of humor, of course, but some people can tell jokes and some cannot. If you cannot, either plan and rehearse jokes very carefully, or stay away from them. Any joke should have some bearing upon the subject matter – and it should be clean humor. Funny things can happen in a classroom, naturally, especially to you; try to take advantage of them with smiles, pauses, and appropriate comments.

One important point; be careful of using humor when teaching allied students. What may be funny to us as Americans may not be funny at all to students from another country. If in doubt, leave it out.

TACT

Tact is being courteous, kind, and patient with your students. Do not be curt, sarcastic, or ridicule student performance. If a student appears openly hostile, or continually "sharp-shoots" you (asks impertinent or overly difficult, irrelevant questions), talk to him after class, or talk to the class leader, or talk it over with your supervisor – or all of these things. Do not let one student dominate a period of instruction with lengthy discussion, questioning, or re-teaching; terminate these calmly and pleasantly with, "See me after class."

CONFIDENCE

Confidence is a belief in your ability to do something well. You are really the only one who knows beyond a shadow of a doubt whether you are competent or not. First, you must "know your stuff" – there is no substitute for knowledge of your subject. Second, you must practice your speaking techniques until you find that you no longer concentrate on them, but on your subject matter. Third, you must rehearse your planned lesson to minimize anxiety and nervousness.

Confidence is mentioned last, because it involves all of the techniques of speech and platform behavior, and the personality traits discussed above. Confidence cannot be injected into you – it comes from rehearsal, experience, and study of your material. If you have it, you will project it from the platform.

AND FINALLY

Your personality traits have been formed perhaps slightly, by inherited qualities that have been greatly influenced by the environment in which you have been raised and trained, to include your training in the US Army, or other services. One sure thing: you are unique. For example, some of us have strong, resonant voices and some of us do not. Those that do have, have an advantage in developing effective speech techniques. Another sure thing, though: we can develop our talents to the maximum.

Never prejudge the effectiveness of one type of personality over another. We might think that the jovial, outgoing personality makes the best instructor; but there are many influential, talented teachers and professors who have been quiet, retiring (but solid) types. Some of the enduring words in our American heritage were delivered by a man who was just the opposite of a boisterous, back-slapping person – Abraham Lincoln.

INSTRUCTOR EVALUATION

INSTRUCTOR	DATE TIME START STOP	EVALUATOR
SUBJECT	DEPARTMENT/SCHOOL	COURSE

I. INTRODUCTION	NA	UA	CA	A
A. ATTENTION ATTRACTS ATTENTION. RELATED TO SUBJECT. DOES NOT OFFEND				
B. MOTIVATION POSITIVE STATEMENT. REALISTIC AND RELEVANT TO JOB AND TARGET POPULATION				
C. OBJECTIVE. STATES ACTION, CONDITIONS, AND STANDARDS IN CLEAR, CONCISE TERMS				
D. SAFETY STATEMENT. STATES SAFETY PRECAUTIONS IN CLASSROOM OR TRAINING ENVIRONMENT				
E. RISK ASSESSMENT. IDENTIFIES MISSION AND TRAINING REQUIREMENTS, RISKS, ACCIDENT PROBABILTY, AND HAZARD EXPOSURE				
F. ENVIRONMENTAL CONSIDERATIONS. RELATES TO PRESERVING TRAINING AREAS AND LOCAL LAWS.				
G. EVALUATION. STATES HOW, WHEN, AND WHERE TLO WILL BE TESTED.				
H. INSTRUCTIONAL LEAD-IN. RELATES LESSON TO BOTH PAST AND FUTURE INSTRUCTION.				

II. BODY	UA	CA	A
A. EMPHASIS OF MAIN POINTS. CLEARLY IDENTIFIES AND STRESSES MAIN POINTS FREQUENTLY. SUMMARIZES PERIODICALLY.			
B. APPROPRIATENESS OF SUPPORTING MATERIALS. ENHANCES CLARITY AND AUGMENTS EXPLANATIONS.			
C. KNOWLEDGE OF SUBJECT. ANSWERS QUESTIONS. EXPLAINS ACCURATELY. RELATES TO JOB SITUATIONS. SELDOM REFERS TO NOTES.			
D. CLARITY OF MATERIAL PRESENTED. EXPLAINS ACRONYMS AND NEW TERMS. USES VOCABULARY EASILY UNDERSTOOD BY STUDENTS. EMPLOYS EXAMPLES.			
E. EVIDENCE OF PREPARATION. ENSURES EQUIPMENT, SUPPLIES, AND MATERIALS ARE READY TO USE.			
F. OVERALL ORGANIZATION. FOLLOWS LESSON PLAN. MAKES SMOOTH TRANSITIONS.			

COMMENTS

FJ FORM 350-100-2, MAR 01 PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE (This form will not be revised, reprinted, or discontinued without written approval of the Forms Management Officer)

III. SUMMARY AND CONCLUSION	NA	UA	CA	A
A. QUESTIONS SOLICITS STUDENT QUESTIONS. CLARIFIES MISUNDERSTANDINGS. ASKS CHECK QUESTIONS IF NECESSARY.				
B. SUMMARY AFFIRMS STUDENT ACCOMPLISHMENT OF OBJECTIVE(S). REEMPHASIZES KEY POINTS.				
C. CLOSING STATEMENT MOTIVATES STUDENTS AGAIN.				

COMMENTS

IV. INTERACTION WITH STUDENTS	UA	CA	A
A. CHECK STUDENT COMPREHENSION ASKS FOR QUESTIONS FREQUENTLY. IDENTIFIES DIFFICULTIES. CLARIFIES MISUNDERSTANDINGS.			
B. STUDENT PARTICIPATION FOSTERS ACTIVE AND VOLUNTARY PARTICIPATION. ATTEMPTS TO INVOLVE ALL STUDENTS.			
C. DISCUSSION GUIDANCE STIMULATES THOUGHT. CONTROLS DISCUSSION. AVOIDS PERSONAL PHILOSOPHY.			
D. QUESTIONING TECHNIQUE USES CLEAR, CONCISE, PURPOSEFUL QUESTIONS THAT ARE DISTRIBUTED THROUGHOUT THE GROUP. USES APCE (ASK, PAUSE, CALL AND EVALUATE) METHOD.			
E. HANDLING STUDENT QUESTIONS ENCOURAGES STUDENTS' QUESTIONS. REMAINS COMPOSED AND CONFIDENT. ANSWERS ACCURATELY CLEARLY, AND DIRECTLY.			

COMMENTS

V. TRAINING AIDS			
A. SKILL IN USE OF AIDS DISPLAYS ORGANIZATION. GOOD MECHANICAL SKILLS. EFFECTIVE INTEGRATION AND PRESENTATION TECHNIQUES.			
B. QUALITY OF AIDS SIMPLE, CONCISE, EASILY VISIBLE, CLEAN, AND WORKABLE. RELATES TO OBJECTIVE(S)			

COMMENTS

VI. INSTRUCTOR QUALITIES	UA	CA	A
A. CONTROL OF CLASS MAINTAINS ORDER. ENFORCES POLICIES. RESPONDS EFFECTIVELY TO DISRUPTIVE BEHAVIOR.			
B. HUMAN RELATIONS SKILLS ESTABLISHES RAPPORT. LISTENS ATTENTIVELY. COMPLIMENTS GOOD WORK. AVOIDS SARCASM. REMAINS OPEN MINDED.			
C. CONFIDENCE RELAXED. COMPOSED. SURE-OF-SELF.			
D. ENTHUSIASM DISPLAYS POSITIVE ATTITUDE. HAS SALESMANSHIP. MAINTAINS STUDENT INTEREST.			

COMMENTS

VII. VOICE AND SPEECH TECHNIQUES			
A. VOCAL CHARACTERISTICS VARIES PITCH AND INFLECTION TO SHOW EMOTION AND EMPHASIS.			
B. VOLUME PROJECTS VOICE FOR ALL TO HEAR.			
C. RATE OF DELIVERY VARIES PACE. PAUSES EFFECTIVELY.			
D. PRONUNCIATION / ENUNCIATION PRONOUNCES WORDS CLEARLY AND CORRECTLY.			
E. FLUENCY SMOOTH DELIVERY. ARTICULATES. AVOIDS FILLERS.			
F. GRAMMAR AVOIDS ERRORS IN ENGLISH USAGE.			

COMMENTS

VIII. NON-VERBAL COMMUNICATIONS			
A. EYE CONTACT LOOKS DIRECTLY AT INDIVIDUALS. DISTRIBUTES VISUAL CONTACT OVER ENTIRE CLASS.			
B. BEARING AND POSTURE MAINTAINS PROFESSIONAL DEMEANOR. WELL GROOMED. COMPLIES WITH ARMY WEIGHT STANDARDS.			
C. FACIAL EXPRESSION VARIES EXPRESSION. PROJECTS CONFIDENCE AND INTEREST IN STUDENTS. SMILES WHEN APPROPRIATE.			
D. GESTURES AND MOVEMENT USES NATURAL GESTURES AND PURPOSEFUL MOVEMENT. AVOIDS DISTRACTING MANNERISMS.			

COMMENTS

EXPLAIN ANY NEGATIVE RESPONSE
IDENTIFY AREA(S) OF GREATEST STRENGTH
IDENTIFIY AREA(S) NEEDING SIGNIFICANT IMPROVEMENT
OVERALL IMPRESSION OF PRESENTATION
OVERALL RATING OF PRESENTATION UNACCEPTABLE CONDITIONALLY ACCEPTABLE ACCEPTABLE

KEY NA = NOT APPLICABLE UA = UNACCEPTABLE CA = CONDITIONALLY ACCEPTABLE A = ACCEPTABLE

INSTRUCTOR EVALUATION

(FJ FORM 350-100-2)

I. Introduction

Attention

- Must attract attention
- Must be related to the subject
- Suitable for the target audience
- Free of offending characteristics
- May be in a variety of methods

Motivation

- Value of the student being able to perform the task or the consequences of not being able to perform the task.
- Establish a need
- Stimulate students to want to learn what they should learn
- Relevant to the target audience
- Benefits to the student
- Easily understood

Objective

- State in clear concise terms in student understood language containing action, conditions, and standards.
- Action shall inform the students what they will be expected to accomplish at the conclusion.
- Conditions shall describe the important conditions under which the action is to occur.
- Standards describe how well the student must perform in order to be considered acceptable.
- Language used shall incorporate terminology that is specific in meaning and not open to a wide range of interpretations.

Safety Statement

- Used if safety precautions apply to the classroom or training environment.

Risk Assessment

- Used only if there is a safety statement
- Identifies risks of mission and training requirements
- Includes accident probability and exposure to hazard

Environmental Considerations

- Relates to preserving the areas in which we train
- Describes local environmental restrictions such as the protection of endangered species or the disposal of oil or hazardous waste.

Evaluation Statement

- Relates to how, when, where, and the pass/fail for evaluating this task.

Instructional lead-in

- Describes how a block of instruction fits into the while picture.
- Relates the lesson to past training and experiences the students have had.
- Relates the lesson to training and/or experiences the students will have in the future.

