Training
INDIVIDUAL/COLLECTIVE TRAINING AND DEVELOPMENT GLOSSARY

All terms/definitions are current as of publication date.
Change(s) to Circular will be issued as necessary.

Chapter 1. GENERAL
Purpose.......................... 1-1 2
Scope............................ 1-2 2
Policy............................ 1-3 2
Concept/Planning.............. 1-4 3
Feedback/Inquiries........... 1-5 4

Chapter 2. GLOSSARY OF TERMS:
INDIVIDUAL/COLLECTIVE TRAINING
AND DEVELOPMENT.......... 5

Chapter 3. GLOSSARY OF ABBREVIATIONS
AND BREVITY CODES: INDIVIDUAL/
COLLECTIVE TRAINING AND
DEVELOPMENT................ 89

Appendix QUICK-FEEDBACK
PROCEDURE...................... 110
1-1. Purpose. This circular is designed to assist in attaining a more common understanding/usage of TRADOC adopted terminology and sets forth the scope, policy, concept/planning and feedback requirements for the Individual/Collective Training and Development Glossary.

1-2. Scope.

a. This circular is a compilation of select terms/abbreviations and their definitions, derived primarily from the areas of individual/collective training and development, adopted for TRADOC-wide use.

b. In many cases only one definition per term/abbreviation is given; in others, multiple definitions are provided. It must be recognized that much terminology varies with situational usage subjecting it to manifold possible nuances in definition (e.g., evaluation). In such cases only the more common uses adopted are given.

c. Several terms contained in this glossary duplicate those contained in the Dictionary of United States Army Terms (AR 310-25, Cl, C2). For most of these terms, the circular makes reference to the Army Dictionary for definition. However, in the few cases where this circular is at variance with the Army Dictionary, this circular will take precedence since it reflects the most recent inputs from TRADOC staff/schools; (concurrence obtained per coordination with DA Dictionary POC: DAAG-AMS-P). In due course, change submissions to the Army Dictionary will be effected for such terms.

1-3 Policy. The following guidelines are established for the construction of other TRADOC publication glossaries:

a. This circular is designed to consolidate in one resource document selected individual/collective training and development (and related) terms having common usage within TRADOC.
This document is designed to assist in attaining a more common understanding/usage of TRADOC adopted terminology and sets forth the scope, policy, concept/planning and feedback requirements for the Individual/Collective Training and Developments Glossary.
b. Other TRADOC publication glossaries will be developed only when terms/abbreviations used are not defined in: the Army Dictionary of terms/abbreviations (AR 310-25/AR 310-50); the Joint Dictionary (JCS Pub 1); TRADOC Circular 350-3; a standard dictionary; or are not explained/defined within the text. This policy is in conformance with C 12, AR 310-3. Users are referred to paragraph 2-19 of the latter document for further general guidance on glossary development.

(1) The purpose of other TRADOC document glossaries is to define only those terms/abbreviations which are specific/unique to the text of that document. Such glossaries should not duplicate terms/definitions contained in references noted in paragraph 1-3b above nor attempt to be a source of general/tangential/nice-to-know information. This does not preclude additional meanings for terms.

(2) If it is essential for other glossaries to highlight select terms that already appear in the above mentioned publications, the definitions should not be duplicated but rather the following statement be made after each duplicate term: "See AR 310-25 (C1, C2)"; "See JCS Pub 1"; or "See TRADOC Cir 350-3", as appropriate.

1-4. Concept/Planning. This publication of TRADOC Cir 350-3 reflects the concerted input of the principal elements of the TRADOC staff/schools. During its compilation and numerous revisions, it became readily apparent that a high percentage of the TRADOC glossary of terms/abbreviations is subject to change (addition/deletion/revision). The reason for this is that many terms are project/program specific. Consequently, as projects/programs evolve so too do their respective terms/abbreviations. In some instances, particularly in early stages of innovation, a set of project related terms can undergo complete change in a matter of months. Considering its volatile nature, and this being the first cut effort to establish a TRADOC glossary, the decision was made to issue the circular in its present form for a period of one year. During this period, the TRADOC staff/schools will have the opportunity to "field test" and validate its contents for thoroughness/accuracy/appropriateness. At the same time many of the project/program oriented terms will have additional time to stabilize. At the end of one year, this circular will again be revised in accordance with the latest inputs (additions/deletions/revisions) available and then be converted to become TRADOC supplements to the
1-5. Feedback/Inquiries.

a. In order to assist in generating the best possible TRADOC supplements to the Army Dictionary of Terms/Abbreviations, all users of this circular are requested to maintain notes during the test year regarding any problem encountered with TRADOC Cir 350-3 including requirement for any new terms/deletions/revisions/typo's, etc. Feedback will be arranged in two stages:

   (1) Ad hoc: All users are requested to provide feedback on a real-time basis (i.e., as soon as user desires to make input). TRADOC Form 126-R (Quick-Feedback Individual/Collective Training Development Glossary) is provided at Appendix for this purpose. Users are encouraged to avail themselves of this mail-back procedure as often as they wish. In this way, their inputs will be received by HQ TRADOC for timely consideration and possible dissemination (as circular changes) to other users. Note: All inputs must be provided NLT ninth month after publication date. (See b below.)

   (2) Final: In addition to "ad hoc" feedback, the primary users of this circular (TRADOC staff offices/schools) will be requested by separate correspondence to provide their respective final feedback. Note: Final request for inputs will be mailed approximately six months after publication date with all responses due NLT ninth month after publication date. (See b below.)

b. Any inquires/feedback pertaining to the contents of this circular are to be directed to TDI POC: ATTNG-TDI-ORA (ATTN: Dr. A. A. Longo) AV 680-3608/09. (Note: Specific inputs must be authenticated in writing (i.e., use of form provided at appendix/DA Form 2028, as appropriate). A definition must accompany any new term/abbreviation recommended).
absolute standard—In testing, a statement defining the exact level of performance required of a student as a demonstration that he/she has mastered the training objective(s). Criterion-referenced tests are based on an absolute standard.

accepted camera-ready copy—Camera-ready copy that is editorially, compositionally and graphically correct and, therefore, ready for printing procurement.

acquisition plan—A document which records program decisions; contains the user's requirements, provides appropriate analysis of technical options, and includes the life cycle plans for development, testing, production, training and logistic support of materiel items.

action verbs—Verbs that convey action and reflect the type of performance that is to occur, such as: place, cut, drive, open, hold. Action verbs must reflect behaviors that are measureable, observable, verifiable, and reliable. See also task.

activity step—One simple operation or movement that comprises part of a task. A task performance standard consists of a list of these operations or movements. See also element.

actual effectiveness—The actual current weapon system effectiveness when operated and/or maintained by the soldier. E is determined empirically and takes into account hardware parameters, soldier-hardware interface; soldier training factors, soldier characteristics and abilities, tactical doctrine and tactics, and operational environment. See also TRADOC Pam 71-8.
actual design—The measure of degree of $E_A - E_D$ correspondence or lack of correspondence conceptually. The $E_A/E_D$ relationship involves comparison of performance curves. See also performance gap, design effectiveness ($E_D$), actual effectiveness ($E_A$) and TRADOC Pam 71-8.

additional skill identifier—A code added to the MOSC to designate areas of supplementary specialization. See MOS and MOSC.

additional training—Refresher or advanced training given to a previously trained soldier that results in the soldier regaining or improving Soldier's Manual task standard proficiency.

adjunctive material—Material that supports a program of instruction (POI) and must be used by soldiers to learn the tasks being taught in the POI. For example, adjunctive material for a lesson on map reading may include a map, compass, protractor, etc.

administrative rating—A systematic evaluation of performance in an assignment or of other behavior, usually used to influence personnel decisions regarding the person being rated; usually made by a supervisor of employees.

advanced individual training—See C1, AR 310-25.

algorithm—1. A finite number of steps that frequently involves repetition of an operation. 2. An orderly process or exact prescription for solving a problem. 3. A routine which specifies all procedures, tasks, and steps for a given operation/process. It deals with all possible courses of action (opposite of heuristic, i.e., rule-of-thumb procedures). It can be a set of "if, then" statements and provides more flexibility than a flowchart in that it permits the use of questions in the form of sentences, line charts, etc.

alternate Hands-On Component—Comparable Skill Component units developed for each task placed in the Hands-On Component (HOC). Soldiers who cannot take the Hands-On Component will be administered the alternate HOC.
analysis—in job/task analysis, represents phase one of a five phase development process. It is the process/methodology of job/task analysis (e.g., what tasks; how performed; what cues, conditions, standards; etc).

analysis plan—A formal document used in the job and task analysis (J&TA) process to define and delineate action required in the J&TA process. Major paragraphs for this plan are: a. Officer/Enlisted Specialty; b. Job Description; c. Plan Rationale; d. Implications of the job and task analysis; e. Target Population; f. Resource Requirements/Constraints; g. Data Sources; h. Deliverables.

analyst—in job/task analysis, an individual assigned to perform the job/task analysis process. Personnel assigned to this position (or who are detailed to assist in this process) should receive training in J&TA for their area of responsibility and have a knowledge of: a. OPMS/CMF structure being analyzed; b. Analysis techniques; c. Documentation research techniques; d. Interview techniques; e. Possess job dedication and have ability to communicate (verbally and in writing). An analyst need not be a job expert, but must have access to job experts.

annual review—1. In general, a process of reconsidering and verifying training, training development decisions and documentation once each year. 2. In TEC, review of each lesson on the anniversary of its approval for mass reproduction. Review is conducted to assure lesson currency.

answer print—Audiovisual production sample which consists of film or video tape that can be screened and edited prior to production and distribution.

apprenticeship—State of learning by practical experience under skilled workers.

apptitude—Capability of acquiring skill or ability; the potential of becoming proficient, given the opportunity and appropriate training. May refer to capacity to learn one specific kind of work or to general trainability.
aptitude test—See Cl, AR 310-25.

Army Apprenticeship Program—A training program that provides the servicemember the opportunity to gain civilian recognition in an apprenticeable skilled trade.

Army Communicative Technology Office—The jointly manned DARCOM/TRADOC office responsible for the application of modern communicative technology to the production, distribution and delivery of instructional doctrine and technical material.

Army correspondence course—A formal course of instruction prepared by service schools and centrally administered by IPD.

Army correspondence course program—The overall program established by AR 351-20, which governs Army correspondence courses. See also the Army Institute for Professional Development (IPD).

Army correspondence subcourse—The basic unit of instruction that teaches a single task or a group of related tasks, and is designed to be administered and managed in the parameters of the Army Correspondence Course Program. Subcourses are the basic element of the ACCP and are grouped together to form courses. See also Cl, AR 310-25.

(The) Army Institute for Professional Development—The organization responsible for overseeing, managing and administering the Army Correspondence Course Program. IPD is the subordinate institute of the U. S. Army Training Support Center at Fort Eustis, Virginia 23604

Army Occupational Survey Program—A system of collection and computer-assisted processing, storage, retrieval, and analysis of detailed military occupational information. Data is collected by means of the Army occupational survey instrument.

Army Program for Individual Training (ARPRINT) data—The information required for the Army Training Requirements and Resource System (ATARRS) so that
students and instructors will be available when instruction begins. Such information includes: course number and title, purpose, prerequisites, scope, length, and location.

Army standard score—See AR 310-25.

Army Systems Acquisition Review Council—Provides key decisions on major Army development programs. When a Defense Systems Acquisition Review Committee (DSARC) is also required, the ASARC provides the approval decision on proposed Army recommendations to the DSARC.

Army Training and Evaluation Program—The program that prescribes the missions and collective tasks which a unit must perform to accomplish its mission and survive on the battlefield. For the trainer, ARTEP provides the tasks, combat conditions, minimum standards and training support requirements that assist in the conduct of performance-oriented training. For the training manager, ARTEP is a tool that will aid in assessing training proficiency, establishing training objectives and programming resources.

Army Training Board—The Army proponent for Training Management in units, FM 21-5, FM 21-6 and the ARTEP. ATB is a subordinate element of the U.S. Army Training Support Center at Fort Eustis, VA 23604.

Army Training Support Center—Manages the development, production, and distribution of training materials in support of individual and collective training for all elements of the Active and Reserve forces. Provides guidance, advice and assistance to TRADOC schools and other training development agencies. Provides milestone and quality control of products for HQ TRADOC. Provides resource management and contract status information to HQ TRADOC. Manages reproduction and distribution of training support materials. Provides primary HQ TRADOC level user representation for the training subsystem of each developing system and for non-system training devices. Provides advice, assistance, guidance and quality checks. Provides training management
doctrine for the effective use in units of training support materials. Includes collective training, individual training and the integration of the two levels. Insures integration of training support materials so that the most cost effective product is provided the user at least cost to HQ TRADOC.