II. Body

Emphasis of Main Points

- Teaching points relate to objectives
- Main points are identifiable and frequency stressed
- Identifies what is important – easy to separate important points from supporting points
- Summarizes periodically

Supporting Materials

- Employed media explains an idea or concept in a new and different way
- Media has a definite purpose – not overused or just “FOR SHOW”
- Materials match the learning activity
- Assist in accommodating different learning styles
- Relevant to the objective and target audience
- Refrains from apologies for content or materials
- Media enhances clarity and augments explanations

Knowledge of Subject

- Make minimal reference to lesson plan or teaching notes
- Answer questions without hesitation and accurately
- Explanations thorough and clear
- Seldom uses the phrase “I don’t know” in response to technical questions
- Apply technical knowledge to specific on-the-job cases

Clarity of Materials Presented

- Language used appropriate to target audience
- Acronyms fully explained
- Minimum use of acronyms
- Technical language explained
- Relates teaching points to objective
- Examples used
- Moves from familiar to unfamiliar
- Moves from simple to complex

Evidence of Preparation

- Visitor’s book is in order
- Lesson Plan is current
- All elements of introduction, body and conclusion are evident
- All instructional materials are on hand (i.e., references, aids, handouts, P.E., etc.) and in order

Overall Organization

- Class starts and stops on time
- Follows the Lesson Plan – all objectives thoroughly covered
- Amount of time spent on a point proportionate to its importance
- Incorporate instructional materials at the appropriate time
- Smooth transition made from one teaching point to the next – relationship of one idea to the next explained
- Teaching points directed to objective – no irrelevant material introduced

III. Conclusion

Check on Learning

- Solicit final questions; ask check questions
- Ask check questions
- Clear up student misunderstandings/misconceptions

Summary

- Restates the main points
- Relates back to the objective stated in the Introduction

Closing

- Re-motivates the students
- Reinforces introductory motivation

IV. Interaction with Students

Checks Student Comprehension

- Asks for questions frequently
- Identifies student difficulties
- Clarifies misunderstandings

Student Participation

- Encourages feedback – attempts to involve all students
- Maintains control – keeps on the subject
- Repeats student responses
- Students volunteer answers
- Students actively engaged in directed exercises

Discussion Guidance

- Planned questions evident
- Discussion has a specific purpose
- Directed toward attaining objective
- Encourages all students to participate
- Remains neutral on controversial subjects
- Summarizes key points
- Maintains control – time and subject

Questioning Technique

- Questions have a specific purpose
- Terminology used understood by students
- Emphasizes one point at a time
- Requires a definite answer
- Discourages guessing
- Uses APCE method – when appropriate
- Involves all students
- Asks in natural, interested and conversational tone
- Uses non-threatening mannerisms
- Does NOT accept incorrect responses
- Uses tact when correcting responses
- Uses a variety of question types
- Distributes questions throughout the group/class
- Calls students by name

Handling of Student Questions

- Accepts student questions
- Repeats or paraphrases questions
- Verifies understanding of responses
- Avoids sarcasm and ridicule
- Acknowledges good questions
- Does NOT fake an answer
- Follows up with correct answers to “I don’t know” responses
- Listens effectively
- Remains composed and confident

V. Training Aids

Skill in use of Aids

- Introduced at the point of need
- Follow guidelines for effective use
- Reference Staff and Faculty Development Training Course Module IA-2 “Develop Media”
- Evidence of pre-class equipment operational checks
- Aid suitable for environment

Quality of Aids

- Visible/audible
- Neat, clean
- Simple
- Relates to objective
- Up to date
- Maintains interest

VI. Instructor Qualities

Control of Class

- Maintains order
- Enforces policies
- Responds effectively to negative behaviors

Human Relations Skills

- Displays concern that students learn
- Remains open-minded
- Establishes rapport
- Attentive and responsive listener
- Refrains from intimidating students
- Praises when justified
- Avoids sarcasm

Confidence

- Relaxed, composed, sure of self
- Absence of nervous actions or overt traits
- Distractions have minimum outward effect
- No nervousness evident in voice

Enthusiasm

- Has salesmanship
- Uses a variety of teaching techniques
- Uses a variety of teaching materials
- Displays overt interest in subject
- Maintains a sense of humor
- Open display of energy
- Appears to enjoy teaching (instructing, training)

VII. Voice and Speech Techniques

Vocal Characteristics

- Varies pitch and inflection to show emotion or emphasis
- Uses conversational tone

Volume

- Varies volume – to gain attention, for emphasis or to display emotion
- Not too loud – not to soft
- Projects for all to hear
- Adjusts to environment
- Easily heard in all parts of the classroom

Rate of Delivery

- Varies rate
- Speaks fast enough to be interesting
- Avoids – slow ponderous speech; fast “machine gun” delivery; hesitating speech
- Pauses effectively – NOT too often or for too long

Pronunciation/Enunciation

- Sounds words completely
- Accents correctly
- Avoids mumbling

Fluency

- Avoids use of fillers
- Smooth delivery
- Articulates – can easily put thoughts into words

Grammar

- Avoids errors in English usage

VIII. Non-Verbal Communication

Eye Contact

- Looks directly at individuals for 3 to 5 seconds
- Distributes visual contact over entire classroom
- Avoids prolonged eye contact with one individual or a very few individuals during the presentation
- Maintains eye contact when asking or responding to questions
- Observes all students
- Avoids “eye dart”
- Minimizes visual focus on inanimate objects

IX. Appearance

Bearing and Posture

- Uniform worn in prescribed manner
- Well groomed
- Appears to be in compliance with weight standards
- Stands straight with weight evenly distributed on both feet
- Professional demeanor

Facial Expression

- Varies expression, NOT a “stone face”
- Smiles periodically
- Projects a pleasant, confident impression

Use of Gestures and Movement

- Moves with a purpose, NOT pacing back and forth
- Gestures support key points
- Arm and hand movements between shoulder and waist
- Avoid physical distractions such as – fidgeting with pencils, jewelry, pointer, etc; jingling change or keys in pocket; Chewing gum or candy; rolling chalk in between hands; many others

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CP–2

CONDUCT A DEMONSTRATION

OBJECTIVE:

Conduct a "hands on" demonstration. Use all the materials and/or equipment required to perform the task. The demonstration must be an actual performance of the task – not a simulation. It must be IAW the guidance in Module CP-2 and be twenty minutes in length.

CRITERION-REFERENCED TEST:

Conduct a "hands on" demonstration of a task. Use all materials/equipment your task requires. You must actually perform the steps of the task; do NOT simulate steps. You must follow the guidance contained in Module CP-2. Your demonstration should be 20-minutes in length.

CONDUCT A DEMONSTRATION

TRADOC Regulation 350-70 defines a demonstration as “the actual situation or portrayal used to show and explain a procedure, technique, or operation; usually combining oral explanation with operation or handling of systems, equipment, or materials.” The demonstration shows students what they are expected to do and how to do it.

Demonstrations can take the following forums:

1. Procedural demonstration – used to shod the operation or function of equipment either indoors or outside.

2. Displays – planned so students can view them quickly. Arrange the display materials, each item, so that all students can see them at once.

3. Training video tapes – provide ready made demonstrations performed by experts. They provide an opportunity to see performances which cannot be presented live. Video tapes relating to specific training objectives make economical demonstrations.

4. Skits – show instructors and assistants acting out operations or procedures. Skits make an effective means for training military courtesy, leadership, race relations, etc. They must be carefully planned and smoothly presented after several rehearsals.

PLANNING AND GIVING A DEMONSTRATION

Use the following instructional strategy when conducting a demonstration:

1. Plan the details of the demonstration.

2. Arrange all tools and equipment properly.

3. Follow a written lesson plan.

4. Demonstrate one operation at a time.

5. Omit unnecessary information.

6. Emphasize safety precautions.

7. Ask check questions frequently to ensure students understand.

8. Encourage students to ask questions.

9. Emphasize the essential points.

10. Conclude the demonstration with a summary.

Tips for Conducting Demonstrations:

- When demonstrating something, consider the student's viewpoint. If possible, rehearse your demonstration in front of someone watching from where the students will see it.

- Carefully explain each step as you demonstrate it. You must plan the details of the demonstration carefully and in sequence. Start with the objectives, then demonstrate one teaching point at a time. Your students should recognize distinct breaks between the steps of the performance being demonstrated. If it is necessary for your students to learn more than one way of performing an operation, a separate and distinct demonstration of the alternate method should be offered. If you have several intermediate objectives, you should avoid demonstrating all of them at the same time. Demonstrate only the number necessary to complete a block of instruction.

- Emphasize key points during the demonstration. One way you can do this is by asking questions about key points. Obtain and use additional training aids that may further clarify your explanation.

- Position yourself to one side, or behind your aid or device, so you won't obstruct the students view. You want your class to watch the demonstration and listen to the explanation, so while demonstrating an item of equipment, speak to your class, not to the equipment. If you are explaining something while an assistant demonstrates, direct the students' attention to the demonstration.

- Make sure all students can see the demonstration and hear the explanation.

- Require the students to "walk through" the performance as soon after the demonstration as possible. This will help them learn faster and better.

CRITERION-REFERENCED TEST

CONDUCT A DEMONSTRATION
CP–2

Conduct a “hands on” demonstration of a task. Use all materials/equipment your task requires. You must actually perform the steps of the task; do NOT simulate steps. You must follow the guidance contained in Module CP-2. Your demonstration should be 20 minutes in length.

NOTE: Your demonstration will be evaluated by your group leader and your fellow students.

DEMONSTRATION
DAY 6

<u>TIME:</u> 20 minutes (+ or - 5 minutes)

<u>TOPIC:</u> Must be “hands on.” You must bring in an object and physically work with it. Does not have to be military topic.

<u>SAMPLE TOPICS:</u>

Iron the Military Uniform	How to Set Up Claymore Mine
How to Camouflage Self	Placing Brass/Ribbons on a Class A Uniform
How to Don Protective Mask	How to Cook an Omelet
How to Plant Flower Bulbs	How to Apply a Tourniquet
How to Hit a Golf Ball	How to Administer CPR
How to Operate a 35mm Camera	

<u>RESTRICTIONS:</u> CANNOT be a paper/pencil task. Filling out a form is NOT an acceptable topic. CANNOT involve alcohol use. Must have finished product to show.

<u>OTHER REQUIREMENTS:</u>
1. Topic must be approved by Day 5.
2. You must have written outline to guide your presentation.
3. You must have all elements of introduction and closing.

CP-3

CONDUCT A DEVELOPMENTAL CONFERENCE

OBJECTIVE:

Conduct a twenty-minute developmental conference using a topic of your choice approved by your Staff and Faculty Group Leader.

CRITERION-REFERENCED TEST:

Conduct a twenty-minute developmental conference using a topic of your choice approved by your Staff and Faculty Group Leader. The developmental conference must be Twenty-minutes in length, contain all instructional elements, and meet the criteria developed in Module CP-3.

CONDUCT A DEVELOPMENTAL CONFERENCE

In Module CP-1 (Select Method of Instruction), you were introduced to various methods of presentations. The majority of the methods presented were instructor-focused. In these, the instructor selects the topic, establishes the key points, the order, the pace, and manner of developing the subject. A characteristic common to most of those methods is instructor control, while there may be varying levels of student input, the instructor/developer establishes and predetermines the learning outcome for the instruction.

The developmental conference is a methodology used to increase student participation and to expand the individual's learning through the sharing of ideas and individual experiences. It is not, a method, used to teach new skills and knowledge. It should be used in a small group setting of 8 to no more than 20 students.

There are two forms of developmental conferences, structured and non-structured. In the structured, the instructor or a student discussion leader has a formal lesson plan to follow with stated learning outcomes and learning activities in established order. The content of the lesson is amplified by experiences of the student. This form is primarily used for factual subjects/tasks. Its use is seen in the small group instruction methodology employed in BNCOC, ANCOC, WOCAC, CCC, USASMA, CAS3, and CGSC courses.

The topics and subjects to be discussed are assigned for study prior to group discussion. During the discussion the group uses the knowledge gained from assigned readings and personal experience to explore the topic. The focus is on factual content, supplemented with individual experience. Since the students will be evaluated on the tasks covered, there is a need to validate or evaluate the personal experiences students may interject. Because of this, prior individual experience may be discounted, evaluated negatively, or rejected. The possibility of being viewed unfavorably by peers can lessen the individual's willingness to share past experience.