ARTEP job worksheet—A formulated worksheet that aids in identifying the Soldier's Manual tasks that are necessary for a given job incumbent to perform successfully on an ARTEP event.

ARTEP proponent agency—Any school, center, academy or command responsible for the development of ARTEP.

ARTEP/SM interface—Material which implements individual collective integration by identifying the individual tasks (Soldier's Manual) that must be mastered to insure satisfactory collective performance on an ARTEP event. The ARTEP/SM interface templates and the ARTEP/Soldier's Manual Interface Booklets are example products of individual/collective integration performed by the US Army Training Board. See also individual/collective integration and individual/collective integration matrix.

ARTEP standard—See standard.

ARTEP tailoring—The process of using ARTEP by the trainer/evaluator to promote decentralized training of a unit based upon the identified needs of the unit. Tailoring of ARTEP is accomplished by using a scenario of specific missions/tasks and duration to accomplish training objectives. In the case of units with severe resource constraints, tailoring must also include modification of type missions/tasks performed. This may dictate the establishment of intermediate training objectives or modifying the stated standards accordingly. The trainer/evaluator must also modify standards when actual conditions differ from those specified in the training objectives.

assignment oriented training—Training designed to qualify an individual to perform, at Soldier's Manual standards, those operator/maintenance functions asso-
associated with the duty position and skill level of his next assignment and for the specific equipment that will be operated/maintained.

attitude—a persisting state of a person that influences his behavior/choices/expressed opinions, etc.

attitude measure—an instrument designed to gather information about a person's disposition toward something. This could include, for example, liking or disliking subject matter, usefulness of a medium, etc.

audio-only kit—an audio tape cassette which "talks" a student through a series of actions. Generally, used in conjunction with a hands-on orientation (e.g., maintenance procedures).

audio-only program—a production which does not contain any video or pictures; for example, a record, cassette or radio program.

audio producer—prepares tape recordings and produces audio programs. The audio producer combines narration, music, and other sound effects in the production of an audio program.

audiovisual—see cl, AR 310-25.

audiovisual equipment—equipment used for the recording, production, processing and exhibition of audiovisual products.

audiovisual kit—a kit (e.g., TEC or skill performance aids) consisting of a Super 8-mm continuous loop film cartridge with accompanying audiovisual materials (e.g., audio tape cassette, video cassette, self teaching cards, etc).

audiovisual medium—any delivery device/system which provides both audio and visual presentations.

audiovisual production—the process of creating presentations. It includes research, planning, preparation, scriptwriting, filming or recording, editing, etc.
audiovisual products—Material containing sound or imagery for conveying a message. Includes still photographs, graphic arts, still projectuals (overhead transparencies, slides, film strips, etc), motion pictures (film, video tape and disc), audio recordings (tape and disc), and combinations such as multimedia.

audiovisual program—A presentation using tape and slides, a filmstrip or movie, etc., as the media, and contains as many principles of programmed instruction as possible; i.e., information is presented in predetermined steps, students are directed to work an exercise about that information, and then they are made aware of their progress.

audiovisual services—Those functions performed in the production, utilization, distribution and storage of audiovisual materials: e.g., tape or film editing; scripting; film processing; sound recording; audiovisual media depository and record center operations; reproduction and distribution of products and equipment; presentation of television, audio, still and motion visual information; and, design or consulting support for audiovisual users.

audit trail—A methodical listing of events, rationale, data sources and justification for change from the original plan/concept; alternate courses of actions are delineated/filed in chronological sequence. File is preceded by a listing of file's contents.

Automated Instructional Management System—A computer based system geared to the management of individual-paced and group-paced training. It will also handle the administrative and scheduling functions presently being performed at TRADOC schools and Army Training Centers. Plans are to begin phasing AIMS into the TRADOC system in FY 80.

baseline data—Valid and reliable information about the current level of performance of the intended student
population. This data can be used to confirm the need to develop new instruction, or can be used as a comparison in ascertaining differences between student performance before and after instruction.

basic issue items—See C2, AR 310-25.

basic training—Basic introductory and indoctrination training given to newly inducted enlisted Active and Reserve personnel without prior military service. It provides a transition from civilian to military life, motivation to become a dedicated and productive member of the Army, and instruction in the basic skills, to include battlefield survival skills, required by all members of the Army.

basis of issue—See C2, AR 310-25.

basis of issue plan—A planning document that lists specific TOE (level 1) TDA, CTA, JTA, and AOP in which a new item of materiel may be placed; the quantity of the item proposed for each organization element; and other equipment and personnel changes required as a result of the introduction of the new item. BOIP is not an authorization document.

behavior—Any activity/response by a person either covert or overt.

bias—A subjective preference/prejudice. A systematic and pervasive error in measurement, not attributable to chance or random effects. In random sampling, if each case in the population has the same opportunity to be included, the sample, except for chance errors, will be representative of the population with which a test is to be tried out. However, some influence other than chance may cause a greater proportion of certain types to be included than would result from chance selection; the resulting sample is said to be biased. Bias affects the validity and usefulness of ratings.

blocking—The process of defining actor, equipment, and set movement on location in a television or film script. A blocked script also contains directions as to the movement of actors, scenery, and equipment on or off the set.
block scheduling—Mode of instruction whereby all students receive the same instruction at the same time. See also group management plan/group-paced training.

branching—An instructional technique, usually in the form of a programmed text, in which the student's next step of instruction is determined by his response.

breakdown sheet—A form prepared by the course developer to provide advanced information to IPD on a new or a revised subcourse.

built-in test equipment—See CL, AR 310-25.

camera-ready copy—The information edited/composed and ready for inclusion in the camera-ready mechanical.

camera-ready mechanical—Material that has been edited, composed, illustrated, and properly displayed on illustration boards in the language of the printer and ready for entry into the printing procurement system. Also known as mechanical.

career management field—A manageable grouping of related MOS that provides visible and logical progression to E-9.

carrel—1. A small enclosure or alcove incorporating a desk, to be used for individual studies, supplied with or without audio and visual materials and supporting equipment. 2. A small enclosure or alcove incorporating a desk, to be used by one or two trainees and equipped with a set of special tools and materials for carrying out a hands-on learning event. It may include audiovisual systems.

chaining—An instructional technique that transforms a learned response into a stimulus for the next desired response.

clustering—A process of organizing many tasks into groups for the purpose of deciding upon the optimal instructional mix for that group of tasks. Also used to sequence groups of tasks within a course of instruction.
collective front-end analysis—See front-end analysis.

collective task—a. A work unit involving more than one individual for its completion (e.g., replacement of a system's component that is too heavy/cumbersome for one individual; use of a weapon system too complex for one individual to operate/manipulate).
b. A work unit requiring a unit (e.g., platoon, company, battalion) to accomplish. Can be a mission requirement (e.g., secure bridgehead) which is then further refined through sub-units to individual tasks. c. These tasks have an identifiable starting and ending point and result in a measurable accomplishment or product. d. These tasks are level-of-involvement dependent. e. Sub-tasks or elements of a collective task may be individual tasks in their own right.

collective training—Training, either in institutions or units that prepares a group of individuals (crews, teams, squads, platoons, etc.) to accomplish tasks required of the group as an entity.

collective training plan—A formal plan for the life-cycle development of collective training in both units and institutions in the US Army. The CTP addresses the area of collective training in a broad, long term context as well as the mid and short term development of the current collective training system. The CTP establishes procedures, interfaces, resource identification, planning and product development to support the total collective system for specific proponent units and systems.

collective training proficiency—The ability of a unit to successfully perform its missions to ARTEP standards.

combat developer—The command or agency responsible for the formulation of concepts, doctrine, organization (excluding Army wholesale logistics) and materiel objectives, and requirements for the employment and support of US Army forces in a theater of operations and in the control of civil disturbances. The combat developer formulates Army management systems (in logistics, personnel, administrative, and other
functional areas as designated) which impact directly on, or extend into, a theater of operations. The combat developer formulates the Army structure. (The US Army Training and Doctrine Command (TRADOC) is the Army's principal combat developer.)

combat readiness—The ability of a unit to perform in combat. Combat readiness considers the status of personnel, logistics, module, and training. Collective training proficiency, based on ARTEP, is only one consideration in determining combat readiness.

combined arms—The combination of combat, combat support and combat service support components of the force structure to accomplish a tactical or strategic mission.

Commander's Manual—The document designed to describe to the battalion and company level commanders their responsibility in the overall training plan for a particular military occupational specialty (MOS). It lists all critical tasks by duty position for every skill level of a particular MOS, provides a reference to the primary training materials available, and indicates where each task is initially mastered as well as where additional training is conducted. In designating responsibility for initial task mastery, the CM lists which tasks are taught first in BT, AIT, OSUT, NCO courses, supervised on-the-job training in units, or via self-study. It is the life-cycle training plan for the MOS. It provides the Commander, senior NCO and unit trainer with information required to plan, conduct and evaluate training for a particular MOS.

command post exercise—An exercise designed to train leaders and staff officers to plan and execute tactical operations without requiring the presence and participation of the soldiers in the unit.

common analysis base—As directed in TRADOC Reg 351-4, a common analysis data base will be developed through a systematic analysis process and will be the premise for all follow-on training developments products.
common job—A duty position which occurs in more than one MOS (e.g., radio-telephone operator).

common modules—Common missions and/or collective tasks that apply to Army units in general or are used by more than one ARTEP proponent, given a specific organization and equipment.

common skill level task—A task performed by every soldier in a specified skill level.

common task—in training development, a task used by more than one training proponent for jobs they train and/or those that are required by statute or regulation to be trained by more than one proponent. From the viewpoint of a training developer, there are various degrees of commonality. A task may be common to two jobs within a skill level of an MOS, or it may be common to all jobs within the skill level. Furthermore, a task may be common to two or more MOS within the same Career Management Field (CMF) across CMF for which a school is proponent. Tasks are common to most jobs in the Army; however, commonality aims to coordinate the use of common tasks among schools.

comparative sequence—in training development, sequencing which starts with familiar topics and goes to unfamiliar ones.

complexity criterion—in media selection, the degree of complexity required of instructional materials in order to adequately train students to meet learning objectives.

composite task list—in TEC, a listing of all tasks taught by all current or programmed lessons. Maintained by USATSC-AET.

comprehensive dummy—the design according to which a publication is to be produced. Also called "comp". It consists of a page-by-page guide or outline of an entire publication showing margins, areas of type and illustrations, headings and captions, and suggested colors. It is drawn to exact size with every item specified and/or identified ("keyed"), and proofs or
typeset copy pasted in position. After receiving final approval, the comp becomes the guide for producing camera-ready mechanicals. The comp must accompany the mechanicals and other artwork sent to the printer.

Comprehensive Occupational Data Analysis Program—The computer based system for processing, analyzing and reporting information obtained through administration of the Army Occupational Survey Program. This system (CODAP) is designed to provide occupational data essential to the analysis of innumerable job related management problems (e.g., job/task analysis).

computer assisted instruction (CAI)—The use of the computer as a multiple instructional mode teaching medium, functioning interactively with the student, providing him with lesson material and evaluating his interaction with the lesson material. The lesson material and teaching logic is stored within the computer memory.

computer based instruction—Any form of instruction wherein a computer serves as the primary basis of training, albeit as CAI, CMI, other mode.

computer managed instruction (CMI)—The use of the computer as a management tool, e.g., classroom, administrative, or logistical. The computer is used in some or all of the following ways in support of training: grade tests, prescribe remedial work, prescribe lessons to be studied, designate media to be used, schedule equipment or media, monitor student progress, maintain records, evaluate course effectiveness, collect logistical data, provide data retrieval services. The instructional courseware is not resident in computer storage but consists of any offline available materials.

computer modeling technique—A procedure employed during the simulation of an operational system; involves computer simulation of the major operations of the system under a variety of conditions.

condition(s)—The situation/environment in which the soldier/unit will be expected to accomplish a task.
Conditions include any pertinent things that influence task performance, including some or all of the following: location of performance, environment, equipment, manuals or supervision required.

confirmation—The knowledge of results provided students on each exercise throughout the instructional process. The principle underlying confirmation is reinforcement or rewarding of student achievement during the entire learning situation.

consensus group—A group of personnel, such as a jury of experts, selected for their experience and knowledge of the job, brought together to organize and record the required job analysis task.

contiguity—In learning, the principle that events which occur closely together become associated by the learner.

contingency management—The establishment of a set of procedures by which trainees are required to perform a certain amount of work or to achieve certain objectives before engaging in activities that are preferred by the trainee (e.g., recreation, a break, or a more desirable training event). Also described as reward stimulus procedures (i.e., systematically scheduling the consequences of behavior).