The non-structured developmental conference is more commonly used in dealing with personal experience, perceptions, attitudes, values and beliefs. In these there are no absolutes, no specific right or wrongs. In the non-structured developmental conference, the students develop the subject content and often the order in which the subject is explored. There may or may not be any pre-assigned readings. Often the substance of the entire conference is experience based.

Its use requires a shift in the traditional instructor role to that of a facilitator. The instructor effectiveness hinges on their ability to stimulate group interest and focus their discussion on the subject. The instructor's ability to employ and interpret interpersonal communications is key to maintaining an environment that encourages student participation. The skill to identify the nature of group interaction is essential to maintain production and harmony within and among the group.

The developmental conference contains all the instructional elements. Their structure, positioning, and use may be modified depending on the nature of the subject. The attention and motivation elements serve to gain interest and establish the utility of the objective. The terminal learning objective in a conference dealing with a non-factual topic, takes the nature of an objective statement: what is to be discussed. The presentation element is developed by student responses to questions asked by the facilitator. These are also used to keep the group on track and to move from one topic area to another. Checks on learning are used to validate group consensus or impasse. The summary is a summation of key points or issues identified during group discussion.

Prepare for conferences that are primarily factual or regulatory, as a formal lesson, with emphasis on the use of a lesson plan with predetermined key points and specific questions. Student input and participation is generally limited to responding to specific questions. While individual experience of the group is used to supplement the subject area, the expected results are already outlined. If the students do not approach the expected learning outcome, they are lead/pushed to it.

Developmental conferences dealing with perceptions, opinions, beliefs or values needs to be more student oriented. To encourage a more open dialogue among students, the instructor needs to shift their role to that of a facilitator. Questions are used as a medium to guide and move the group through the subject area. While the instructor may have already reached their own conclusions on the subject, they are not forced on the group.

To conduct a developmental conference, the instructor must be thoroughly familiar with the topic. They must have a broad enough knowledge of the subject to consider varying views on all associated issues; however; they must avoid trying to sway the group to their own preconceived notions. They must tolerate and be non-evaluative of the opinions and beliefs of others.

Before conducting the developmental conference, ensure that all possible distracters are eliminated. The attitude of participants can greatly affect the communications process. Attempt to lesson irritants and distracters. Notify people well in advance of the conference of the purpose, location (provide directions if necessary), time, any special uniform requirements, and materials they may need to bring. Survey the facility that will be used before the conference. Be prepared to brief participants on facilities and locations within. If there are any special instructor requirements, plan for and have them already setup.

Create an environment that will enhance open communications. Think about those elements that can block or form barriers to communications. Think about the forms of communication: Verbal, Body, and Symbolic. In the normal classroom the ability of the participants to see these are limited. Consider removing the desks or tables, a form of barrier. Change seating arrangements so participants are able to view each other. Consider a U or circle arrangement.

The position of the instructor/facilitator will have an influence on the direction and focus of group member's responses. Traditionally, the student has been conditioned to direct their comments to the teacher/instructor, which normally sit or stand at the center fore of the classroom. Justifiably, this is to whom the group member will tend to address their responses; however, this lessens group interaction. To offset and de-emphasize this conditioned response, to speak to the instructor, the instructor/facilitator should be in the U or circle (avoid being at the front center).

In preparing for a developmental conference, think of the conference subject as an essay assignment. Research and analyze your topic. Identify key issues and themes. Write a thesis/objective statement, and then prepare a topic outline. Write out all essential issues/key areas as main and sub-paragraph headings. The outline should address the subject in logical order from thesis statement to the conclusion. To use the outline as an aide to developing the topic, change the paragraphs and subparagraphs headings into questions. The questions are then used to initiate group discussion and a guide to work through the topic. A sample format is at Annex A.

Make all questions open-ended, in that they cannot be answered with a simple yes or no. The questions should require the student to provide some insight for their reasoning or feelings on the issue. The use of open-ended questions allows other students to piggyback on previous statements or to supplement responses with their own options or experiences. Their use also can avoid the perceptions of interrogation, as with yes/no responses, more questions must be asked to gain any understanding of the student's intent, reasoning or perceptions.

The outline can be used as a road map by the instructor/facilitator to keep the group's discussion on track and as an aide in recording key points or issues discussed by the group. In using the outline, do not, I repeat, do not become overly rigid on adhering to the exact order of the outline. It is not uncommon for groups to move to different issues before you initiate questioning, because of a comment made by a group member. If the group has concluded discussing the question asked and has gone off on another issue you had intended them to discuss, it generally matters little, in what order it is discussed. It can also be used to record the group conclusion on points discussed.

The instructor's facilitator skills are essential in gauging the group's energy on different issues and their interaction throughout. Responding to group dynamics is extremely important in gaining meaningful and honest participation. If the group's concerns are not handled properly, the group will not voluntarily work toward the objective. As a facilitator, the instructor observes what is being said, how it is said, and what is not being said. From this role, the instructor must determine if – intervention is needed to provide content or comment on interpersonal interaction or to remain outside the discussion.

When it is obvious that the group has reached a consensus or impasse on a specific point, the instructor summaries the point/position (this would be similar to a check on learning in structured conference), and gains group agreement. The instructor then uses their road map outline to direct the group to other remaining questions. Discussion is continued until the subject has been concluded or time allowed is expended.

At the conclusion, the instructor summarizes the group's agreements and disagreements. The instructor ensures that the group concurrence on each point presented, changes are made in any error or omission at this time. The instructor restates the group's objective and reminds them of any outside use of the information gathered.

Developmental Conference Checklist

1. Elements of introduction presented correctly.
____Attention
____Motivation
____Objective
____Safety
____Risk Management Level
____Environmental Considerations
____Instructional Lead-in

2. Used questions properly.
____Open-ended questions used
____Questions stimulated discussion relative to objective
____Leading questions used to expand/clarify student comments
____Questions were clear, simple and unambiguous

3. Ensured maximum participation.
____All students included in the discussion
____Encouraged participation
____Gained rapport with group

4. Kept discussion focused.
____Practiced time control
____Addressed main points of subject
____Avoided war stories

5. Communications skills.
____Used Standard English
____Controlled use of fillers
____Varied rate and pitch of voice
____Listened to group discussion

6. Elements of conclusion properly used.
____Restated objective
____Summary
____Closing

DEVELOPMENTAL CONFERENCE
DAY 8

TIME: 20 MINUTES (+ OR - 5 minutes)

TOPIC: Must be something that everyone in the class will be able to discuss. Does NOT have to be a military topic.

SAMPLE TOPICS:

Tips for Buying a House	Tips for Buying a Car
Tips for Buying a Computer	Creating a Personal Budget
Keeping Good Customer Relations	Leadership
Why People Enlist/Reenlist	Ethics
Advertising	Motivation
How to Plan a PCS Move	Stress Management
Effective Communication	Planning for a Vacation

RESTRICTIONS: CANNOT be a controversial topic.

OTHER REQUIREMENTS:
1. You must cover specific teaching points.
2. You must have an outline with open-ended questions written out to ask students.
3. You must have all elements of introduction and closing.
4. Your topic must be approved by Day 5.

ANNEX A

SAMPLE OUTLINE

Topic Plan a Vacation

Thesis (purpose) Develop a list of factors to consider in planning a vacation.

A. Recreational Activities	What type of recreational activities do we want?
B. Costs	What things do we need to consider in cost?
C. Location	Where would we want to go? What are things to consider in selecting location?
D. Transportation	How will we get to our vacation spot? How will we travel in and around vacation area?
E. Lodging	Where will we stay while on vacation?
F. Dining	How are we going to eat while on vacation?
G. Special Requirements	Do we have any special requirements?
1. Home	What do we need to think about the home we leave behind?
2. Yard	How can we keep the yard up?
3. Mail/Newspapers	What can we do about the mail and newspapers?
4. Emergencies	How can we prepare for emergency contact if needed to and form?
5. Pets	What do we do with Rover, the dog?
6. Documents	Are there any special travel documents needed?

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F–1

DESCRIBE CLASSROOM MANAGEMENT PRINCIPLES

OBJECTIVE:

Describe classroom management principles. Use Module F-1 as a resource for your description. Your description must contain the following items.

- Four categories of pre-class checks and one example of each four strategies for maintaining classroom discipline
- Three categories of problem students and two appropriate strategies for handling each type of student
- Three post-class checks

CRITERION TEST

Describe classroom management principles using Module F-1. The following items must be addressed.

- List four categories of pre-class checks and give one example of each category
- List four strategies for maintaining classroom discipline
- List three categories of problem students and explain two appropriate techniques for handling each type of student
- List three post-class checks.

ADDITIONAL RESOURCES:

SSI Reg 1-4, Classroom Standardization

SSI Reg 350-9, Student Class Leader Program

SSI Reg 600-3, Student and Permanent Party Relationships

AR 670-1, Wear and Appearance of Army Uniforms and Insignia

DESCRIBE CLASSROOM MANAGEMENT PRINCIPLES

INTRODUCTION

One of the most vital elements leading to successful instruction is classroom management. To be an effective instructor you must not only know your subject, but also know how to manage a class and use your facilities to the best advantage.

This module is designed to teach the administrative procedures and instructional guidelines critical to the successful presentation of a unit of instruction. The material will be presented and divided into three sections:

I. Pre-class checks

II. Classroom discipline

III. Post-class checks

SECTION I: PRECLASS CHECKS

As an instructor you must prepare certain things before your class starts in order for you to have a smooth and effective presentation. These preparations can be broken down into four categories:

1. The physical condition of the classroom

2. Training aid and audio/visual equipment preparation

3. Visitor's Desk preparation

4. Appearance - both classroom and self

<u>Category 1: Physica1 condition of the classroom</u>. To maintain good physical conditions for learning, check the classroom temperature, lighting and ventilation. Make sure the seating arrangement is adequate. Make sure that the bulletin board contains a fire evacuation plan.

<u>Category 2: Training aids and audio/visual (AV) equipment</u>. It is important to make sure that training aids are available, accurate, and in proper sequence. Slapsticks identifying the instructor, the lesson and the class should be placed in the appropriate location and sequence. A suggested order is:

Top <u>Subject/Task</u>

2nd <u>Instructor's Bank/Name</u>

3rd <u>Course Title *</u>

*Course title may be placed on classroom door or at upper left corner of the chalkboard.

The following is an example of a slapstick sign sequence.

MILITARY CORRESPONDENCE

SFC MONTGOMERY

AGOBC

Check with your particular department for the SOP addressing sign sequence. Refer to Module IA-2, Develop and Use Training Aids, for more information concerning training aid preparation.

In addition to checking training aids, you need to test all AV equipment prior to class to ensure that it is operational. If you are using an overhead projector, have a spare bulb available. See Module IA-2 f or additional information about checking AV equipment.

Category 3: Visitor's Desk preparation. The Visitor's Desk should contain a Visitor's Book and a copy of the lesson plan the instructor is using. Check that the Visitor's Book contains the following items:

(1) A welcome letter from the commandant at Tab A,
(2) a class roster at Tab B, and
(3) a seating chart at Tab C.

These items should be covered with document protectors and placed in a one-inch, three-ring black binder.

Category 4: Appearances. You, as the instructor, are responsible for the overall appearance of the classroom. See that desks and chairs are neatly arranged. Do not use the classroom to store excess materials. The overall appearance of the classroom should be neat and clean. Also, your own appearance, as well of the appearance of any assistant instructors, should be IAW prescribed Army standards. (See AR 670-1.)

Answer the following questions to test your knowledge of pre-class checks.