continuous tone copy—Any image that has a complete range of tones from black to white in an uninterrupted flow (i.e., photographs, paintings, drawings, etc).

contract—1. In general a binding agreement between two or more persons or parties. 2. Formal document between the contractor and the government that specifies exactly what will be developed during a particular time period. 3. In installation contract, a negotiated written document between CG, TRADOC and the installation commander. Represents the funding required and workload to be accomplished during the forthcoming fiscal year.

contract developed lessons—Lessons designed and developed by a contractor which follow contractual specifications and are evaluated for technical accuracy and
instructional and audiovisual quality at specific points in the development cycle.

contractually cancelled lesson/kit—Lesson/kit, that by mutual agreement between proponent and contractor, is cancelled from the delivery schedule. Contractor is paid for work accomplished through the cancellation.

coordinated test program—A planning document which formalizes the all-inclusive testing activities relating to a development project. It is evolutionary in nature, sectionalized by major tests and developed and maintained by the materiel developer of an item or system.

coordination and contract summary sheet—A summary sheet completed for each subject area submitted for development. The CCSS outlines the scope and purpose of lessons being developed for each subject area, target audience, lesson objectives, acceptable standards of performance and criterion-referenced test items. It accompanies all government furnished materials (GFM) or references provided for development of a lesson series.

correspondence course—See Army correspondence course.

cost and operational effectiveness analysis—A documented investigation of comparative effectiveness or alternative means of meeting a requirement for eliminating or reducing a force or mission deficiency; the validity of the requirement in a scenario which has the approval of TRADOC and HQDA; and, the cost of developing, producing, distributing, and sustaining each alternative in a military environment for a time preceding the combat application.

cost and training effectiveness analysis—The training effectiveness analysis (TEA) study conducted during the materiel acquisition process to: a. Insure that the training developments (TD) processes (ISD Phases I, II, and III) are initiated early in the life cycle of hardware systems and are accomplished both in parallel and coordination with combat developments (CD) during the acquisition cycle; b.
Optimize soldier-hardware subsystem interface; c. Insure that the appropriate level of scientific methods are used in the development of the training subsystems; d. Insure that all feasible training subsystem alternatives are considered; e. Optimize soldier-training subsystem interface; f. Recommend the preferred hardware system based on cost and training effectiveness; and, 2. Provide decision makers with more precise information at critical points in the acquisition process concerning the Total System composed of the training, hardware, and other subsystems. See also TRADOC Reg 350-4.

course documentation—Information describing the current content of a course (instructional materials, tests, instructor's manual, evaluation plan, student's manual) and its developmental history (job analysis, criteria for selecting tasks for training, previous revisions).

course map—A chart which identifies tasks to be learned, sequences them in desirable order for learning, and indicates possible routes for learning when "bottlenecks" develop. See also training map.

courseware—The actual instructional package (including content/technique) loaded in a hardware/software system. See also hardware/software.

covert behavior—Thinking/mental processes inferred from overt behavior. Note: Covert behavior may have an observable product or result. See also overt behavior.

criterion—1. The standard by which something is measured. 2. In test validation, it is the standard against which test instruments are correlated to indicate the accuracy with which they predict human performance in some specified area. 3. In evaluation, it is the measure used to determine the adequacy of a product, process, behavior, etc.

criterion-referenced grading—A way of grading students in relation to a predetermined standard (go/no-go). The standard is based on job requirements.
criterion-referenced instruction—1. A way of organizing and managing instruction in which prespecified performance criteria are achieved by each qualified learner. 2. Instruction which is designed to teach only those performances which are specified as critical to the successful accomplishment of a defined task.

criterion-referenced test—A test which measures what an individual must be able to do or must know, in order to successfully perform a task. An individual's test performance is compared to an external criterion/prespecified performance standard which is derived from an analysis of what is required to do a particular task. See also norm-referenced test.

critical combat systems—The systems which are directly involved in the role of land warfare are termed combat systems. Combat systems are deemed critical when their operational presence is pivotal to the success of combat. Examples of standard critical combat systems include: all nuclear capable weapons, intelligence gathering activities, infantry rifle squads, and individual anti-armor capabilities.

critical incident analysis—A method of determining key factors of a task through the use of experience provided by a job holder. Used for tasks having many diverse activities or a loose flow.

critical issue—Those issues associated with the development of an item or system that are of primary importance to the decision authority in reaching a decision to allow the item or system to continue into the next phase of development.

critical missions/tasks—Collective missions/tasks identified by front-end analysis (mission/task analysis) that provide an immediate, direct, or significant contribution toward the ability of a unit to perform a specific combat mission/task or the survival of a unit on the battlefield. These missions/tasks are included in the ARTEP.

critical mission/task list—in collective training, the list of missions/tasks derived from front end analysis
(mission analysis) that meet the critical task criteria and will be included in the ARTEP document.

critical sequence—In training development, sequencing of topics or objectives according to their importance.

critical task—A task selected for training by a task selection board in a service school and approved by the school's commandant. It is a task which is essential for accomplishment of the unit's mission or successful individual performance or survivability in combat situations. All critical tasks for enlisted personnel are placed in the Soldier's/Commander's Manuals.

cue—A word, situation, or other signal for action. An initiating cue is a signal to begin performing a task. An internal cue is a signal to go from one element of a task to another. A terminating cue indicates task completion. See also prompt/signal.

cut-off score—Minimum passing score.

D

data—Facts or numerical values resulting from measurement (observations, etc) of situations, objects, people or other events.

data collection plan—The procedures and techniques that will be used to gather information for any specific purpose.

decay rate—The rate of forgetting (knowledge/skill loss). If the decay rate is high then a soldier should not receive training in a specific task until shortly before he will actually perform it.

decentralized training—Training which releases the authority and responsibility for the detailed planning, conduct, and internal evaluation of training to the battalion or separate company level. Brigade headquarters and above retain the responsibility for providing mission type guidance to
their subordinate units, allocating training resources, coordination, and the broad supervision/evaluation of training. This term also applies to how training may be conducted at company, battery or troop level.

Defense Audiovisual Support Activity—An organization designated by the Department of Defense to produce and procure audiovisual products and to provide audiovisual support for all DOD components in a specified geographic area.

Defense Systems Acquisition Review Council—The agency which advises the Secretary of Defense on the status and readiness of each DOD designated major system under development to advance to the next phase in the Life Cycle System Management Model.

dependent relationship—In instructional systems development, skills and knowledges in one learning objective which are closely related to those in another learning objective. In order to master one of the learning objectives, it is first necessary to learn the other. See also learning hierarchy/skill hierarchy.

design effectiveness—The design or intended effectiveness of a weapon system. $E_D$ is determined by analysis of the hardware parameters of a weapon system and is typically stated in terms of an AMSAA-like hit or kill probability curve or similar type hardware subsystem analysis-based performance curves. See also TRADOC Pam 71-8.

developing agency—See materiel developer.

Developing Systems Training and Devices Directorate—The US Army Training Support Center activity designated by Commander, TRADOC, to manage the development of the training subsystem associated with developing materiel systems and nonsystem training devices that have Army-wide application. When writing to DST&DD, use this address: Commander, US Army Training Support Center, ATTN: ATTSC-DS, Fort Eustis, VA 23604.
developmental system—See system.

development phase—Process that includes the development of initial instructional materials; conduct of individual, small group and large group tests; and approval of camera-ready kits.

development testing—Testing of materiel systems conducted by the materiel developer using the principle of a single, integrated development test cycle to assist the engineering design development process and to verify attainment of technical performance specifications and objectives. DT is conducted in factory, laboratory, and proving ground environments. See also AR 70-10.

diagnostic feedback—Identifies by mission, task and subtask specifically what the unit did or failed to accomplish and why. This feedback may be a written or mental process. The recommendations to correct identified weaknesses must be provided if those weaknesses were not corrected during the training and evaluation exercise. Diagnostic feedback must be provided to the leader or commander responsible for the training and evaluation of the unit.

Difficulty-Importance-Frequency (DIF) Model—One of several models available for use in selecting tasks for training.

directed training—Training required by law, or by DA and TRADOC regulations.

discrimination—Recognition that two or more stimuli are different in one/more aspects and, thus, belong to separate classes of things.

documentation—in job/task analysis, those elements of information that specify which tasks require training, how they are learned and performed, and supporting data and rationale for decisions (e.g., what factors were considered in selecting tasks for training activities and what problems were encountered). See also audit trail.

down time—The period of time when equipment is inoperable. See also Cl, AR 310-25.
dummy copy—The text or facsimile thereof of a proposed publication, with or without layout.

duty assignment (first)—The assignment which a soldier is prepared for during basic, AIT, OST, OSUT, etc. Includes job performance requirements as well as those requirements to permit a soldier to perform effectively in areas such as life coping skills, socialization requirements, etc.

duty position—See C2, AR 310-25.

duty position task—A task identified with and related to a particular duty position (job) at a given skill level within a specified MOS.

effectiveness testing—in TEC, part of the development phase which determines whether or not the lesson trains the soldiers for whom it was designed. This is synonymous with validation. Also referred to as large group testing.

element—in training developments, the smallest unit of behavior that has practical meaning to instructional analysts/designers. Elements are in turn composed of steps which are basic motions, movements, mental processes. See also activity step.

emphasized training—Those training subjects which have been designated by DA or TRADOC for special emphasis.

empirically based revision—Revision based on the results of test data and the collection of other types of quantitative information.

enabling objective—The specification of prerequisite skills and knowledges necessary for the achievement of a terminal objective, or another enabling objective.

enabling skills and knowledges—Those skills and knowledges required for the performance of a task. Enabling S&K are those that are required before learning another (building block principle). Example, a typist must be able to read handwriting/handwritten materials before being able to produce a typewritten copy.
end-of-course comprehensive testing—An end-of-course test, administered to all initial entry trainees prior to graduation, designed to insure a high probability that students can perform all critical tasks taught in the course. It provides feedback on the need for both reinforcement training and course revisions.

enlisted training strategy—A comprehensive, CMF based, three part service school training developments' analysis which is driven by the needs of operating units. The ETS recognizes that the results of TRADOC occur only in operating units of the Army, Active and Reserve Components. The ETS addresses the interactive effect of the three major training products: a. Initial entry training (IET) graduates; b. NCOES graduates; c. Training support products of all kinds. While all three of these products are important—indeed essential—the NCOES graduate is the key. Reason: The NCO is responsible, in the unit, for the training/supervision of the IET graduates and lower grade soldier; the training support products are tools to be used in meeting these responsibilities. As consequence, the skill and motivation of the NCO set the upper limits on the effectiveness of IET graduates and training support products. If the NCO is first-rate, he can accomplish a great deal with marginal lower grade soldiers and limited training support materials. Conversely, unit proficiency is unlikely to be enhanced if the IET graduates and training support materials are top quality and the NCO lack the required capabilities and motivation. The analysis incorporates the development of three strategies for training, each with proposed milestones: a. The best balance among IET, NCOES and training support, given current funding level, CMF structure, and existing training; b. Proposed requirements (i.e., unconstrained). The resources required to assure unit ability to achieve ARTEP/SM standards, given the current CMF structure; c. Best case (i.e., with tradeoffs). Assess the extent to which CMF restructuring would narrow the gap between capabilities (a) and requirements (b), providing rationale and resource implications. See also TRADOC policy for the development of enlisted training as set forth in TRADOC Cir 351-10.

entry level training—The introductory and indoctrination training given to individuals upon initial entry
into the Army which provides an orderly transition from civilian to military life. For enlisted soldiers it includes basic training or one-station unit training and other individual training required to prepare soldiers for initial duty assignments. With respect to officers, entry level training is the officer basic course (OBC) which prepares them for their first duty assignment.

**entry skills**—Skills necessary to begin subsequent instruction. Specific, measurable behaviors that have been determined through the process of analysis of learning requirements to be basic to subsequent knowledge or skill in the course.

**entry skills test**—A test designed to determine if a student already possesses certain skills or knowledges needed as a prerequisite before undertaking new instruction.

**evaluation**—The process of determining value or effectiveness (e.g., individual training evaluation aims at determining the value of training programs in terms of the contribution of the individual soldier toward his or her unit's mission effectiveness). See also formative/summative evaluation, Cl, AR 310-25.

**evaluation criterion**—See criterion.

**evaluation plan**—A method or outline of a set of procedures which will be used to gather data and information for the purpose of assessing a course of instruction or other training product.

**expert tryout**—A systematic way to have experts in the MOS review a training product (e.g., SQT) to be sure that it is consistent with doctrine.