1. Which of the following are four categories of pre-class checks? Place an (X) beside your choice.

____A. Physical condition of the classroom, lesson plan preparation, seating arrangement, and classroom/instructor appearance.

____B. Physical condition of the classroom, training aid and AV equipment preparation, Visitor's Desk preparation, and classroom/instructor appearance.

____C. Training aid preparation, classroom/instructor appearance, lesson plan preparation, and Visitor's Desk preparation.

____D. Training aid preparation, classroom/instructor appearance, seating arrangement, and lesson plan preparation.

2. Select and write the number of the correct category of pre-class checks in Column B next to the appropriate examples in Column A.

A

____A. Sequence of 35mm slides in projector.

____B. Current training schedule, class roster, and seating chart.

____C. Proper ventilation and lighting.

____D. Assistant instructor in proper uniform.

____E. Posted fire evacuation plan.

____F. Neat and clean classroom.

____G. Spare bulb for overhead projector.

B

1. Physical condition of the classroom
2. Training aid and AV equipment preparation
3. Visitor's Desk preparation.
4. Appearances.

Answer Key

1. You should have checked B - physical conditions of the classroom, training aid preparation, visitor's desk preparation, and classroom/instructor appearances.

2.
2	A	training aid and AV equipment preparation
3	B	visitor's desk preparation
1	C	physical condition of the classroom
4	D	appearances
1	E	physical condition of the classroom
4	F	appearances
2	G	training aid and AV equipment preparation

NOTE: See list of pre-class checks at the end of this module.

SECTION II: CLASSROOM DISCIPLINE

Classroom discipline is defined as those activities that maintain class control, as well as assist in the achievement of desired objectives. The effectiveness of any particular classroom discipline activity depends on the personality of the instructor, the composition of the group of students, and the situation at hand. The following four general strategies are important in maintaining discipline. Within those strategies, however, the specific techniques employed by individual instructors will vary.

1. Setting a good example - starting and stopping class on time, being well prepared and organized.

2. Presenting interesting and effective classes — displaying enthusiasm, developing rapport, using descriptive gestures and vocal variety. These instructional techniques are described in Module CP-4, ‘Demonstrate Platform Techniques.

3. Demonstrating professionalism - exhibiting a thorough knowledge of your subject, adapting your presentation style to your target population, not bluffing or using profanities, avoiding offensive jokes, and observing fraternization policies.

4. Handling problem students’ effectively - by understanding students and their problems, and by employing various techniques to deal with their inappropriate classroom behaviors. Of the major classroom discipline activities, effectively dealing with problem students’ is one of the most difficult. As an instructor you will encounter both passive (e.g. the Withdrawer) and disruptive students. The following chart categorizes types of problem students, offers possible explanations of their behaviors, and suggests instructor responses.

STUDENTS AND HOW THEY ACT	WHY THEY ACT THAT WAY	WHAT YOU CAN DO
The Aggressor. Often a sharp shooter puts instructor on the spot by asking difficult/irrelevant questions. May make smart remarks. May be very critical of others.	Seeks attention/recognition Wants to feel superior. Wants to control the group. May be unwilling to see other points of view	Keep your temper. Find SOME merit in what is said. Express agreement and move on. Recognize student's experience if appropriate. Toss obvious misstatements to the group. Talk to privately.
The Rambler. Talks on and on about the subject. May use farfetched analogies.	Compulsive talker. Insecure. Lonely. Can't help being longwinded. Likes to delve deeper into the subject than the class requires.	When student stops for breath, thank him or her and refocus attention by restating relevant points and moving on. Say, "That's interesting" and in a friendly way indicate that the class must move on. Mention your time constraints.
The Manipulator. Attempts to use group to serve own interests. May talk about own situations or problems that don't apply to other students. May frequently ask to be excused from class. May make suggestions to finish class earlier.	Sees a chance to get something he/she wants. May have a pet peeve. May want to avoid work or cut down on time spent in class.	Point out the objectives of the class and move toward then. Indicate that you will talk about the situation with the student privately. Indicate time constraints.
The Clown. Makes use of jokes, puns or silly answers to your questions. Makes light of serious topics.	Seeks attention/recognition. May lack confidence. Could be lonely.	Ask direct questions. Re-ask a question if clown gave a silly answer. Smile or laugh and then move on. Let other students handle. Counsel after class.

STUDENTS AND HOW THEY ACT	WHY THEY ACT THAT WAY	WHAT YOU CAN DO
The Know-It-All. Mentions past accomplish-ments, reading/studies in subject area. "Name drops." "Tops" experi-ences others relate. Uses jargon and "big" words.	Wants to impress others as being an expert and of high value to the group. May want to control group or be viewed as its leader. Note: May actually only have surface knowledge of subject.	Ask for evidence to support ideas. Toss obvious misstatements to the group. Let group take care of this person.
The Digressor. Gets off the topic. May go back to something the group finished discussing a long time ago.	Easily distracted. Short attention span.	Take the blame yourself: Say "Something I have said must have led you off track" and then refocus attention on subject. Interrupt, summarize and move on. Call attention to the objective of the lesson.
The Dominator. Often is the first one to blurt out answer to question. May make the same point over and over. Interrupts others and is a poor listener. Takes every opportunity to jump into the conversation.	Wants attention or may want to influence the group.	Draw others into the discussion. Avoid calling on very often. Comment that you'd like to hear from students who haven't said anything yet.
The Withdrawer. Does not volunteer to answer any questions. May not know what the question was when called upon to answer. May be doing something else in class such as writing a letter. May have a negative attitude.	May be physically or mentally tired. May be on medication or had duty the night before. May have a personal problem and find it hard to concentrate. May be shy or lacking in confidence. Might feel that other students know more or have more experience.	Instruct students at beginning of class to stand when they get sleepy. Maintain good eye contact. Direct questions to sleepy students and to students around them. Awaken any student that falls asleep. Counsel privately. Ask a shy student a question you are sure he/she can answer. Keep the lesson interesting.

Answer these questions concerning classroom discipline.

1. The following are appropriate classroom discipline activities, true or false:

_____ A. Creating good "rapport" by socializing with students after class hours.

_____ B. Starting and stopping class on time.

_____ C. Using profanities in class to establish a "one of the guys"' relationship.

_____ D. Bluffing students, is necessary, because students expect instructors to be subject matter experts.

2. The following are appropriate instructor actions when dealing with 'problem students,' true or false.

____ A. Expressing some agreement with a remark made by a "sharp shooter," and immediately continuing with the class presentation.

____ B. Accepting the blame for not clarifying a teaching point if a student is totally off track and cannot respond to a question.

____ C. Letting a rambling student talk indefinitely so as not to embarrass him/her in front of the class.

____ D. Maintain good eye contact with and directing questions to sleepy students.

In the first question B is true and A, C, and D are false. Building "rapport" (A) must occur within the fraternization guidelines of the U.S. Army Soldier Support Institute Regulation 600-3, Student and Permanent Party Relationships Policy (C) and bluffing students (D) are considered inappropriate discipline techniques.

In question number two, A, B, and D are true, while C is false. When dealing with a rambling student, the instructor needs to guide the discussion back to the subject at hand.

SECTION III: POST CLASS CHECKS

Once your presentation is over, there are certain duties you must accomplish so that the classroom you use will be ready for the next class. You need to:

- Erase the board
- Make sure the classroom and adjacent hall area are clean and neat.
- Remove and store training aids, and, if necessary, audio/visual equipment.
- Turn off all lights if no class is meeting in that room the following period.
- Place chairs on desks after last hour of the day.

NOTE: See the list of post-class checks at the end of the module.

LIST OF PRE/POST CLASS CHECKS

PRE-CLASS CHECKS

	YES	NO
Is classroom temperature, lighting, and ventilation adequate?	____	____
Is the fire evacuation plan posted?	____	____
Is the class seating arrangement conductive to learning?	____	____
Is the lesson plan current?	____	____
Are training aids organized and is AV equipment operational?	____	____
Are slapsticks containing instructor name, lesson title, and course title properly displayed?	____	____
Does Visitor’s Book contain a welcome letter from the commandant, a weekly training schedule, and a class roster?	____	____
Is instructor/classroom appearance IAW army and installation regulations and policies?	____	____
Do bulletin boards contain current information, displayed IAW current regulations, with no papers extending beyond the edges of the boards?	____	____

POST-CLASS CHECKS

Is chalkboard erased?	____	____
Is all trash in classroom and adjacent hail area picked up?	____	____
Are training aids, AV equipment and lesson plans properly stored?	____	____
Are lights turned off if no class is meeting in that room the following period?	____	____
Are chairs placed on desks after last hour of the day?	____	____

CP-4

CONDUCT A MINI-CLASS

OBJECTIVE:

Conduct a 20-minute class using a topic that you will be teaching upon completion of the Staff and Faculty Development Training Course or a topic within you area of competence (if you will not be teaching upon completion of this course).

Your class must include two different types of training aids and be IAW Module CP-4. You will be evaluated in the following areas:

Introduction	Contact with Class
Appearance	Voice Variety
Self-confidence	Speech
Enthusiasm	Conclusion
Gestures and Movement	Training Aids

CRITERION-REFERENCED TEST:

Conduct a 20-minute class using a topic that you will be teaching upon completion of the Staff and Faculty Development Training Course. If you do not plan to teach upon completion of this course, use a topic in your area of competence. You must use two different types of training aids when presenting your class. Your class must follow the guidance of Module CP-4.

Your Group Leader and fellow students will evaluate your class in these areas:

Introduction	Contact with Class
Appearance	Voice Variety
Self-confidence	Speech
Enthusiasm	Conclusion
Gestures and Movements	Training Aids

CONDUCT A MINI-CLASS

When you give a speech or present a class for the first time, it is normal to suffer from stage fright. Even the most veteran actors experience the feelings of nervousness and "butterflies" in their stomachs.

In this module, we discuss good platform techniques and bad ones. When you finish this module, you will be ready to test your ability by demonstrating good platform technique during your 20-minute block of instruction to your colleagues and your group leader.

A good instructor must have a thorough knowledge of the subject before presenting a class. You can't teach something if you don't know the subject. After learning the subject, organize your material and determine a sequence for the presentation. Prepare an introduction and a conclusion in your presentation outline. They are important parts of the entire class.

The introduction includes:

1. An attention step.
2. A motivation step.
3. A clearly stated objective.
4. A safety statement, if applicable to the training environment.
5. A statement of risk assessment level, if applicable to the training environment.
6. A statement of environmental considerations, if applicable to the training environment.
7. A statement of the evaluation for the topic.
8. An instructional lead-in.

The attention step attracts the students' attention and focuses interest on your subject. The motivation step tells the student consequences of learning and why your subject is important to learn. The objective expresses the student performance expected at the end of the lesson and should be stated in terms of action, conditions and standards in language the student will understand.

NOTE: See the prototype lesson plan in IM-4 for an example of a well-written attention and motivation step and a well stated objective.

If safety precautions apply to the classroom or training environment, then a safety statement should follow the objective. A risk assessment identifies risks of mission and training requirements in terms of accident probability and exposure to hazard. Environmental considerations relate to preserving the areas in which we train. Trainers must comply with local environmental restrictions such as endangered species protection or the disposal of oil and hazardous waste. Module IM-4 provides additional examples of integrating these areas in a lesson. Safety, risk assessment and environmental considerations do not apply to all lessons.

Inform the students how they will be evaluated and what the pass/fail for the evaluation is.

The last portion of the introduction is the instructional lead-in. This is a statement that relates your lesson to training and experience your students have already had or will have in the future. It also includes a statement of how this lesson ties into past and future lessons within the course.

The conclusion is equally as important as the introduction. The conclusion contains the following items.