**extended analysis**—The analysis process which picks up or extends the capacity or procedures of present job and task analysis models. This process builds upon traditional task analysis activities by focusing upon the transfer task, recognizing that transfer tasks are not taught in their own right but represent the principles, rules, laws, or other factors that make up a set of performances.
extension course—A course developed by the service school as part of the ITP but conducted in locations other than service schools or training centers (e.g., USAR schools, NCOA), or in the individual soldier's unit, or self-study by the soldier in a unit or other organization.

extension training—Training, either individual or collective which is structured, developed, and supported by the service schools, but is usually conducted at locations other than TRADOC service schools or Army training centers.

extension training material—Training material used to train individuals in the tasks that cannot be successfully accomplished using only the technical manual as a job aid. Development of ETM is governed by MIL-M-63040 and includes other exportable training material (e.g., TEC/ACCP) used for non-resident training.

external cues—Signals for actions that exist outside of the student (conditions, features, or characteristics of the job environment that trigger action).

external training and evaluation—In unit training an exercise sponsored by a higher headquarters for the purpose of training and evaluating the ability of the subordinate unit(s) to achieve training objectives. The worth of this process is directly related to quality of the trainer-evaluators and the assistance provided. Key to this effort is comprehensive diagnostic feedback and immediate follow-on training and evaluation to correct training weaknesses. They may vary in formality from a battalion or brigade commander furnishing comments on observations made from a visit during training to an external evaluation team with a detailed written scenario, providing feedback during a formal critique.

face validity—Apparent validity of tests or test items that seem to be logically related to, or bear some
resemblance to job activities. General agreement among subject matter experts that the test fairly represents the job situation.

fading—In training development, the technique of gradually removing the teaching information in a programmed sequence to the point that the student is required to perform the desired behavior without assistance.

false negative—In testing, the error which occurs when a person can perform the task but receives a failing score on the test.

false positive—In testing, the error which occurs when a person cannot perform the task but receives a passing score on the test.

feedback—The return of information. Information on student performance is "fed" back: to the student so that he can improve that performance; to the instructional designer so that he can improve materials and procedures on the basis of student needs; to the management system so it can monitor the internal and external integrity of the instruction and make appropriate revisions. Also refers to the flow of data or information from one step in the ISD Model to others.

fidelity—In job performance measures, the accuracy of how well the actions, conditions, cues, and standards of the job performance measure approximate those of the task.

field exercise—An exercise conducted in the field under simulated combat conditions in which the troops and armament of one side are actually present while those of the other side may be imaginary or partially/fully represented by a second force.

field survey—School/agency prepared survey (not Occupational Survey under AR 611-3) to validate task list, obtain additional data for task analysis, etc. When survey is inter-command it must be approved by MILPERCEN. See also Cl, AR 611-3.

field user needs—The general and specific duties that will have to be taught to the trainee if he is to be able to adequately perform in a field environment.
**field validation**—1. The point in training product development where the product is administered to a representative sample of job incumbents. The intent is to exercise the product in a realistic environment to determine the administrative feasibility and the appropriateness of the product for the target population. 2. Determination (by school Director of Evaluation) that tasks taught in residence and/or extension are, in fact, applicable to the soldier's job.

**final draft**—The last version of training material before the production of the master material (i.e., camera-ready materials).

**first draft materials**—Any training material which is not yet committed to final form. First draft refers to the fact that the material is still in "rough" form and will be revised on the basis of test results and other data.

**fixed sample**—In testing the effectiveness of a lesson, a preset sample of soldiers is selected in advance. Decisions are based on the outcome of that preset sample.

**fixed sequence**—In training developments, elements that are always done in the same order. See also comparative and critical sequence.

**flexible HOC**—Maximum flexibility in administration of all hands-on components. Units should be able to test in the way they determine to be best according to their needs. This may mean setting up a station one day, two another day, etc., or testing the entire HOC at one time and at one site. The MAHOC will be organized so that each task can (1) stand alone and be tested as a single event, and (2) be part of the entire group and tested collectively.

**flowchart**—A graphic representation of the sequence of a specific activity or operation.

**flow diagram**—A graphic representation of actions/events required in accomplishment of task (e.g., lesson development). Frequently accompanied by a narrative
description, the flow diagram provides specific instructions and precise sequencing for task/goal accomplishment.

force development testing and experimentation—See C2, AR 310-25.

format—In printing, the distinctive and recurring treatment, and the shape, size and style of a publication's page(s) and/or sections achieved through stylized composition and typographic make-up (e.g., line length, type face, size, etc.).

formative evaluation—The iterative process of developing and improving training materials and procedures. Operationally, this is equivalent to developmental testing of training materials.

front-end analysis—1. In SPAS training development, precise definition of performance requirements through equipment analysis and functional analysis which yields a total task list, assessment of the requirements of each task against target population skills, and determination of which tasks (although covered by the related technical manual) require supplementary training. 2. In collective mission/task analysis, the analysis process in which the TOE capability of the unit, the unit missions (stated and implied), and the most current tactical doctrine and applicable threat doctrine available are systematically analyzed and integrated to determine the critical missions and critical tasks of a unit. The critical missions/tasks are then developed into training and evaluation outlines and published in ARTEP documents. 3. In ISD, the analysis phase in which doctrine is combined with the job and task analysis process.

functional area—A named category, descriptive of a subject under which tasks are listed. The title given a functional area is descriptive of a subject in which the assigned proponent is recognized as the technical expert.

functional course—A training course designed to convey to the soldier specific critical skills required to
perform in selected areas within an MOS or specialty. Such courses may or may not be included within an ITP. Functional courses may be either extension or service school training. Examples of a functional course included within an ITP, based on analysis which shows that a significant number of MOS incumbents need training for competency in job performance, are the First Sergeant Course, the Operations-Intelligence NCO Course, and the Master Gunner Course. Examples of a functional course which would not be included within an ITP for an MOS or specialty are the Airborne Course, or MOS Reclassification Courses. See also functional training: C2, AR 310-25.

G

generalization—The recognition that two or more things are similar in one/more ways and thus form a class of their own.

generic task—A task having wide application and transferability: One which provides a base on which other task are supported; with unique requirements or idiosyncrasies for job specific requirements (e.g., generic task of performing a given operation is modified as a result of equipment differences/geographic differences).

generic skill—A skill having wide application and transferability.

go/no-go—pass/fail. The evaluation criterion whereby a student cannot "partially" pass. He either passes (go: meets the standard) or fails (no-go: does not meet the standard). See also C1, AR 310-25.

government furnished material—Documents, equipment and services supplied to a contractor before and during performance under that contract. See also government furnished property: C1, AR 310-25.

graphic artist—A person who designs and develops a wide variety of visual materials such as illustrations, graphs, charts, and diagrams.
graphic arts guidance kit—Kit available from ATSC-AET that specifies standards for development of visuals in audiovisual and printed TEC lessons.

gross tasks—Generalized tasks that usually are the initial "cut" by the analyst in job analysis (e.g., examine an unconscious victim). These tasks are then refined to specific task statements.

group-paced management plan—Arrangement whereby instruction is scheduled and conducted for groups instead of individuals. See also individual-paced management plan.

group-paced instruction—A group of people gathered together for the purpose of receiving information or instruction in the performance of some specific task. See also block scheduling/individual-paced instruction.

halftone—The photomechanical reproduction of continuous-tone copy (such as photographs) in which the gradations of tone are obtained by the relative size and density of tiny dots produced by photographing the original copy through a fine cross-line screen.

halo effect—A common tendency in raters to let their general impression about a person influence their judgment concerning specific and independent traits and abilities of that person. Halo effect usually refers to a high subjective rating. It is one of the chief obstacles to obtaining valid ratings.

hands-on—Student practice on actual equipment, simulators, or training aids.

Hands-On Component—A performance oriented test (within SQT) which tests the soldier's ability to perform critical tasks using job equipment or simulators. The HOC may take up to 8 hours to administer to the individual soldier.

hands-on scoring book—In SQT, the document which contains the instructions the scorer issues the soldier and
the score sheets used for each task tested in the Job-Site and Hands-On Component. The score sheets are used to record the soldier's performance on the tasks, providing immediate feedback to the soldier as well as the training managers.

hard d.m. An objective and precise measure. A job performance measure (JPM) is an example of hard data while an attitude questionnaire is a less direct measure, providing subjective soft data.

hard skill—Job related skills involving actions which are easily measureable: e.g., adjusting rifle head space; timing an engine; operating a bulldozer; measuring voltage; welding; etc.

hardware—A term, pertaining usually to the computer field, used to describe the equipment required in a computer system. The term is popularly used also to refer to the mechanical, electrical, or electronic devices in educational systems. See also courseware/software.

hardware design imposed tasks—Critical tasks imposed by the design of a weapon system and which, in turn, place demands on the physical, physiological, mental, information processing, perceptual, motor, and educational (civilian and military) development abilities of the soldiers who operate and/or maintain the weapon system.

hardware design (c) soldier capabilities relationship—A training effectiveness analysis (TEA) study term used to denote that weapon system hardware design imposed tasks (H_D) are within the capabilities (S_C) of the soldiers who operate and/or maintain the weapon system.

hardware design (#) soldier capabilities relationship—A training effectiveness analysis (TEA) study term used to denote that weapon system hardware design imposed tasks (H_D) exceed the capabilities (S_C) of the soldiers who operate and/or maintain the weapon system.

heuristic—\ guideline, "rule of thumb". Also, a study/research finding valuable in suggesting direction for further investigation.
high density signal—A signal containing many cues.

high frequency task—In relation to an ARTEP mission or group of missions: a. An individual task that is required to be performed on most missions; b. An individual task that, when analyzed in terms of a grouping of tasks, is required to be performed in most of those missions or tasks.

high risk tasks—Critical operation or maintenance procedures which have a high potential for performance shortfall and a corresponding adverse impact on overall system performance if soldiers are not trained to perform them to standard. These tasks are typically difficult to train because they are exceptionally complex and/or require a high degree of skill, have either a high frequency of inadequate performances, or any combination of the above.

historical package—In TEC, originals or copies of all correspondence and attendant training materials for a specific TEC lesson from concept to completion. Master historical packages for all lessons are maintained at Tobyhanna Army Depot, Pennsylvania. See also audit trail.

indicator behavior—The behavior that indicates the presence of a specific attitude.

individual/collective integration—The concept of identifying the specified and implied individual tasks, leader tasks and collective tasks/missions in order to maximize integration of individual/collective training. The identification process shows the relationship between individual tasks and collective training tasks/missions. The process also illustrates the relationship between the individual tasks themselves. The material shows the existence of individual training dependencies and gives the trainer a diagnostic measure to determine weak areas for corrective training. By listing leader tasks, the material also assists the planning and conduct
of multi-echelon training. Finally, the training manager may select any special individual tasks supporting the SQT or EIB and emphasize those tasks by training for the appropriate ARTEP mission(s).

individual/collective integration matrix—A method of identifying to the trainer-evaluator (or training developer) those individual tasks that support accomplishment of a collective mission or task.

Individual/Collective Training Plan—A plan developed to reflect how training on new and improved equipment will be incorporated in CONUS schools, training centers, and used worldwide. The plan details all training support required for weapon/equipment systems. It also describes the training required, both individual and collective, for each MOS associated with the weapon/equipment system.

individualized instruction—An instructional method which permits individual characteristics, learning styles, and intellectual level of the trainee to be a major determinant of the kind and amount of instruction/training given. It nearly always implies some form of individual pacing.

individual-paced instruction—Instruction which permits: a. Progress at individual pace; b. Open entry and credit by examination; c. Systems design and individualized course management; d. Use and reliance on educational/instructional media; e. Open exit graduation forecasting. Also referred to as self-paced instruction.

individual-paced management plan—Arrangement whereby instruction is scheduled and conducted for individual students rather than groups of students. Also referred to as self-paced management plan.

individual soldier's report—The results of a soldier's SQT performance. One copy goes to each soldier giving: SQT score, scorable units scored, go/no go, units not performed, etc.

individual training—Training which the individual officer, WO, NCO, or enlisted person receives in institutions,
units, or by extension self-study, that prepares the individual to perform specified duties and tasks related to the assigned MOS and duty position.

Individual Training Plan—A five-phase process for implementing the commandant's concept and strategy for developing, producing and supporting the individual training for a specific MOS, from entry level to the highest skill level. The ITP identifies the resources and time required for developing and conducting resident and extension training. The five phases are: Analysis, Design, Development, Implementation, and Evaluation.