1. Check on learning
    a. Check questions
    b. Practice exercise
2. Summary
3. Closing
    - Transition to next lesson (if applicable)

As an instructor, your last opportunity for clarifying or explaining any problem areas is in the check on learning portion. The instructor will solicit final questions from the students and also ask check questions of the students. The practice exercise is administered after the instructor has cleared up any student misunderstanding.

The summary covers major teaching points and should relate back to the objective that you stated in your introduction. This is a review of the lesson and includes an outline of its MAJOR POINTS. The closing statement relates back to the motivation statement used in the introduction. The instructor once again stresses why this task is important and how the students will apply what they have learned.

Finally, if applicable, the instructor may transition to the next lesson by providing a brief overview of what the next lesson will cover.

NOTE: See lesson plan prototype, IM-4 for relevant examples.

If you have a good introduction and a good conclusion, the material you present in the body of the presentation generally will flow smoothly and logically.

REMEMBER: A strong introduction and conclusion are part of a professional presentation. Practice your introduction and conclusion separately several times. This will give you increased confidence. Many people have difficulty getting started and ending smoothly. By following and practicing the steps of the introduction and conclusion, you will start and end your class with a good impression.

At this point, look at the Instructor Evaluation Sheet at the end of this module and review the categories for Platform Techniques. You will be rated in eight categories during your presentation along with the Introduction and Conclusion blocks.

1. Appearance
2. Self-confidence
3. Contact with Class
4. Enthusiasm
5. Gestures and Movements
6. Speech
7. Voice Variety
8. Training Aids

Now you will want to organize your material and rehearse your 20-minute presentation based on guidance and suggestions in this module. After you learn your subject and have rehearsed your class, remember these classroom tips:

- BE NATURAL
- MAINTAIN VISUAL CONTACT
- COMMUNICATE WITH YOUR BODY AND VOICE

CRITERION-REFERENCED TEST
CONDUCT A MINI-CLASS
CP-4

Conduct a 20-minute class using a topic that you will be teaching upon completion of the Staff and Faculty Development Training course. If you do not plan to teach upon completion of this course, use a topic in your area of competence. You must use two different types of training aids when presenting your class. Your class must follow the guidelines of Module CP-4.

Your group leader and your fellow students will evaluate your class in these areas:

Introduction	Contact with Class
Appearance	Voice Variety
Self-confidence	Speech
Enthusiasm	Conclusion
Gestures and Movements	Training Aids

NOTE: Refer to the CP–4 Evaluation Form on pages CP–4–7 and CP–4–8.

MINI-CLASS
DAY 10

<u>TIME:</u> 20 minutes (+ or - 5 minutes)

<u>TOPIC:</u> Should be task you will teach/develop after graduation from SFIDTC. You will give this class as if you were actually teaching your target audience.

<u>OTHER REQUIREMENTS:</u>
1. You must have a written outline to guide your presentation.
2. You must have all elements of introduction and closing.
3. You must use two <u>different types</u> of training aids.

CP-4
EVALUATION

_______________ Student Name	_______ Date	_______________ Evaluator	Start_______Stop_______ Time

Subject: ____

INTRODUCTION

BA	A	AA	RATING	BA	A	AA	RATING
☐	☐	☐	Attention	☐	☐	☐	Risk Assessment Level
☐	☐	☐	Motivation	☐	☐	☐	Environmental Considerations
☐	☐	☐	Objective	☐	☐	☐	Evaluation
☐	☐	☐	Safety	☐	☐	☐	Instructional Lead-in

PLATFORM TECHNIQUES

BA	A	AA		COMMENTS
			I Appearance	Appearance
☐	☐	☐	Neatness (clothing person)	
☐	☐	☐	Bearing (carriage, behavior, posture)	
☐	☐	☐	Mannerisms (unique action or style)	
☐	☐	☐	Facial expression	
			II Self-Confidence	Self-confidence
☐	☐	☐	Composure (not agitated or disturbed)	
☐	☐	☐	Positiveness (definite, sure of self, forceful)	
			III Contact with Class	Contact with Class
☐	☐	☐	Rapport (accord, harmony)	
☐	☐	☐	Friendliness	
☐	☐	☐	Eye contact	
☐	☐	☐	Humor (good nature)	
			IV Enthusiasm	Enthusiasm
☐	☐	☐	Animation (appearance of spirit and vigor, expressiveness)	
☐	☐	☐	Sincerity (personally interested)	
☐	☐	☐	Salesmanship (punch)	

Continued on reverse

COMMENTS

BA	A	AA		Comments
			V Gestures and Movement	Gestures and Movement
☐	☐	☐	Descriptive gestures	
☐	☐	☐	Appropriate gestures	
☐	☐	☐	Purposeful movement (aimed, reasoned)	
			VI Speech	Speech
☐	☐	☐	Vocabulary	
☐	☐	☐	Grammar	
☐	☐	☐	Articulation	
☐	☐	☐	Pronunciation	
☐	☐	☐	Enunciation	
☐	☐	☐	Fillers	
☐	☐	☐	Fluency (smoothness)	
			VII Voice Variety	Voice Variety
☐	☐	☐	Pace	
☐	☐	☐	Pitch	
☐	☐	☐	Volume	
☐	☐	☐	Projection	
☐	☐	☐	Emphasis	
			VIII Training Aids	Training Aids
☐	☐	☐	Clarity	
☐	☐	☐	Conciseness	
☐	☐	☐	Visibility	
☐	☐	☐	How used	

REVIEW/SUMMARY

BA	A	AA	
☐	☐	☐	Check on Learning (Check Questions, PE)
☐	☐	☐	Summary
☐	☐	☐	Closing

Overall Impression of Presentation

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CP-5

PRESENT A 45-MINUTE LESSON

OBJECTIVE:

Present a 45-minute class. The lesson plan you developed in Module IM-4 will be your reference while teaching this class. Your lesson must include two different types of training aids. You must receive an overall rating of “acceptable” or “conditionally acceptable” on the Instructor Evaluation Form (FJ FORM 350-100-2, Apr 01). Your supervisor and Staff and Faculty group leader will evaluate this class.

CRITERION-REFERENCED TEST:

Present a 45-minute class using the lesson plan you developed in Module IM-4. You must use two different types of training aids while teaching the class. You will be rated according to the criteria on the Instructor Evaluation Form (see Module IE-1) by both your supervisor and Staff and Faculty group leader. You must receive an overall rating of “acceptable” or “conditionally acceptable” to fulfill the requirements of this module.

PRESENT A 45-MINUTE LESSON

<u>OVERVIEW</u>

At this point, you should have the following approved materials which will be used for your final 45-minute presentation:

- A complete lesson plan, including all appendices.
- Training Aids
- An approved method of instruction

The 45-minute presentation will be formally critiqued by a course manager and your supervisor using the Instructor Evaluation Sheet.

You should review the Instructor Evaluation Form and the companion explanation of its items. You will find this in the module “Instructor Evaluation.”

You must receive an overall rating of “conditionally acceptable” or “acceptable” for a successful presentation.

CRITERION-REFERENCED TEST
PRESENT A 45-MINUTE LESSON
CP-5

Present a 45-minute lesson using the lesson plan you developed in Module IM-4. You must use at least two different types of training aids when presenting the class.

You will be rated according to the criteria on the Instructor Evaluation Form (see Module IE-1). Your supervisor and Staff and Faculty group leader will rate your presentation. You must receive an overall rating of "conditionally acceptable" or "acceptable" in order to meet the requirements of this module.

45 MINUTE CLASS PRESENTATION
DAY 12 OR DAY 13

TIME: 45 minutes (+ or - 5 minutes)

TOPIC: You must obtain from your supervisor by 0800 Tuesday, Day 2. NOTE: We will refer to this topic as "Task #1." You will give this class as if you were teaching your target audience.

OTHER REQUIREMENTS:
1. You must have a copy of a complete lesson plan (including appendices) for yourself, the SFDE group leader, and your supervisor(s).
2. Your must have at least two different types of training aids.
3. You may NOT repeat your Mini-Class presentation as part of your 45-minute class.

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INSTRUCTOR EVALUATION

INSTRUCTOR	DATE TIME START STOP	EVALUATOR
SUBJECT	DEPARTMENT/SCHOOL	COURSE

I. INTRODUCTION	NA	UA	CA	A
A. ATTENTION ATTRACTS ATTENTION, RELATED TO SUBJECT, DOES NOT OFFEND				
B. MOTIVATION POSITIVE STATEMENT, REALISTIC & REVALENT TO JOB & TARGET POPULATION				
C. OBJECTIVE. STATES ACTION, CONDITIONS & STANDARDS IN CLEAR, CONCISE TERMS				
D. SAFETY STATEMENT. STATES SAFETY PRECAUTIONS IN CLASSROOM OR TRAINING ENVIRONMENT				
E. RISK ASSESSMENT. IDENTIFIES MISSION & TRAINING REQUIREMENTS, RISKS, ACCIDENT PROBABILTY & HAZARD EXPOSURE				
F. ENVIRONMENTAL CONSIDERATIONS. RELATES TO PRESERVING TRAINING AREAS AND LOCAL LAWS.				
G. EVALUATION. STATES HOW. WHEN, AND WHERE TLO WILL BE TESTED.				
H. INSTRUCTIONAL LEAD-IN. RELATES LESSON TO BOTH PAST AND FUTURE INSTRUCTION.				

II. BODY	UA	CA	A
A. EMPHASIS OF MAIN POINTS. CLEARLY IDENTIFIES AND STRESSES MAIN POINTS FREQUENTLY, SUMMARIZES PERIODICALLY.			
B. APPROPRIATENESS OF SUPPORTING MATERIALS. ENHANCES CLARITY AND AUGMENTS EXPLANATIONS.			
C. KNOWLEDGE OF SUBJECT. ANSWERS QUESTIONS, EXPLAINS ACCURATELY, RELATES TO JOB SITUATIONS, SELDOM REFERS TO NOTES.			
D. CLARITY OF MATERIAL PRESENTED. EXPLAINS ACRONYMS AND NEW TERMS, USES VOCABULARY EASLY UNDERSTOOD BY STUDENTS, EMPLOYS EXAMPLES.			
E. EVIDENCE OF PREPARATION. ENSURES EQUIPMENT, SUPPUES, AND MATERIALS ARE READY TO USE.			
F. OVERALL ORGANIZATION. FOLLOWS LESSON PLAN, MAKES SMOOTH TRANSITIONS.			

COMMENTS

FJ FORM 350-100-2, APR 01 PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE (Form will not be revised, reprinted, or discontinued without written approval of the Forms Management Officer)

III. SUMMARY AND CONCLUSION

NA	UA	CA	A

A. QUESTIONS
SOLICITS STUDENT QUESTIONS, CLARIFIES MISUNDERSTANDINGS, ASKS CHECK QUESTIONS IF NECESSARY.

B. SUMMARY
AFFIRMS STUDENT ACCOMPLISHMENT OF OBJECTIVE(S). REEMPHASIZES KEY POINTS.

C. CLOSING STATEMENT
MOTIVATES STUDENT AGAIN.

COMMENTS

IV. INTERACTION WITH STUDENTS

UA	CA	A

A. CHECK STUDENT COMPREHENSION
ASKS FOR QUESTIONS FREQUENTLY, IDENTIFIES DIFFICULTIES, CLARIFIES MISUNDERSTANDINGS.

B. STUDENT PARTICIPATION
FOSTERS ACTIVE AND VOLUNTARY PARTICIPATION. ATTEMPTS TO INVOLVE ALL STUDENTS.

C. DISCUSSION GUIDANCE
STIMULATES THOUGHT. CONTROLS DISCUSSION. AVOIDS PERSONAL PHILOSOPHY.

D. QUETIONING TECHNIQUE
USES CLEAR, CONCISE, PURPOSEFUL QUESTIONS THAT ARE DISTRIBUTED THROUGHOUT THE GROUP. USES APCE (ASK, PAUSE, CALL AND EVALUATE) METHOD.

E. HANDLING STUDENT QUESTIONS
ENCOURAGES STUDENTS' QUESTIONS. REMAINS COMPOSED AND CONFIDENT. ANSWERS ACCURATELY CLEARLY, AND DIRECTLY.

COMMENTS

V. TRAINING AIDS

A. SKILL IN USE OF AIDS
DISPLAYS ORGANIZATION. GOOD MECHANICAL SKILLS. EFFECTIVE INTEGRATION AND PRESENTATION TECHNIQUES.

B. QUALITY OF AIDS
SIMPLE, CONCISE, EASILY VISIBLE, CLEAN, WORKABLE, RELATES TO OBJECTIVE(S)

COMMENTS

VI. INSTRUCTOR QUALITIES	UA	CA	A
A. CONTROL OF CLASS MAINTAINS ORDER. ENFORCES POLICIES. RESPONDS EFFECTIVELY TO DISRUPTIVE BEHAVIOR.			
B. HUMAN RELATIONS SKILLS ESTABLISHES RAPPORT. LISTENS ATTENTIVELY. COMPLEMENTS GOOD WORK. AVOIDS SARCASM. REMAINS OPEN MINDED.			
C. CONFIDENCE RELAXED. COMPOSED. SURE-OF-SELF.			
D. ENTHUSIASM DISPLAYS POSITIVE ATTITUDE. HAS SALESMANSHIP. MAINTAINS STUDENT INTEREST.			
COMMENTS			
VII. VOICE AND SPEECH TECHNIQUES			
A. VOCAL CHARACTERISTICS VARIES PITCH AND INFLECTION TO SHOW EMOTION AND EMPHASIS.			
B. VOLUME PROJECT VOICE FOR ALL TO HEAR.			
C. RATE OF DELIVERY VARIES PACE. PAUSES EFFECTIVELY.			
D. PRONUNCIATION / ENUNCIATION PRONOUNCES WORDS CLEARLY AND CORRECTLY.			
E. FLUENCY SMOOTHE DELIVERY. ARTICULATES. AVOIDS FILLERS.			
F. GRAMMAR AVOIDS ERRORS IN ENGLISH USAGE.			
COMMENTS			
VI. NON-VERBAL COMMUNICATIONS			
A. EYE CONTACT LOOKS DIRECTLY AT INDIVIDUALS. DISTRIBUTES VISUAL CONTACT OVER ENTIRE CLASS.			
B. BEARING AND POSTURE MAINTAINS PROFESSIONAL DEMEANOR. WELL GROOMED. COMPLIES WITH ARMY WEIGHT STANDARDS.			
C. FACIAL EXPRESSION VARIES EXPRESSION. PROJECTS CONFIDENCE AND INTEREST IN STUDENTS. SMILES WHEN APPROPRIATE.			
D. GESTURES AND MOVEMENT USES NATURAL GESTURES AND PURPOSEFUL MOVEMENT. AVOIDS DISTRATING MANNERISMS.			
COMMENTS			

PLEASE EXPLAIN ANY NEGATIVE RESPONSE(S)
IDENTIFY AREA(S) OF GREATEST STRENGTH
IDENTIFIY AREAS THAT ARE IN NEED OF SIGNIFICANT IMPROVEMENT
OVERALL IMPRESSION OF PRESENTATION
RATING OF PRESNTATION UA – UNACCEPTABLE   CA – CONDITIONALLY ACCEPTABLE   A – ACCEPTABLE

KEY: NA – Not Applicable   A – ACCEPTABLE   CA – CONDITIONALLY ACCEPTABLE   UA – UNACCEPTABLE

CS-1

COUNSELING

OBJECTIVE:

Apply counseling principles in determining need, appropriate approach, planning and conduct of counseling. Identify components of counseling skills and their application in the counseling process.

CRITERION-REFERENCED TEST:

Apply counseling principles in the conduct of student counseling. You may refer to the material contained in Module CS-1. All answers will be in accordance with Module CS-1.

COUNSELING

Counseling is a basic responsibility of every leader and an important part of taking care of the total force. Its principal objectives are developing soldiers, improving their well being, and resolving their problems. In the context of this text, any time the terms, soldier or student is used, they apply to enlisted, officers and civilian personnel.

Instructors are the leaders that students look too for direction and feedback on their performance in the classroom. Field Manuals 22-100 (Military Leadership) and 22-1-1 (Leadership Counseling) essentially state that leaders are responsible for the development and training of all soldiers entrusted to their care. In the classroom, the instructor is the leader who assumes the supervisory and/or command authority over the students attending the instruction.

In the classroom, the instructor provides the instruction that enables the student to gain competency in their specialty. They provide the students with the purpose and motivation for learning. The instructor sets and enforces standards for learning and personal conduct in the classroom. They are the most qualified to inform the students of their individual performance: academic and behavioral. This includes positive and negative.

Counseling is a tool instructors can employ to improve learning and to assist students in personal development and resolving problems. The amount of counseling instructors will become involved in will vary depending on their particular role and contact with students. Instructors, which start and finish a course with the same group of students, are likely to counsel more than instructors who only present short blocks of instruction. The types and frequency of counseling will vary depending on the characteristics of the students attending the course. Students attending their initial Advanced Individual Training (AIT), will generally have different problems from those attending Advanced Noncommissioned Officer (ANCOC) or Captains Career Course (CCC).

There are four types of military counseling. They are Integration, Performance, Personal and Career. While these may take a slightly different shade due to the learning environment and temporary conditions they impose, they are essentially the same that one performs in the field Army (the work site).

Integration counseling is normally accomplished at the beginning of training. In the schools, students are informed of requirements for the course and personal conduct and of conditions or actions that can result in dismissal. They are also provided with information on agencies that can provide or assist in personal problem areas. They are provided with a chain-of-command for communicating problems or other issues. If you are involved in block type instruction, it will be helpful for you and the students, if the specific requirements for you block are stated at the onset of the training. The flow of communications within the classroom should also be established.

Performance counseling is an ongoing occurrence in the learning environment.
In the school environment, learning is the student’s performance, and feedback to the student on how well they are or are not doing is the performance counseling. It is often not as formal as the monthly or quarterly counseling done in the work site. In the classroom, the norm for performance counseling is generally on the spot praising or

correcting. It should be concise, specific, and immediate and describe a behavior (good and bad). In the school, performance counseling should be accomplished during every learning activity and at the end of each task taught. Day-to-day counseling may be nothing more than a comment that helps the student see what they did not do correctly or reinforce something done well.

Positive counseling should be given as much emphasis as negative. Students will be more willing to continue working and attempt more difficult tasks when they have been given reassurance of previous success. Positive comments should be included and recorded in formal counseling sessions.

All instructors should review their respective school's policy for formal student counseling. When student performance is below standard or suddenly takes a downward turn, formal counseling should be considered. In cases that the student's performance could lead to dismissal, ensure required counseling is conducted and recorded as required by internal policy. Procedures and considerations for formal counseling will be addressed later.

Personal counseling may be conducted at any time in the course. Generally, the frequency of personal counseling will depend upon the climate and the learning environment and the perceived need of the student. Because of the personal nature of the problem areas and the emotional implications, personal counseling is best done when requested by the student. However, if you are made aware of a situation or it is unearthed during performance counseling (this is a frequent occurrence, especially when the counseling is for poor performance), waiting for the student's request may not be practical. While the student problems may be personal in nature, if left unresolved, they can adversely affect duty performance.

Only a few have the experience or knowledge to effectively deal with the myriad of possible problems confronting students. In helping the student work through their problems, there may be a need to refer them to an outside agency or support group. These activities are generally better qualified to assist students with personal issues. You should identify and become familiar with agencies and support groups available within the school and local area. Be willing to let go. There are going to be problems that will be beyond you ability to assist. When this occurs, it is in the student's best interest to refer them to an appropriate activity.

Career counseling in the learning environment will generally be limited to individual requests. With limited time available, it is usually difficult to map out specifics for each student to consider in professional development. Often these requests result from the student having developed a personal respect for the instructor, because of their professionalism, demonstrated concern for students, appearance of success or other factors important to the student. When requested, career counseling or professional development guidance should be provided within the constraints of current directives. Avoid providing opinions or likes as being the official policy. Before providing suggestions, check their validity and applicability. Stay abreast of the changes in your specialty. Refer students to an appropriate source when you lack the knowledge of, or have no experience of a specific career field.

Counseling requirements for Initial Entry Training (IET) soldiers vary from school to school. Before counseling IET soldiers, ensure you fully understand the proper procedures to be followed. Because of the heightened sensitivity regarding the treatment of IET soldiers, even the best of intentions can be misconstrued. Do not avoid counseling when needed because of these constraints; just ensure you are following the correct guidelines. All soldiers, especially soldiers in initial training benefit from corrective helpful performance counseling.

Documentation of counseling is usually required if the level of the performance of conduct could lead to dismissal or other disciplinary action. Follow local policy for recording student counseling. Students should be informed when record of counseling are to made, their contents, and possible use.

While there are many approaches to counseling, within the military environment there are three primary approaches to counseling: the directive, non-directive and the combined. The approach you select will depend on your personal leadership style, the student and the situation. The approach used can directly influence the effectiveness of the counseling session. The advantages and disadvantages of each are discussed below.

The **directive approach** is the quickest method. It is good for immature/insecure students, and allows the counselors to use their experience. Its disadvantages are it does not encourage maturity; may only treat symptoms, not a problem; discourages students from talking freely; and the solutions are the counselor's, not the student's. In the directive approach, the counselor does most of the talking. They state the problem, identify the cause, and give options to correct. They may provide further advice or alternatives and finally tell the student what must be done.

The **non-directive approach** encourages maturity, open communications and develops personal responsibility. Its disadvantages are it is slow and requires greater counselor skill. In the non-directive method, the student works out solutions to the problem and accepts responsibility to implement the solution. The counselor role is to help the student become more self-reliant.

The **combined approach** is moderately quick, encourages maturity and open communication, and allows counselors to use their experience. It disadvantage is that it may take too much time. In the combined approach, the counselor uses parts of the directive and non-directive approaches. This allows the counselor to adjust the techniques used to that, which is best for the students. In opening, the specific reason for counseling might be stated (directive) and then the student would be encouraged to determine cause and possible corrective action (similar to problem solving) (non-directive). The counselor would encourage and be able to offer suggestions. The final outcome would be student developed.

Communication skills are essential to successful counseling. To be effective the counselor must become familiar with and practice several basic communication skills. These are grouped as listening and watching skills, responding skills, and guiding skills. These skills can be learned through study, improved with practical application, and applied as appropriate for the situation.

Listening and watching skills require the counselor to be alert to the full range of communications, verbal and non-verbal, and attuned to the emotional content of what is being said. In listening and watching, the counselor is not only listening to what is being said, but how it is being said. The word choice, voice tone, inflection, pauses, speed, and the facial expressions, are all apart of the message.

Active listening is a means to establish rapport with the student and gain a fuller understanding of what they are attempting to communicate. In active listening the counselor's physical demeanor should clearly indicate to the student, they are concentrating on what the student is saying. Maintaining eye contact is one element, a relaxed but alert posture helps put them at ease, an occasional nod lets the student know you are attentive; facial expressions should remain neutral and relaxed; avoid speaking too much, speak only when necessary to stimulate student discussion. The other aspect of active listening is being aware of the student's non-verbal behavior. There should be a congruence between what the student is saying and doing. Their non-verbal behavior can often provide insight to the feeling portion of the message. Some of the most common behavioral indicators encountered in counseling are boredom, self-confidence, withdrawal, and openness.