Individual Training Plan Proposal—A document which precedes Phase I of the ITP. It is the commandant's proposal for an ITP, establishes resource priorities, requirements, and expenditures, and outlines the commandant's plan for meeting the new or revised training requirement.

individual trial—In lesson-effectiveness testing, this is the initial tryout of lesson materials on a small group of soldiers representative of the target population. See also formative evaluation.

industry recognition program—Identification of civilian skills that are related to military training/skills which are nonapprenticeable but have direct transferability to civilian occupations and to those apprenticeable skills for which documentation beyond the journeyman level may be feasible.

in-house development—Lessons designed and developed within an individual school using school resources or contract services procured by the school from local civilian community, using a local installation contracting office. See also in-house work: AR 310-25.

initial entry training—Introductory training for enlistees that provides the skills and knowledge needed to perform MOS and related duties at the first unit of assignment. IET includes Basic Training, Advanced Individual Training, One-Station-Unit Training, and One-Station Training.
initial operational capability—The first attainment of the capability by an MTOE unit to employ effectively a production item or system, provided unit personnel have been trained to use or employ the item or system; the unit can be adequately supported in the field in such areas as maintenance, repair parts, documents and training; and a favorable decision has been made on the qualification of the item or system for entry into the inventory for other than test purposes.

initial screening training effectiveness analysis—The initial training effectiveness analysis (TEA) study conducted after a system has been fielded in order to: a. Determine if actual effectiveness (EA) and design effectiveness (ED) are essentially equal or if significant performance gap exists; b. Determine if a cause and effect relationship exists between demonstrated soldier proficiency and attitude and trainer proficiency and attitudes; and, c. Examine aspects of the training environment which are most likely related to the EA/ED relationship. See also TRADOC Reg 350-4.

in-process review—See Cl, AR 310-25.

installation contract—See contract.

installation support schools—Schools organized and operated by individual units or commands to meet local training requirements.

institutional training—Training, either individual or collective, conducted in schools (Army service school, USAR school, NCO academy, unit school) or Army Training Centers.

instructional conditions—Instructional atmosphere including environmental, physical and psychological factors. The amount of participation which the instruction requires of the learner. Instructional conditions may be active (the learner produces or practices) or passive (the learner sits and listens).

instructional delivery system—A medium or combination of media, including personnel, equipment, and software used to convey instruction to the student.
instructional designer—Person who designs and develops a training program based on a systematic analysis.

instructional management plan—The specifications for the scheduling, instruction and evaluation of trainees toward the goal of training completion.

instructional program—A document/composite of instructional/learning strategies, equipment, materials (etc) used to achieve a set of training objectives.

instructional setting—See instructional site.

instructional site—A term often used synonymously with instructional setting. Despite semantic preferences, recognition of basic distinction between form of training (self-study/SOJT, etc) and location of training (resident/job site) is important. In this context, site and setting are designations of training location not training form. See also training site selection. In job/task analysis the analyst is concerned with site (location) selection not training form selection which is the task of the designers/developers.

instructional support—Learning resources; different kinds of material, number of instructors, amount of time, etc., which will contribute to the learning situation.

instructional system—The training component, distinct from the operating system by location, authority, or mission, that is concerned with the preparation of individuals to serve the operating system.

instructional systems development—A fully documented, detailed systematic approach to instructional development. One example is TRADOC Pam 350-30.

instructional systems design—The systematic instructional design/implementation strategy which includes the following elements: analysis, design, development, evaluation. Regardless of whether one intends to deliver instruction through programmed instructional
materials, text books, instructional television, motion pictures, tech lessons, or other forms, the model for the planning, design, and implementation of this instruction remains essentially the same.

instructional technology—The application of accumulated technical and research based knowledge, research techniques, and invention to the solution of educational and training problems. These techniques and processes have been derived from the management sciences and practices, the behavioral sciences, and the communication technologies and sciences.

instrument—In testing/evaluation, a test and/or other measuring device used to determine achievement (go/no-go) or the relative standing of an individual/group or a test objective (e.g., attitude, behavior, performance objective, etc). Tests, rating forms, inventories, and standard interviews are all evaluation instruments. See also instrumentation: C2, AR 310-25.

integrated logistics support—A composite of all the support considerations necessary to insure the effective and economic support of a system or item of equipment for life cycle. The elements of ILS are: the maintenance plan; the support and test equipment; the supply support; the transportation and handling; the facilities; the logistics and support resource funds; logistics support management information; and the personnel and training. The personnel and training element considers the number of personnel and skills necessary to operate and support an item in its operational environment and the processes, procedures, and equipment used to train the personnel in the operation and support of the item.

integrated technical documentation and training—This term has been replaced by skill performance aids (SPAS).

internal evaluation—In individual training, the assessment of the effectiveness of an instructional program in terms of student performance on stated terminal learning objectives. See also formative evaluation.
internal training/evaluation—In unit training, an exercise sponsored, controlled and evaluated by the performing unit for the purpose of self-evaluation and correction of weaknesses. This provides the trainer-evaluator with a means to train and simultaneously evaluate the ability of his unit to perform critical combat missions/tasks.

Interservice Training Review Organization—An organization of uniformed services established to improve the cost effectiveness of service training consistent with individual service requirements without impairing the quality of the training.

item analysis—The process of evaluating single test items by any of several methods. This usually involves the determination of how well an individual item separates examinees, its relative difficulty value, and its correlation with some criterion of measurement.

job—The duties and tasks performed by a single worker constitute his job. If identical duties and tasks are performed by several individuals, they all hold the same job. The job is the basic unit used in carrying out the personnel actions of selection, training, classification, and assignment. Job, duty position and duty assignment are synonymous and can be used interchangeably. However, it should be noted that in certain cases job/duty position contains only one duty and in other cases more than one duty. See also duty position: C2, AR 310-25.

job analysis—The process used to identify all tasks required of/associated with the jobs which comprise an officer or enlisted specialty. It consists of collecting data to identify all jobs/duties, pertinent target population data, preparation of a task inventory and culminates in the selection of tasks for training/critical tasks.

job & task analysis course—A course designed within TDI to provide the generic skills needed for the service
school analysts to perform a designated job. It should also be administered to anyone associated with performing or evaluating job and task analysis products.

job & task analysis worksheet—TRADOC Form 550. A "stubby pencil" worksheet used to assist the analyst and designer of training development products with empirical data on a given task. This form 550 is not a dictate; however, to permit inter-service school communications, data within each block (to include the block number) must remain for data exchange and compatibility. Any form used by a school in lieu of TRADOC Form 550 should be designed with the above in mind. Supplemental data (e.g., LSAR data sheets) should be attached to provide backup/supporting data for empirical purposes/audit.

job book—A book for the NCO supervisor useful in maintaining empirical data (training record) on a soldier's work performance in his duty position. It assists the NCO supervisor in keeping track of a soldier's ability to perform the tasks of a duty position, and planning to meet the training needs of the individual soldier.

job expert—An individual who has had recent field experience with soldiers in job performance/supervision. Although the terms "subject matter expert" and "job expert" are often used interchangeably they are not synonymous. For example, the industry representative for an item of equipment may be an SME, but the individual who has used or supervised the use of that item in a unit is a job expert. The job expert is always an SME, but the SME is not necessarily a job expert. See also subject matter expert.

job fidelity—The degree to which a testing situation truthfully and accurately reflects the job situation.

job performance aid—A checklist, instruction sheet, or other device that guides or assists in job performance. This offers an alternative to training rather than an actual method of training; it is
developed to eliminate or minimize training requirements for some tasks.

job performance measure—An instrument used to evaluate proficiency of a job holder on each task he performs. See also instrument.

job performance test—An instrument used to determine whether or how well an individual can perform a job. It may include either all of the job performance measures for a particular job or a subset of the job performance measures. See also job performance measure/instrument.

Job-Site Component—A performance oriented test (within SQT) which combines the standardization of the Hands-on Component with the flexibility of testing by the supervisor on the job. Designed much the same as the Hands-on Component, with detailed step-by-step performance measures, it brings the supervisor (NCO) directly into play as the scorer. The test can be administered by single task or groups of tasks, and allows the unit to select the time of administration. As the JSC will be fielded 6 months prior to the start of the test period, units will have unlimited training time. Similar to the HOC, the JSC is also a one shot evaluation, encouraging units to train up for the test. The JSC will be designed to test soldiers on the equipment used on the job and not on equipment peculiar to the MOS but not found in the unit. This will be done by developing a task series for the different types of equipment found in the field. The unit can then select a specified number of tasks from the various series which applies to its unique situation.

job site scoring book—In SQT, the document which contains instructions the scorer issues the soldier and the score sheets used for each task tested in the Job-Site and Hands-On Component. The score sheets are used to record the soldiers performance on the tasks, providing immediate feedback to the soldier as well as the Training managers.

job/task analysis process—The systematic approach of analyzing jobs/tasks as defined by TRADOC documen-
job training package—An integrated individual extension training program for use by trainers in field units. The JTP will contain all the training materials available to train specific tasks in support of a duty position. In addition, the JTP will include instructions as to the recommended sequencing, frequency, and location for teaching individual training tasks.

journeyman—A person that has learned a trade and works for another person in his specialty. See also Army Apprenticeship Program.

key elements—Elements which represent the most important part of the task. Key elements are those which have been identified as being the most common sources of failure in performance of the task or as having serious consequences of failure. See also element.

kit—The self-contained instruction material developed, reproduced and packaged for distribution to soldiers in the field. A kit may be in an audiovisual, printed text or audio-only format. Closely related kits, those dealing with the same subject areas, will constitute a lesson.

kit design approach—A procedure prepared by a contractor and contains the description of the kit, how the kit will be developed, outline or size and content, outline of administrative requirements to support the kit, and provisions for design changes.

knowledge—In task performance, the minimum information about conditions, desired goals or end results, and means and methods for reaching goals needed by the worker to insure success in performing a task. Knowledge categories include: a. Conduct knowledge (e.g., rule, principle; Ex: "Exercise care when tightening nuts—do not over tighten them"); b.
Perceptual knowledge (e.g., when it should be applied in the work situation; Ex: "Overtorquing can damage an engine"); c. Practical application of the knowledge (e.g., "Know when and how to use a torque wrench").

knowledge of results—Feedback information provided to the student indicating the correctness of his response. Evaluative knowledge of results indicates what a student is doing right and what he is doing wrong. Comparative knowledge of results indicates how the student's response compares to the objective or standard established by the instructor.

learning activity—The specific behaviors a student performs during a particular segment of learning.

learning analysis—A procedure to identify task elements and their related skills/knowledges that must be learned before a person can achieve mastery of the task itself. See also learning objective and learning step.

learning characteristics—The traits possessed by learners that could affect their ability to learn (e.g., age, I.Q., reading level, etc).

learning hierarchy—The relationships among tasks in which some tasks must be mastered before others can be learned. See also skill hierarchy/dependent relationship.

learning objective—A subunit of terminal learning objective consisting of a precise description of what is to be learned in terms of the expected student performance under specified conditions to accepted standards. These learning objectives identify the mental skills, information, attitudes, or physical skills that are required to perform the terminal learning objective. See also learning step and terminal learning objective.

learning resource center—The focal point for organized training support and provides the learning environ-
To conduct individual and small group training. The center should contain media equipment and software material to conduct group and individually paced instruction. It is one of the most flexible, efficient tools a commander has to accomplish his individual training mission and increase unit effectiveness.

learning step—A subunit of a learning objective derived when the latter is analyzed into its component parts. See also learning objective and terminal learning objective.

lesson—In TEC, the instructional material for one task or one subject area. A lesson may be composed of one or several closely related kits.

lesson administrative instruction—In TEC, the detailed administrative information which accompanies each lesson. The LAI includes both a pretest and a post-test.

lesson content analysis report—A contractor developed outline of the general approach for constructing instructional material to support a lesson specified by a proponent. Contains an appraisal of the adequacy of GFM.

letter of agreement—A jointly prepared and authenticated document in which the combat developer and the materiel developer outline the basic agreements for further investigation of a potential materiel system. See also AR 71-9.

letter requirement—An abbreviated procedure for acquisition of low value items. It is jointly prepared and authenticated by the combat developer and the materiel developer. See also AR 71-9.

life cycle system management model—A model which outlines the acquisition of major and non-major systems by the Army. It is a flowchart outlining the acquisition system from materiel concept investigation to ultimate phase out and disposal of unneeded systems. It is divided into four acquisition phases: a. Explanation of alternative system concept phase; b.
Demonstration and validation phase; c. Full-scale engineering development phase; and d. Production and development phase. See also AR 11-25.

line copy—Any copy that is solid black with no graduation of tones, such as line work, type, dots, etc.

link trainer—Mechanical training device which simulates the cockpit of an aircraft. More recently is referred to as a flight simulated training system.

logistics support analysis—An analysis of manpower requirements, operator and maintenance quantity/skills, personnel training requirements, and training materiel requirements.