Responding skills are a follow-up too active listening and watching skills. They allow counselors to validate their understanding of what the student meant to say. These are particularly important in validating non-verbal clues. Questioning, summarizing, interpreting, and informing can be used in responding.

Questioning is used to involve the student in solving their problem. Avoid questions that can be answered yes or no, or appear only to be seeking information for the counselor to make decisions. Questions should be thought out and relate to the problem that the student needs to resolve. They should be open-ended, requiring thought on the student's part, and provide more information that the student can use to work out corrective actions.

Summarizing is putting together all the information provided by the student. It is done by restating the main points of discussion in the counselor's words and allows the student to verify the content. Summarizing can also be used to avoid student rambling and to stimulate further discussion.

Interpreting is similar to summarizing except that the counselor gives the student a new frame of reference or way of looking at something. Its purpose is to develop a total picture of the problem so the soldier can view the problem differently. The counselor may also suggest how others may view the situation.

Informing is giving the student information that may help form or change the student's views. The information may come from what the students themselves have said or from the counselor. Information may be provided that is needed by the student to continue or in answer to something asked of the counselor. Informing may be used to let students know what further conflicts, trouble, or confusion their behavior may cause.

Guiding skills are used to provide structure and organization to a counseling session. Using the problem-solving and decision-making model, the counselor helps the student to identify the problem and reach a solution. Determining the problem, factors bearing on, development and evaluation of alternatives, making a decision, making a plan, and finally implementing the most practical course of action can be overwhelming for some students.

Assisting the student in working through the problem-solving and decision-making model helps them gain maturity, self-confidence, and personal responsibility for resolving the problem. Guiding is accomplished using open-ended questions at each step, which causes the student to consciously reflect and develop thoroughly thought out responses, which consider possibilities and improbabilities. The 7 steps of the problem-solving and decision-making model are given below. Samples of questions that can be used in guiding students through the model are available in Chapter 2, FM 22-101.

Steps:

1. Identify the problem.

2. Gather information.

3. Develop course of action.

4. Analyze and compare courses of action.

5. Make a decision; select a course of action.

6. Make a plan.

7. Implement the plan.

Successful counseling requires careful planning and execution. All formal counseling should be planned in advance. The only exception should be when a student requests immediate assistance or their conduct is of such a nature to warrant immediate formal on the spot counseling (these should be infrequent).

There are primarily 5 steps to consider in planning a counseling session:

1. Notify the student in advance of the counseling. Provide them with the why - purpose of the counseling; where – location of counseling site to include room number; and when – time and date of the counseling session. This will avoid any conflicts with student schedule, and provide the student an opportunity to make any personal preparations required.

2. Schedule the best time. Set a time limit for the session, usually less than an hour. Total time required will depend on the direction the counseling session takes (additional sessions can be scheduled for later dates if necessary). Consider the effect of other impending events on the student's attention span.

3. Choose a suitable place to conduct the session. The site should afford privacy where the student can speak without interruptions. Any location that can support these basic requirements is adequate – field, day rooms, labs, unused classrooms, or building steps. Counseling does not have to be conducted in an office.

4. Decide the atmosphere of the counseling. Consider the nature of the counseling in determining the atmosphere to establish. If the desire is to have an open discussion, a more relaxed atmosphere is appropriate. Allow the student to sit or have a beverage during the counseling. If the purpose is disciplinary, a more formal atmosphere is suited for the nature of the discussion. Student remains standing while the counselor gives directions.

5. Plan the discussion to include topics and order of discussion. The outline is only a tool. Change it as necessary to include student concerns. Another element to consider is the approach to be used in the counseling. Be flexible, one approach may give better results than another, given the type of counseling and the student.

The counseling session is conducted in three phases; opening the session, discussion, and closing the session.

The manner used to **open the counseling session** generally establishes how effective the session will be. The first objective is to quickly establish rapport with the student and to reduce any anxiety. Create the atmosphere that is most conducive to the purpose of the counseling. The second objective is, to explain the reason for the counseling session and what is to be accomplished. Students should be informed of general time limits, structure, and degree of confidentiality to be applied.

During the **discussion phase**, the counselor must ensure that effective, two-way communication is taking place. The techniques employed will depend on the approach used and the nature of the counseling. It is critical that any misunderstandings or confusion be cleared up before continuing on to other points. If necessary, go back to the last point and work forward again. If during the discussion the counselor realizes that the student's problem or need is beyond their ability or qualifications, the counseling session should be stopped and the student referred to the appropriate agency.

In **closing the counseling session**, the counselor should summarize what was discussed. The student should also restate what they intended to do to maintain or improve the current level of performance or to correct any shortcomings. This should include any requirements or expectations they may have of the counselor. All questions should be answered before concluding. If new topics come up, they should be scheduled for another session.

The counselor's responsibility does not end at the completion of the session. Effective counseling requires the counselor to follow-up on what was decided. Follow-up actions may include the following or others required by your school.

Inform chain-of-command of results of counseling and decisions made that are applicable to any future actions.

Make referral to outside agencies as agreed, if required.

Monitor student's progression, recognize positive results and take corrective measures for poor results.

Written records of students counseling may or may not be required by the school. When detailed this record can be a useful tool for improving student performance and professional development. In rare instances, they may be the basis for elimination of students who are unable or unwilling.

If your school has not established a formal record-keeping requirement, DA Form 4856-R (General Counseling Form) may be used for most counseling. Regardless of the storage mechanism, the minimum information recorded should include date, time, place of counseling, reason for counseling, individual(s) involved, topic discussed, student response, action to be taken, required follow-up, and counselor's signature. All records of counseling should be kept confidential and destroyed when the student departs.

Counseling is conducted to inform students of their performance, professional development considerations and to assist them in resolving personal problems. Counseling requires concern for the student and prior preparation. As an instructor, you will have the occasion to perform counseling functions for a varied array of students. Your counseling skills can directly contribute to the students' personal and professional growth.

Practice Exercise

CS-1

COUNSELING

You may refer to Module CS-1 while completing this practice exercise. Do not write in this book; place your answers on a separate sheet. All work on this practice exercise should be your own. If you have any problems or questions, ask your group leader.

1. Read the following situation and indicate which counseling type would be appropriate for the situation given.

   a. PFC Williams always appears alert in class and attempts to participate whenever possible. He has failed two consecutive tests.

   ____

   b. SGT Jones pays attention, completes work on time, and supports the efforts of any group assigned. He has expressed his concern on getting promoted before he exceeds his grade retention ceiling.

   ____

   c. SPC Wiford was doing well, but lately, she seems to be preoccupied and is frequently unprepared for class. You have overheard that she is the mother of two children, ages 4 and 6, and her husband is running around and neglecting the children. She had asked earlier if she could speak to you about a problem that was bothering her.

   ____

   d. SFC York arrived to the school late due to attendance at courts-martial. This is his first military school in some years. He was drafted to attend and he is unfamiliar with the post and local community.

   ____

2. Read the situation concerning counseling, and then select the appropriate counseling approach for the situation.

   a. SSG York has made little effort to complete assignments outside the classroom. You have overheard members of his small group commenting on his last participation and not carrying his load.

   ____

b. PFC Littleshort does not pay attention in class, often ignores instructions, and in general lacks interest in any of the training.

____

c. CPT Ileada was excellent as the initial class leader. She had always been ahead on outside classroom work. She was a contributing member on the Delta group. However, the last week, she did not complete any of her homework and was not prepared for class participation.

____

3. Indicate the appropriate components for each of the following.

a. Communication skills are essential to counseling are:

(1) ______________________ (3) ______________________

(2) ______________________ (4) ______________________

b. Responding skills are a follow-up too active listening and include:

(1) ______________________ (3) ______________________

(2) ______________________ (4) ______________________

c. Indicate the steps involved in planning a counseling session:

(1) ______________________ (4) ______________________

(2) ______________________ (5) ______________________

(3) ______________________

ANSWER KEY
CS-1
COUNSELING
Practice Exercise

1. Read the following situation and indicate which counseling type would be appropriate for the situation given.

a. PFC Williams always appears alert in class and attempts to participate whenever possible. He has failed two consecutive tests.

Performance

b. SGT Jones pays attention, completes work on time, and supports the efforts of any group assigned. He has expressed his concern on getting promoted before he exceeds his grade retention ceiling.

Career

c. SPC Wiford was doing well, but lately, she seems to be preoccupied and is frequently unprepared for class. You have overheard that she is the mother of two children, ages 4 and 6, and her husband is running around and neglecting the children. She had asked earlier if she could speak to you about a problem that was bothering her.

Personal

d. SFC York arrived to the school late due to attendance at courts-martial. This is his first military school in some years. He was drafted to attend and he is unfamiliar with the post and local community.

Integration

2. Read the situation concerning counseling, and then select the appropriate counseling approach for the situation.

a. SSG York has made little effort to complete assignments outside the classroom. You have overheard members of his small group commenting on his last participation and not carrying his load.

Combined, mature, capable of determining the problem, course of actions, decide and make a plan

b. PFC Littleshort does not pay attention in class, often ignores instructions, and in general lacks interest in any of the training.

Directive, immature

d. CPT Ileada was excellent as the initial class leader. She had always been ahead on outside classroom work. She was a contributing member on the Delta group. However, the last week, she did not complete any of her homework and was not prepared for class participation.

Non-directive, mature, capable of determining the problem, courses of action, decide, and implement

3. Indicate the appropriate components for each of the following.

   a. Communication skills are essential to counseling are:

      (1) ***Listening and (watching) or*** (3) ***Guiding***

      (2***) Responding*** (4***) Watching***

   b. Responding skills are a follow-up too active listening and include:

      (1***) Questioning*** (3) ***Interpreting***

      (2) ***Summarizing*** (4) ***Informing***

   c. Indicate the steps involved in planning a counseling session:

      (1) ***Notify student*** (4) ***Decide on atmosphere***

      (2) ***Schedule time*** (5) ***Plan discuss***ion

      (3) ***Choose site***

DEPARTMENT OF THE ARMY
Headquarters, U.S. Army Soldier Support Institute
Fort Jackson, South Carolina 29207

REGULATION
NUMBER 600–3 28 March 1995

Personnel – General
STUDENT AND PERMANENT PARTY PERSONNEL RELATIONSHIPS
Supplementation of this regulation is prohibited

1. PURPOSE.

a. This regulation applies to all military and civilian personnel assigned, attached or detailed to, employed by, or on temporary duty (TDY) at the U.S. Army Soldier Support Institute (USASSI). This regulation is punitive in nature. A violation of this regulation provides the basis for actions pursuant to the Uniform Code of Military Justice, applicable federal statutes, other Army Regulations, or civilian personnel regulations.

b. This regulation defines and prohibits unprofessional associations between students and cadre members. Unprofessional associations are harmful to the accomplishment of the USASSI mission. This regulation is meant to foster the academic and training environment appropriate for developing professional military skills.

2. RESPONSIBILITIES.

a. Commandants will assure the contents of this regulation are briefed to all students during the student’s initial orientation.

b. The appropriate commander, commandant, or director will brief all new USASSI permanent party military and civilian personnel on this regulation during their initial orientation.

3. PROHIBITION. Unprofessional associations are prohibited between:

a. USASSI cadre and USASSI students (with the exception that USASSI advanced course students may associate with USASSI cadre members not in their chain of command as well as with USASSI cadre who do not teach their branch advanced course).

b. USASSI AIT students and
- all USASSI students (other than AIT)
- all Fort Jackson trainees, receptees and holdovers
- all Fort Jackson permanent party personnel.

4. DEFINITIONS. As used in this regulation, the following words and terms have the meanings indicated:

a. USASSI – cadre military or civilian personnel who either command, supervise, instruct, train or support USASSI students and soldiers.

b. USASSI AIT students – military personnel attending Advanced Individual Training (AIT) instruction presented by, at, or under the auspices of the USASSI.

c. USASSI students (other than AIT) – military or civilian personnel attending any course of instruction (other than AIT) presented by, at, or under the auspices of the USASSI. Included are students attending such courses as BNCOC, ANCOC, OBC, OAC, Recruiting and Retention courses and functional courses.

d. Unprofessional associations – any actual or attempted association, contact, or personal relationship, which is NOT REQUIRED TO ACCOMPLISH THE ACADEMIC, TRAINING, OR PROFESSIONAL DEVELOPMENT MISSION OF THE USASSI. By way of example, actions and activities which are unprofessional between students and cadre are:

(1) gambling and wagering;
(2) consensual sexual activity, or the use of sexually explicit, suggestive, or obscene language or gestures, whether in an instructional setting or otherwise;
(3) accepting or offering gifts or favors;
(4) loaning or borrowing money, or asking or soliciting to do so; or
(5) actions or activities by cadre which create, or reasonably could create, the appearance of favoritism or partiality towards a student or group of students.

e. Nothing in the foregoing definition of "unprofessional associations" is meant to prohibit participation of cadre and students in social or recreational functions sponsored by a unit or element of the USASSI; nor does it prohibit the hosting of, or participation in, social functions by cadre personnel for students, designed to acquaint them with the customs of the service, or to provide an opportunity for social mentoring, or which are designed to foster esprit within a class, a portion of a class, or some other element of USASSI.

5. PERMITTED AND PROHIBITED ASSOCIATIONS. Because of the nature of the USASSI training mission, it is necessary to prohibit certain non-training-related associations between students and cadre as well as associations with other Fort Jackson groups. These associations are prohibited to preclude situations that may give the appearance of partiality, preferential treatment, or the improper use of rank or position for personal gain. Such situations are prejudicial to good order, discipline and high morale. The USASSI Association Matrix at Appendix A outlines permitted and prohibited associations.

FOR THE COMMANDER:

D. C. BARNEY
Director,
Training Support

DISTRIBUTION: A

Appendix A
USASSI ASSOCIATION MATRIX*

	TRAINEE/ RECEPTEE/ HOLDOVER	NON-USASSI PERMANENT PARTY	USASSI AIT STUDENTS	USASSI STUDENTS (other than AIT)	USASSI CADRE
TRAINEE/ RECEPTEE/ HOLDOVER	May Associate	May Not Associate	May Not Associate	May Not Associate	May Not Associate
NON-USASSI PERMANENT PARTY	May Not Associate	May Associate	May Not Associate	May Associate	May Associate
USASSI AIT STUDENTS	May Not Associate	May Not Associate	May Associate	May Not Associate	May Not Associate
USASSI STU-DENTS (other than AIT)	May Not Associate	May Associate	May Not Associate	May Associate	May Not Associate**
USASSI CADRE	May Not Associate	May Associate	May Not Associate	May Not Associate **	May Associate

NOTE:;

* AR 600–20 provides basic guidance on relationships between and among soldiers. Fort Jackson Regulation 600–3 provides guidance on Prohibited Practices and Illegal and Unprofessional Associations.

** USASSI advanced course students may associate with USASSI cadre personnel not in their chain of command as well as with USASSI cadre who do not teach their branch advanced course.

CS-2

SELECT REMEDIATION FOR INDIVIDUALS WITH LEARNING DIFFICULTIES

OBJECTIVE:

Select the most appropriate remediation category for each of the seven scenarios. Use the list of remediation categories as a reference. Your selections must be IAW Module CS-2.

CRITERION-REFERENCED TEST:

Select the remedial category that best applies to each of the seven scenarios. You have a list of remediation categories to use as a reference for your selections. Your selections must follow the guidance in Module CS-2.

SELECT REMEDIATION FOR INDIVIDUALS WITH LEARNING DIFFICULTIES

Introduction:

The role of the instructor is a key element in the implementation and operation of a course. No course, regardless of the quality of its design and materials can be successful without dedicated and competent instructors. Major duties must be performed by instructors to ensure course success. This success will depend on the extent that instructors motivate, take pride in the course and its graduates and truly care about what they are doing.

Instructor duties fall into two major categories:

1. Duties that relate primarily to the function of teaching.

2. Duties that relate to the course administration.

These categories overlap somewhat, and are essential to the mission of producing qualified course graduates. However, this module will address only teaching duties, specifically identifying learning problems and providing remediation.

Teaching duties (category 1) include:

- Orienting new students to the course.
- Monitoring and controlling students' learning sequence.
- Monitoring student progress.
- Identifying learning problems.
- Providing remediation.
- Motivating students.

Motivating student progress requires the instructor to be actively involved with students. If this monitoring process is done thoroughly, it can lead to the identification of learning problems - a prerequisite to selecting proper remediation.

Identifying Learning Problems:

Practice Exercises (PEs) provide input to the instructor is terms of the relevancy of the instruction to the practice. Sometimes there is a disconnect between the two. If the problem isn't detected soon enough, the student may receive a NO/GO on the test following the block of instruction. On the other hand, the instructor may discover that the student isn't reading the materials or understanding the teaching points from a particular block of instruction.

Students' questions and/or their responses to instructor's questions are another indication that learning is amiss. Sometimes there is a specific term or procedure they don't understand. A simple explanation can sometimes solve this type of problem.

Observation of students and analysis of test results can key instructors to problems that relate to using Army regulatory guidance, such as regulations and pamphlets. Identifying the area of the problem is only a first step; the instructor must then identify specifically what is causing trouble within that area. Test or PE results are sometimes specific enough to allow the instructor to pinpoint the cause of difficulty. Even in such instances, however, it is best to verify the nature of the problem by questioning the student rather than assuming something that may not be true.

Test results may yield another type of learning problem. The student can be confused by the instructions and/or administration of a test, and this in turn can lead to poor test scores. The exact cause of the problem dictates its solution. The validation of tests should minimize the amount of confusion caused by vague instructions, but sometimes there are problems that are not caught during the validation process. On the other hand, a student may just misread the test directions. In such an instance, the student can be corrected without the need for any changes to the test or the way it is administered.

There is a group of learning difficulties that, for want of a better term, may be called problems of applying and integrating skills. What this amounts to is a situation in which a student can explain what he is supposed to do, but for some reason, can't do it. In some cases, the problem lies in the fact that the student cannot recognize when to do something. The problem of integrating skills refers to students who can perform certain tasks or skills separately, but who have difficulty putting them together. Often this type of problem is a function of practice.

The last major learning problem to be addressed here is learning decay. In other words, the student learned the skill, but didn't retain it very long. Students who pass a performance test, but then receive a NO/GO on the same task during the End-of-Course Test (EOCT) may be experiencing this difficulty. The way to find out is to question the student concerning what he did and why.

NOTE: Asking students questions is a critical part of identifying the exact cause of a learning problem.

As a result of monitoring student progress, learning problems can be identified. <u>Remediation</u> is the process of taking action to solve these learning problem(s).

Several major categories of remediation are available to instructors.

- <u>Instructor Explanations</u>

  This type of remediation involves a straightforward explanation of a term or procedure. It is particularly useful in situations where the problem is easily recognizable and can be corrected on the spot. It often occurs as the instructor is walking around during a controlled practice exercise or notices a puzzled look on several students' faces during a lecture/conference.

- <u>Instructor Cuing</u>

  Here the instructor directs the student back to instructional materials, handouts or job references rather than telling him how to do something. This type of remediation often is preferable to an actual explanation because it forces the student to interact with written materials applicable to the actual job environment.

- <u>More Practice</u>

  If PEs or test results indicate some problems and the student indicates that his errors were the result of carelessness or forgetfulness, rather than ignorance of correct procedures, than the most suitable remediation could be assigning the student more practice. Some courses may have exercise workbooks (71L course) which provide additional practice. In cases where a workbook is not available, the student could re-do previous PEs or the instructor could devise PEs that address the students' specific problems. Additional practice is also appropriate for learning difficulties associated with integrating skills.

- <u>Refresher Training</u>

  This is a combination of study and practice designed to counteract learning decay. In situations where the student can perform a task after initial training, but forgets parts of it later, he can be directed to restudy and work through PE's again. This procedure insures that the student will regain enough proficiency to meet both course and job requirements.

- <u>Peer Instruction</u>

  Not all remediation has to be conducted by the students primary instructor. Assistant instructors can also provide remediation as long as the primary instructor is aware of what they are doing and why.

  Peer instruction, the technique of using stronger students to help their classmates can be used effectively as well. Peer instruction not only gives recognition to good students, but also provides a means of getting a different "angle" on a problem. Sometimes peers can explain things in a way that makes sense to their classmates because their point of view is that of students rather than that of instructors. However, two things should be kept in mind about peer instruction. First, it should not be used so frequently that faster students are slowed down or given too much instructional responsibility. This turns peer instruction into punishment for good students rather than a reward. Second, the instructor should always be the one to determine the nature of a learning problem and should tell the peer instructor exactly what he's supposed to do. Peer instructors simply aren't qualified to determine the causes of learning difficulties.

- <u>Resource/Learning Center</u>

  Remediation may be conducted in the Resource/Learning Center as well as in the student's classroom. The Center may provide the student with another media – tape, cassette, etc. for instructional purposes. Or, it may provide the advantage of a remedial instructor. Again, to be effective, use of the Center must involve coordination between the academic instructor and the instructor in charge of the Resource/Learning Center.

- <u>Small Group Sessions</u>

  There are times when more than one student experiences the same problem at the same time. In this situation, the instructor can hold a small group tutorial or practice session. This type of activity is efficient, but it should be used only when people are having the same difficulty at the same time. The instructor should not hold a student up or delay remediation in the expectation that others will need help. If everybody in the class is having some type of problem, the instructor can simply stop the class, hold a class session to resolve the problem.

NOTE: Care should be taken by the instructor when determining if remediation is necessary. Just the fact that a student makes a mistake does not mean that extensive remedial work is required.

When a student makes a mistake, how often he/she makes it, and whether or not he realizes the mistake and corrects it are all important factors in the determination or whether or not remediation is necessary.

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PRACTICE EXERCISE

Read each situation and select the type of remediation for each learning problem.

TYPES OF REMEDIATION

Instructor Explanations	Instructor Cuing
More Practice	Refresher Training
Peer Instruction	Resource/Learning Center
Small Group Sessions	

1. A job aid is given to students to use when completing a practice exercise following a block of instruction. A few students have trouble using the job aid.

   What type of remediation? __________________________.

2. A student is making a simple mistake in writing the m – n shorthand symbol.

   What type of remediation? __________________________.

3. During a block of instruction the instructor is asked many questions by some students indicating that instruction conducted earlier is the course has been forgotten.

   What type of remediation? _________________________.

4. A student has a language problem and has difficulty interpreting written materials.

   What type of remediation? _________________________.

5. A student forgets the proper spacing used for a military letter.

   What type of remediation? ________________________.

6. Many students cannot follow the organization of a particular regulation.

   What type of remediation? ________________________.

7. A student can type 20 words a minute after the first three weeks of all the PEs. When tested, he makes several errors because of nervousness.

   What type of remediation? ________________________.

<u>ANSWERS TO PRACTICE EXERCISE</u>

1. Peer instruction
2. Instructor explanation
3. Refresher training
4. Resource/Learning Center
5. Instructor cuing
6. Small group session
7. More practice

NOTE: Check with your Staff and Faculty group leader if you have any questions. Then go to the Criterion Test.