machine-scorable test—A test that may be scored by means of a machine. The examinee records responses on separate test answer sheets (TAS) with an electrographic pencil. The pencil marks are electrical fingers for registering correct responses and indirectly registering incorrect responses.

maintenance—The physical act of preventing, determining, and/or correcting equipment faults.

major Army command—See AR 310-25.

management plan—A program for the assignment, monitoring, and assessment of the personnel, materials, and resources dedicated to a specific mission, operation, or function.

maneuver arms—in ARTEP development, consists of armor, cavalry and infantry.

manual for the administration of hands-on component—The detailed instructions and administrative requirements for conducting the job-site component. The manual contains all information needed by the Test Control Officer (TCO) and test site managers (TSM), to prepare for and administer the hands-on component. While its purpose is to ensure that administra-
tion of the test is standardized Army-wide, it serves as an excellent training document.

manual for the administration of job-site component—In SQT the detailed instructions and administrative requirements for conducting the hands-on component. The MAJSC will be developed and fielded six months prior to the start of the test period. Early fielding of the MAJSC provides the field an excellent training document which can be used throughout the test period.

master kit—In TEC, a kit containing all the master materials, i.e., camera-ready copies, which are constructed from an approved final draft.

master mechanicals—In TEC, the final copy of a printed TEC lesson which is camera-ready for printing.

master tape—The final recording of an audio-only lesson or the audio portion of an audiovisual lesson ready for mass reproduction. Can also refer to master copies of TV tapes combining audio/video.

mastery—In learning, the attainment of all of the specified minimum requirements for a specific performance. Criteria for mastery are defined in the design phase of the ISD Model.

materiel developer—The command or agency which, in response to HQDA objectives and requirements, is responsible for research, development, and production validation, and product improvement of materiel systems (to include the system for its logistics support). See also AR 71-9.

mean—Arithmetic average calculated by adding up all scores and dividing by the number of scores.

measurement—The process of assigning numbers to objects to represent quantities of attributes. Types of measurement include nominative, ordinal, interval, and ratio.

measurement errors—Errors which occur due to unreliability of the measurement process. These errors are random
and are never completely absent. In addition, these may be systematic (non-random) errors due to some fault in the measurement process.

**mechanical**—See camera-ready mechanical.

**media**—An agency, instrument or other means for presenting instructional material, e.g., literature, audio-visual, devices, simulation.

**media alternative**—A substitute means for presenting materials.

**media mix**—A combination of different media used to present a unit of instruction.

**media pool**—All of the media options suitable for a given unit of instruction. The final media choice is drawn from the media pool.

**media selection**—The process of determining how instruction is to be presented to the student.

**mental skills**—Those processes of identifying, classifying, using rules, and solving problems that involve active mental processing. Mental skills include such functions as thinking, reasoning, analyzing, judging, inferring, etc. See also skill.

**methods-of-learning course**—A criterion-referenced, self-paced, faculty training program for Reserve Components incorporating self-paced course manager training and other instructional technology required for award of the instructor SQI or ASI, as appropriate.

**military occupational data bank**—See Army Occupational Survey Program.

**military occupational specialty**—See Cl, AR 310-25.

**military personnel center**—US Army Military Personnel Center, Alexandria, Virginia, the Headquarters Department of the Army Field agency responsible for personnel operations; proponent of systems, procedures, and implementing regulations for personnel management.
military qualification standard—A systematic officer education and training program recommended by Review of Education and Training for Officers study group. MQS provides a framework for officer education and training that links self study, resident schooling and on-the-job experience. MQS provides for orderly and progressive training for each officer.

mission diagram—A diagram that shows the supporting training relationship of a mission to other missions, given a specific echelon responsible for performing that mission. Where applicable the relationship shows the trainer-evaluator how the performance of his mission contributes to the next higher echelon's missions and how the performance of lower echelons contribute to his mission. See also supplemental missions; task/mission diagram.

mnemonics—A technique designed to aid one's memory.

mode of instruction—A method of scheduling materials presentation. The instructional mode may be individualized (individual pacing) or group (block scheduling).

module—An individualized self-instructional package containing all the necessary materials a learner needs to meet some or part of an instructional terminal learning objective or grouping of like tasks that are easily trained together. See also C2, AR 310-25.

MOS certification instructions—Guidance provided to the commander for the award of an MOS. Included are methods for monitoring proficiency and justifying. It is a part of JTP TMIP.

multi-echelon training/evaluation—A technique wherein training is simultaneously accomplished at more than one echelon. For example, during a battalion FTX, specific company and section training is also ongoing. Multi-echelon training and evaluation is an inherent design characteristic of ARTEP.

multimedia—Use of more than one medium to convey the content of instruction. Media available for use may
include, but need not be limited to, texts, programmed instruction, audio and video tapes, slides, film, television, and computers.

multimedia package—A self-contained instructional unit in more than one presentation medium.

narration—The voice printed version of verbal descriptions on an audiovisual program.

narrator—The person whose voice is heard describing or commenting upon the content of a film, television program, etc.

Naval Training Equipment Center Project engineer—The person who insures quality control through inspection of products for compliance with the technical standards required by the contract, and is directly responsible to PM TRADE.

needs analysis—The process used to analyze the discrepancy(ies) determined from a needs assessment. This analytical process addresses the specific nature of the deficiency.

needs assessment—The process in which performance discrepancies are focused upon to determine where the discrepancies exist (e.g., environmental, training, instruction, personnel, equipment).

new equipment training—Training which provides for the initial transfer of system/equipment/component technical information from the materiel developer to key military and government personnel.

nondevelopment programs—Items or systems available for procurement with no expenditure of RDTE funds.

nonperformer—An individual who cannot meet a specified performance standard for a designated task.
nonsystem device—A device developed to support general military training, training on more than one item/system or several different types of equipment. Such device may be developed, funded, and procured by either the appropriate materiel developer or trainer.

nonverbal test—A test that requires little or no speaking, reading, or understanding of language on the part of the examinee either in connection with comprehending directions or making responses. Directions may be given pictorially or in pantomime. Also referred to as a non-language test.

norm-referenced test—A test which grades a student in relation to the performance of other students in contrast to criterion-referenced testing wherein a student is graded in relation to a prespecified performance standard. See also criterion-referenced test.

norms—In norm-referenced testing, the derived distribution of test scores. Describes how a defined group of people performed on the test and does not carry in itself any value judgments about "good" or "bad" performance. See also norm-referenced test.

objective test—An instrument in which there is little or no disagreement among experts as to the correctness of response and on which the result obtained is almost completely independent of the person doing the testing and scoring so long as directions are strictly followed.

objectivity—In testing, the degree to which a test is scored the same by two or more scorers acting independently.

observation interview—A dialogue wherein a job holder is observed in the job environment performing all or a substantial part of the job. The job holder performs the job while the analyst asks questions.
occupational survey—See Army Occupational Survey Program.

off-line—In training development, an activity which does not take place as part of the regular production process.

one-station training (1)—Initial entry training (IET) conducted at the installation in two distinct phases, BT and AIT, both phases in the same unit with the same cadre. Each phase may have a separate POI or may be combined into one common POI. BT and AIT instruction are discernible phases of training.

one-station training (2)—Initial entry training (IET) conducted at one installation in two distinct phases, BT and AIT, each in a different training unit with different cadre and separate POI.

one-station-unit training—Initial entry training conducted at one installation in one unit with the same cadre and one POI. BT and AIT instruction are integrated in order to permit the early introduction of MOS specific training, followed by adequate reinforcement training to assure mastery.

on-the-job experience—Experience gained by the soldier while working in a duty position at a skill level.

on-the-job-training—See AR 310-25.

operational concepts—The ways in which people and things would be arranged and employed and the training impacts of such arrangements and employments.

operational environment—The conditions that might exist at the time of use of the systems on which training is conducted.

operational test criteria—Expressions of the operational level of performance required of the military system to demonstrate operational effectiveness for given functions during each operational test. The expression consists of the function addressed, the basis for comparison, the performance required, and the confidence level.
operational tester—That command or agency, as designed by DCSOPS, assigned responsibility for conducting operational testing of items or systems. It derives program and budget information for operational testing (OT); writes OT portion of the coordinated test program (CTP); determines when, where, how, and by whom OT will be accomplished; prepares operational test design plans; conducts or directs the conduct of OT; reports on test results; and provides independent evaluations.

operational testing—Testing and evaluation of materiel systems accomplished with typical user operations, crews, or units in as realistic an operational environment as possible to provide data to estimate: a. The operational effectiveness, and operational suitability (including survivability/vulnerability, compatibility, interoperability, reliability, availability, maintainability, logistic, supportability, safety, health, human factors, and training requirements) of new systems. b. From the user viewpoint, the system's desirability, considering systems already available and the operational benefits and/or burdens associated with the new system. c. The need for modification to the system. d. The adequacy of doctrine, organization, operating techniques, tactics, and training for employment of the system; the adequacy of maintenance support for the system; and, when appropriate, its performance in a countermeasures environment.

operator—An individual who uses equipment or who accomplishes a limited number of duties to enable a system to function as designed.

outline test plan—The formal document included in the FYTP which contains appropriate administrative information, the test purpose, objective, scope, and tactical context, resource requirements, and cost estimates.

overlearning—The continual practice on learning a task by a person who has correctly performed the task (i.e., practice beyond what is required for retention). Also referred to as overtraining.
overt behavior—Behavior which is observable/measurable. See also covert behavior.

peer training—A form of instruction in which students at the same or more advanced level of knowledge provide instruction to other students at the same or lower level of knowledge on the specific objectives under consideration.

performance-based item—Items which are based on the examinee's skill/knowledge of correct performance of the task even though he does not have to actually perform the task to respond to the item.

performance evaluation—Data collection/analysis in order to determine the success of students on a specific task as a result of a training program.

performance evaluation tools—Competency tests that allow the trainer to profile his soldier's proficiency and identify weak areas so that training can be efficiently planned for the areas of most critical need. A part of JTP TMIP.

performance gap—An operationally significant discrepancy between design effectiveness ($E_D$) and actual effectiveness ($E_A$) indicative of weapon system performance ineffectiveness. A performance gap is indicative of training subsystem, hardware subsystem, soldier characteristics, trainer characteristics, and/or training environment problems which must be identified and corrected. See also TRADOC Reg 350-4.

performance measures—Those behaviors/products/characteristics that the scorer observes/checks to determine if the soldier has performed the task correctly are called performance measures. The standard by which a job performance is judged. Also, can be degree(s) of simulation utilized in test development.

performance-oriented training—Training which emphasizes the skills and knowledges that are needed to perform
a task or job through individual practice and constant evaluation. 2. The conduct of individual or collective training in which one or more tasks are performed under specified conditions to a specified standard. Differs from traditional practical exercises in that performance is measured against a specific standard. Also see criterion-referenced instruction.

performance test—The test criterion by which performance of a task is measured for degree of skill mastery. Such tests are prepared in terms of the specific task to be performed, conditions under which it will be performed and the absolute standards for acceptable performance. It may contain one or more performance measures. See also Skill Qualification Test.

population—A well-defined group of subjects/things/etc., from which measurements are taken (e.g., all students 6 feet or taller).

posttest—A test administered after the completion of instruction to assess whether a student has mastered the objectives of the course or unit.

power test—A test in which items are usually arranged in order of increasing difficulty and in which examinees are given all the time they need to complete as many items as they possibly can. See also speed test.

practice effect—The influence of previous experience in taking a test for the second time or more. Familiarity with directions, types of items, and questions when taking a test again usually helps the examinee to score higher. Practice effect is greatest when the time interval between the test and retest is short and when the same form is administered.

pre-award phase—in TEC, the phase of lesson development process during which the contract is written. Also called the front-end phase.

predictive validity—The ability of a test score to accurately forecast future performance.
predifferentiation of stimuli—The process of pointing out the distinguishing features of an object and explaining the differences between them.

preproduction sample—In TEC, the sample product of a TEC kit submitted to the proponent school and PM TRADE for approval prior to the mass reproduction run. In the audiovisual medium the sample is an answer print. In audio-only the sample consists of a duplicate of the master tape in an appropriate tape cassette. In printed test the sample consists of proof prints of master mechanicals.

pretest—A test administered prior to instruction to determine how much the student already knows and to determine if student needs to take this particular instruction.

printed text kit—In TEC a printed lesson, used when this medium is educationally sounder than others, and when the lesson content is subject to continual change.

printer's dummy—A copy of the camera-ready mechanical, which is assembled exactly as the final product will be and includes blank pages, if any.

procedural task—A task for which there is a set procedure for performing the task, for which, if one follows that procedure, the desired results will occur every time and for which if one does not follow the procedure the desired results will not usually occur. This may be either unitary (i.e., linear) or multiple (i.e., branching).

process evaluation—An early stage in ISD development that identifies which steps in the model will be used for the course under development. The purpose of the process evaluation is to describe and document the actual developmental process for this particular instruction.

process task—A task which consists of a series of steps resulting in the soldier obtaining a single discrete
result. The task is evaluated by observing the process and by scoring each step or element as it is performed in terms of sequence, completeness, accuracy, or speed. Examples are "put on the protective mask" and "take oral temperature".

product task—A task which terminates in a discrete product or outcome which is observable and measurable. The task is evaluated by looking at the product or outcome in terms of completeness, accuracy, tolerance, clarity, error or quantity. "Repair the carburetor" could also be an example of a product task. Another example is "determine a magnetic azimuth with a lensatic compass".

professional development course—A course designed to prepare commissioned officers, warrant officers, and noncommissioned officers to effectively perform the duties required in assignments of progressively greater responsibility.

program analysis resource review—The purpose of the PARR is to influence the HQDA issues and priorities for inclusion in the Army's Program Objective Memorandum (POM). It addresses programs 2 to 7 years beyond the present time.

program evaluation review technique—1. A method of monitoring the flow of a large project by breaking it down into small individual activities and assigning each activity a specified amount of time for completion. 2. A management technique used for project planning, scheduling and control. It involves network diagramming and critical path determination and the application of statistical methods to the time values of activities and events. In addition, PERT/COST includes the estimation of dollar resources in relation to time. This information is used in management decision making to determine which activities may be accelerated or delayed in order to reduce time and cost for project completion.

programmed instruction—1. In branching mode, a printed text containing frames of information and multiple choice questions concerning the information, orga-
nized in such a way that the trainee's choice of response directs him to remedial frames or advanced material, as appropriate. The material is carefully sequenced, tested, and revised to ensure that a specific student population will achieve stated behavioral objectives with a predetermined level of success. 2. In linear mode, 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. The material is carefully sequenced, tested, and revised to ensure that a specific student population will achieve stated behavioral objectives with a predetermined level of success.

program of instruction—See Cl, AR 310-25.

project manager—An individual chartered by the Secretary of the Army, who is assigned the responsibility and is delegated the full line authority for the centralized management of a specified development/acquisition project.

project manager for training devices, acquisition director—Individual who monitors contract performance and directs and coordinates the development and implementation of remedial actions when problems occur. Does not normally interact directly with the school.

prompt—A word or other signal that initiates or guides behavior; a cue. See also cue/signal.

proponent—See Cl, AR 310-25.

proponent school—The TRADOC school designated by CG, TRADOC, to exercise supervisory management of all combat/training development aspects of a materiel system.

qualification training—Introductory training, usually entry level training, given an untrained soldier that results in the soldier performing a specified task within Soldier's Manual standards.
qualitative and quantitative personnel requirements information—A compilation of specified organizational, doctrinal, training and personnel information developed by a materiel development agency (specified in AR 71-5), in coordination with the combat developer and trainer for a new or improved materiel system. This information is used to determine the need for establishment or revision of an MOS/SSI and to prepare plans to provide the numbers of trained personnel required to operate and support the new or improved materiel system. See also AR 611-1.

quality control—In training developments, a process of measurement/evaluation used in order to maintain standards through adjustments in instructional materials or procedures. See also AR 310-25.

quality control data—Information which reflects the degree of success achieved by a system or operation.

queuing—In training, the queue or line-up of users waiting to be serviced by the training system.

random sample—A sample which has the property not only of giving each individual an equal chance of being selected but also of giving each combination of individuals an equal chance of selection.

random selection—A process of choosing people or objects at random rather than according to some systematic plan.

rank—The relative standing of an individual on a given trait, with reference to other members of the group. When all members of a group of ten are arranged in order from lowest to highest, the number 1 may be assigned to the one who stands highest, 10 to the lowest. Such an arrangement is called rank-ordering.

rating scale—A measurement device in which a rater must choose a response from a range of choices arranged in a continuum from low to high or good to bad, etc.
raw score—See C2, AR 310-25.

readiness—The ability of a military unit to perform its wartime mission.

reading grade level—A person's ability to read and comprehend what they are reading is represented by a numeral equating to a given level of schooling in which a student should be capable of reading/comprehending written matter. An RGL of 7 is representative of an individual being able to read/comprehend 7th grade subject matter. See also DA Cir 310-9.

refresher training—See additional training.

reinforcement—A stimulus presented after the learner has correctly responded which increases the likelihood that the desired response will occur again.

reliability—The degree to which a test instrument can be relied upon to yield the same result upon repeated administrations to the same population. Example: A reliable scale is one which yields the same weight for an object on repeated weighings. It differs from validity in that it is concerned only with the dependability or consistency of the measure and not with whether the instrument measures what it is supposed to measure (validity). See also C2, AR 310-25.

reproduction phase—In TEC, the phase of lesson development process which covers the reproduction and distribution of approved TEC lessons.

required operational capability—A DA approved document which states concisely (normally in four pages or less) the minimum essential operational, technical, logistical, and cost information necessary to initiate full-scale development or acquisition of a materiel system. See also AR 71-9.

reserve components—See AR 310-25.

resident schools—A training location other than the soldier's unit and where he/she is a full-time stu-
dent. This includes NCOA, service schools, training centers and USAR schools.

response bias—A tendency to favor a certain response over others. See also bias.

response time—Actual elapsed time from receipt of cue to demonstrated required performance.

revision plan—A detailed outline of the procedures to be taken to modify the structure or content of a course.

reward sequence—The timely scheduling of a reward/reinforcement upon completion of a proper response/activity (e.g., promotion when all grade requirements are met). See also contingency management.

sample—A limited number of observations out of the entire population for use in making inferences about the population. Ex: All soldiers at Fort Monroe would represent a sample, though not random, of all soldiers Army-wide.

sampling plan—A procedure for selecting a small but representative group from a larger population.

scale—in media selection, the dimensional representation of an object. A model may, for example, be full scale, half scale, (or any other representation) with the actual object. See also C1, AR 310-25.

scorable unit—The basic module of the SOT. In the HOC, an SU can consist of up to 20 performance measures. In the scoring process for the SOT normally one point is given for each correct SU. One to three SU may be written to test each task. The number of SU written to test a task will generally be dependent upon the criticality of the steps within a specific performance measure within the task.

scoring template printout—A computer printout showing information coded for a particular SOT. It is used to
verify the proper coding for correct and incorrect answers.

scoring template worksheet—The primary school-prepared answer key for an SOT. ITE personnel use the worksheet to encode entries onto template marksense forms for machine processing. The data, now computerized, is used to score all SOT answer sheets.

scratch tape—The initial narrative recorded on tape for review, correction, improvement, and approval of finished narrative.

script—The written text of an audio portion of a presentation. Also the detailed plan of all that constitutes an audiovisual or audio-only lesson.

self-paced instruction—See individual-paced instruction.

self-paced management plan—See individual-paced management plan.

self-study—Individual study by which the soldier learns new skills or knowledges or reinforces skills or knowledges already learned. This study should be in tasks or other areas directly related to the individual's MOS. It may include participation in the ACCP or the use of a JTP or components from the JTP. It includes the study an individual must accomplish in preparation for the Skill Qualification Test.

sequencing—in training development, the proper ordering of instruction which allows the learner to make the transition from one skill or body of knowledge to another, and assures that supporting skills and knowledge are acquired before dependent performances are introduced.

sequential testing—A method of testing which allows the random selection of a single sample at a time, with the pass/fail result of a criterion test plotted on a control graph. The graph is constructed to ensure that acceptance or rejection of instructional materials is done with a known probability of error.
service school course—That part of an ITP at a specific skill level which is conducted in an Army Service School or Army Training Center. When supported by instructional materials from the proponent Army Service Schools, these courses may be presented in the USAR school institutional environment. Institutional courses provide professional development and/or skill progression training. TRADOC service schools and Army Training Center courses may award a specialty, MOS or identifier. Courses may be formalized in the Army Correspondence Course Program (ACCP) or presented in the using school-prepared exportable job training packages. Correspondence courses, both self-study and supervised, are accomplished while an individual is working in a particular duty position at a particular skill level and MOS. The training is closely monitored by the soldier's supervisor because of equipment, safety, or skill requirements. SOJT may be incorporated into correspondence courses.

service school training—Institutional training, either individual or collective, conducted in Army Schools or Army Training Centers, using instructional systems development materials.

shaping—The process of gradually changing a student's behavior until it conforms to the desired behavior.

shared task—In officer training, a task common to two or more specialties but not the majority.

signal—In training, the cue that initiates, directs or terminates an individual/group's response. See also cue/prompt/AR 310-25.

simulation—Any change from reality or any imitation of reality. Three types are common: simulating part of the system, simulating the operation of the system, and simulating the environment in which the system will operate.

simulators—Machines or processes designed to provide training which will have high positive transfer to the real world equipment or situation. Simulators
are ordinarily cheaper, safer, or more available than the actual situation or equipment.

single volume subcourse—A subcourse which is contained in a single mailable booklet.

site selection—See training site selection.

skill—1. In general, the ability to use one's knowledge effectively and readily in execution or performance; a learned power of doing something competently; a developed aptitude or ability. 2. In training, mastery/proficiency of a technique, procedure, etc., albeit mental or physical in nature. Mental skills include such processes as identifying/classifying/problem solving, etc. Physical skills include such activities as manual dexterity/other body movements. In many cases, physical skills involve mental processes and can properly be labeled as psychomotor skills.

Skill Component—A performance oriented test (within SQT) which requires the soldier to select the correct answer to a question and record that answer on a marksense form. The use of illustrations, diagrams, extracts, and audiovisual modes such as television, training extension courses, 35mm slides, etc., ensures fidelity to actual job requirements.

skill hierarchy—The "spreading out" of skills/behaviors required to accomplish the terminal objective. It identifies those skills that must be learned before proceeding to higher skills. It does not reflect a course map, how difficult the skills are to learn, or the sequence in which the parts of the job are to be completed. See also learning hierarchy/dependent relationship.

skill level—See C2, AR 310-25.

skill performance aids—1. A systematic approach to developing technical documentation and training. The key features are: a. The systematic analysis of the equipment to identify all performance tasks; b. The analysis of all tasks to develop step-by-step performance procedures; c. The identification
of performance tasks which require supplementary training, d. The development of lesson and training management materials to directly support the technical manual. Following the validation and verification of all materials, the technical manual becomes the primary resource for all training. The TM is the primary reference source for using the training materials. The systematic approach includes requirement for a front-end analysis (FEA) (i.e., task analysis, equipment analysis, functional analysis, behavioral task analysis). Basic SPAS concept/process includes (in sequence): front end analysis, technical manuals/training materials development, and verification of total package. 2. A support package which enables Army units to receive, use and maintain equipment with a minimum of outside technical assistance and outside training support. Training is restricted to the teaching of equipment specific task sequences, plus the use of the technical manual which is the basic reference.

skill progression course—A course designed to train military personnel in skills related to a specific MOS, ASI, or SQI.

Skill Qualification Test—A job-oriented criterion-referenced test of the soldier's ability to perform the critical tasks required by his job. SQT is used to assess task competence for training feedback and personnel management purposes.

skill qualification test requirements alert notice—An early notice informing the field of the tasks on the SQT and all equipment and personnel requirements needed to administer the test. The SRAN will be developed and fielded to be in the hands of the troops six months prior to the start of the test period. In order to meet this goal the SRAN will be placed in the scoring book of the Job-Site Component.

slide-tape—A combination of visual slides and an audio tape synchronized so that the audio describes the content of the slides.

small group trial—In training developments, the effectiveness of lesson material based on performance
of a small representative sample of the target population. See also formative evaluation/validation (general).

socialization—The process by which: a. the individual's behavior becomes consistent with the standards, values and attitudes of the organization; b. the individual gains the degree of technical competence necessary to make a meaningful contribution to the organization's efforts to meet collective goals and objectives.

soft data—Data obtained with test instruments having low reliability (e.g., attitude/opinion surveys, etc). See also hard data.

soft skill—An area of performance that does not have a definite beginning and end as do hard skill areas. Examples are counseling, supervising and managing.

soldier capabilities—The existing physical, physiological, mental information processing, perceptual, motor, and educational (civilian and military) development capabilities of soldiers relevant to performing the critical tasks necessary to operate and/or maintain a specific weapon system effectively.

soldier profile—A comprehensive descriptive statistical summary of the characteristics and capabilities of the soldier population that employs, operates, and maintains; supervises employment, operation, and maintenance; and, trains other soldiers to employ, operate, and maintain a weapon system targeted by a training effectiveness analysis (TEA) study. A soldier profile includes such variables as grade structure, demographics, mental and physical abilities, educational development, military training status, attitude, and current proficiency.

soldier's guidance—The "how to use" guidance for an individual soldier when the soldier is expected or desires to use training materials without supervision. A part of JTP-TMIP.

Soldier's Manual—A manual that lists for the soldier those critical tasks needed to perform satisfac-
torily at his present skill level. In addition, the SM tells the soldier how to perform the tasks, the expected conditions under which they will be performed, and the standards which must be met. The SM is the basis for the tasks used in the SQT.

Soldier's Manual of Common Tasks—A Soldier's Manual containing summaries of tasks appropriate to most Army jobs for which Soldier's Manuals have been developed. The SMCT is published by the US Army Training Support Center for use by soldiers whose MOS-specific Soldier's Manual has not been developed. The SMCT is superseded by the MOS-specific Soldier's Manuals.

sound/slide kit—35-mm slides and a draft narrative tape to represent what the finished audio visual lesson will be. Used in the review/approval cycle.

specialty—A grouping of duty positions having skill and job requirements which are mutually supporting in the development of competence in an officer to perform through the grade of colonel in the specialty.

specialty skill identifier—A number or letter denoting a specific skill that an officer has in addition to his primary specialty. Example: the letter 5K or number 8 after the specialty code identifies an instructor.

specific tasks—Tasks that are the lowest level of behavior and which meet the criteria of a task (see task). These are the products of refinement from gross tasks.

speed test—An instrument in which the time limit is set so that almost no one can finish all the items or tasks making up the test. See also power test.

SQT developer—A person engaged in writing, preparing, and validating SQT at the Test Development Agency (TDA). The SQT developer will be preparing tests for a number and variety of tasks. The developer's depth of knowledge of these tasks will vary. During devel-
opment, it is necessary to make use of subject matter experts (SME). These individuals are generally available within the TDA, either as coworkers or workers within other departments.

SQT notice—The notice which tells the soldier which tasks by soldier's manual task number and task title will be tested on the SQT; what component each task will be tested in; and, the reference or references by title, change and date the soldier needs to study in order to pass the task.

standardization—The administration of a test to a sample representative of the population with which it is to be used to determine the proportion of the group that will reach or exceed each test score. It is then possible to compare scores made by individuals on subsequent administrations of the test with the performance of the standardization sample.

standard—1. In ARTEP, a description of the minimum degree of training proficiency that a specific size and type unit must achieve in order to accomplish its mission and survive on the battlefield. There are no longer Level 1 and Level 2 standards. 2. In task analysis, a statement of how well a task must be performed. The standard specifies how well, completely or accurately a process must be performed or product produced. The standard reflects task requirements on the job. If a product standard, it is in terms of accuracy, tolerance, completeness, format, clarity, errors, or quantity. If a process standard, it is in terms of sequence, completeness, accuracy or speed. Both product and process must be observable and measurable. 3. See also AR 310-25.

step—See element.

stimulus characteristics—Those basic qualities or capabilities of a medium that are required to carry out the intent of the learning activity; for example, visual images, motion, color, and sound.

stimulus time—in TEC, the time the student spends viewing or listening to TEC lesson materials.
storyboard—A collection or series of small pictures which describe the action and content that will be contained in an audiovisual or visual-only production. A sequence of these small pictures comprises a storyboard.

student centered—Instruction that employs all the principles of criterion referenced instruction for the benefit of meeting the needs of the student.

subcourse—See Army correspondence subcourse.

subject matter expert—An individual who has a thorough knowledge of a job (duties/tasks) which qualifies him to assist in the training development process (e.g., consultation/review analysis/etc). See also job expert.

summative evaluation—The process of assessing the value of an overall program after it is in operation. See also evaluation/formative evaluation.

supervised on-the-job training—Structured training accomplished while an individual is working in a particular duty position at a particular skill level and MOS. This training is closely monitored by the soldier's supervisor because of equipment, safety, or skill requirements. SOJT may be incorporated into correspondence courses.

supervisor—Army officers (Commissioned and Warrant), civilians, and enlisted personnel (in skill levels 2 thru 5) responsible for the work actions of soldiers in lower skill levels.

supplemental missions—Those additional ARTEP missions performed in conjunction with a major collective mission in an ARTEP document. A major ARTEP mission not dependent on a supplemental mission, and may be trained/evaluated with or without the supplemental mission. Supplemental missions include such collective missions as install a hasty protective minefield, conduct passage of mines, conduct tactical roadmarch, occupy assembly area, etc. They are placed in a separate chapter of the ARTEP document so they
may be trained/evaluated in any sequence in an ARTEP scenario that best fits the needs of the trainer/evaluator. See also mission diagram.

supportive relationship—Skills and knowledges in one objective which have some relationship to those in another objective; the learning involved in mastery of one learning objective transfers to another, making learning involved in the mastery of the other easier.

survey—See field survey.

synchronizing pulse—An audible or inaudible sound used to coordinate the audio and video portions of a slide-tape program so that audio and video (i.e., slide and narration) are coordinated.

system—A process which synthesizes and interrelates the components of a process within a conceptual framework, insure continuous, orderly, and effective progress toward a stated goal. 1. An integrated relationship of components (personnel, training, logistics, hardware, and procedures) aligned to establish proper functional continuity toward the successful performance of a defined task or tasks. 2. In fielded system, any system currently in the active inventory that has been type classified or exempted from same. 3. In developmental system, any system currently in the acquisition process (LCSMM). 4. In total system, the system which encompasses all system elements which must be considered in analysis, testing, and development during the materiel acquisition process. These elements include materiel (hardware), tactical employment (organization), manpower (training, management, replacement), and logistical support (maintenance, supply, transportation).

system device—A device developed in support of a specific item/system. It is designed for use with only that system or item of equipment, including subassemblies and components. It is the responsibility of the item/system project manager or appropriate materiel developer to develop, fund, and procure a device concurrent with the parent system/item (DA Pamphlet
system master plan—The control document used to coordinate the development and implementation of an instructional program.

systems approach—A process for effectively and efficiently achieving a required outcome based on documented needs. a. In the context of a systems approach to instructional design and development it means: a process within which performance requirements are explicitly defined from an analysis which occurs prior to a training development effort with a subsequent specification of performance requirements in terms of behavioral objectives followed by the development of criterion tests which match job performance, with the appropriate curriculum development effort supporting the training on these specific training objectives and the whole process undergoing extensive formative and summative evaluation to ensure the validity of the process; b. A systematic approach to instruction or training must begin with an analysis of whether a discrepancy exists between what is and what ought to be. That is, if there is no requirement for higher trainee performance in the field, there is certainly no identified need for more or better training. Thus, training needs originate when new systems or procedures must be implemented, or when researchers or competent supervisors discover that personnel are unable to perform specific activities required in their duty position, diminishing a unit's capability to accomplish its mission.

system training device—A device which is developed in support of a specific item/system. It is designed for use only with that system or item of equipment, including subassemblies and components. It is the responsibility of the item/system project manager or appropriate materiel developer to develop, fund and procure a device concurrent with the parent item/system or to fill a training void for items/systems already fielded.
tailoring—In ARTEP, the process of using ARTEP by the trainer-evaluator to promote decentralized training of a unit based on the identified needs of the unit. Tailoring of ARTEP is accomplished by using a scenario of specific missions/tasks and duration to accomplish training objectives. In the case of units with severe resource constraints, tailoring will also include modification of the number and type of missions/tasks performed. This may dictate the establishment of intermediate training objectives (task, condition and standard).

TAK 004—A computer generated report sent to TCO's. This document announces which MOS will be tested in a test period. The TCO records the number of soldiers in his area of responsibility to be tested. The TAK 004 serves as the requisition for SQT materials.

talk-through technique—The technique used during simulation of an operational system; involves talking through each operation in the new system to determine decisions and contingencies.

target population—The population defined for a training developments effort to insure the training products produced are compatible with the personnel in the field or to establish the parameters for the baseline (skills and knowledges) entry point for any officer or enlisted specialty training requirement. To properly address this requirement four categories exist that must be identified at the beginning of each analysis: a. Target population in the field; no anticipated changes in the specialty; data items are required to insure existing training products are compatible with existing TP; b. New specialty being created, being built upon an existing specialty; data items are required to insure training products currently in existence provide the prerequisite skills and knowledges for newly created tasks or to create a training package to provide this building block principle. Requirements for newly created job/task(s) must exceed existing TP capabilities on which a new specialty is built; c.
New system(s)/equipment being acquired through the acquisition process; base line entry level on which the new training package will be premised/created must be identified. If entry level established by producer exceeds capabilities of available personnel for assignment to a new system/MOS, etc., a requirement may be generated to alert the TRADOC system manager, Human Factors personnel, etc. Requires developer/user interface; d. New analysis effort to ascertain a detailed description of requirements that must be included in an education/training system (e.g., officer job and task analysis).

task—1. In individual training, a unit of work activity that constitutes a logical and necessary step in the performance of a job/duty. In describing a task statement/description it should be detailed enough to provide minimal step-by-step directions and guidance that an individual in training could follow to complete the task successfully. The task statement has the following characteristics: a. verb, subject, and sometimes a qualifier; b. addresses specific actions; c. has a beginning and termination point; d. time rateable; e. observable; f. measurable; g. can be accomplished in isolation. A task is the smallest unit of behavior in a job that describes the performance of a meaningful function in the job under consideration. 2. In collective training, a unit of work activity that constitutes a logical and necessary step in the performance of a collective mission. In describing a task statement/description it should be detailed enough to provide minimal step-by-step directions and guidance that a unit/team in training could follow to complete the task successfully. The task statement should conform to the following characteristics whenever possible: a. verb, subject and sometimes a qualifier; b. addresses specific actions; c. has a beginning and termination point; d. time rateable; e. observable; f. measurable. In some cases, collective tasks will not be able to have time rateable and measurable standards, but will have to rely on trainer/evaluator judgment as to the successful completion of standards. A collective task is the lowest level of collective behavior in a
mission for a given echelon that describes the performance of a meaningful function in the mission at the echelon under consideration. 3. Extended analysis: In addition to la, b, c, f and g, task may be action based, cognitive in process (not observable) and results performance based.

task analysis—A process of reviewing actual job content and context to classify information into units of work within a job. The process provides a procedure for isolating each unique unit of work, provides a procedure for describing each unit accomplished and provides descriptive information to assist in the design and testing of training products.

task conditions—Factors which describe the necessary equipment and physical setting under which the soldier is required to accomplish the specified task on the job. Conditions describe the important aspects of the performance environment.

task delay tolerance—A measure of how much delay can be tolerated between the time the need for task performance becomes evident and the time actual performance must begin.

task element—See element.

task inventory—The document used to select tasks for training by the task selection board. It is developed in two stages: a. Preliminary task inventory: an initial, exhaustive list of all duties/jobs and tasks performed by a soldier in a specialty. The preliminary task inventory is refined by means of special surveys, job site visits, interviews, etc; b. Final task inventory: the resulting task list represents the final task inventory. The latter serves as the basis for the task selection board to select the critical tasks for training (i.e., Soldier's Manual tasks).

task learning difficulty—Time, effort, and assistance required by a student to achieve performance proficiency.

task limits—The cues in the job situation which mark the beginning and ending points of the task are called task limits/boundaries.
task/mission diagram—The diagram which shows what tasks should be trained first based on mastering simple tasks before executing more complex field training which incorporate simpler or lower echelon tasks. Thus the diagram shows training relationships, not necessarily performance sequences. For example, a simple task should be trained and evaluated in garrison in preparation for a mission that must be trained and evaluated in a local training area. See also mission diagram.

task selection board—A board of personnel (subject matter experts, personnel selected by the School Commandant, and at least one analyst) convened to review the task inventory and select tasks for training for submission to the School Commandant for approval as critical tasks. Guidance for the conduct of this board must be in writing and be maintained in the audit trail for the job and task analysis process.

task selection board SOP—Guidance for analysts and task selection criteria. SOP includes current doctrine, threat, and mission guidance, board composition requirements, powers of the head of the board, designation of arbitrator for disputes, training priority guidance and guidance to analysts (i.e., requirement to submit data on methods used to select tasks, justification for methods used, and other requirements as designated by the service school).

task standard—See standard.

task statement—A statement composed of three basic elements: a. specific action verb; b. object of verb; and c. qualifying phrase, as necessary, (e.g., sort unit mail). Two considerations contribute to an adequate task statement: purposes to be served by task performance, and individual performer of task. Both considerations require the following criteria for task statements be met: a. clarity; b. brevity; and, c. current usage terminology.

task step—See element.

task worksheet—The empirical result of the task analysis for each task selected for training/critical task; used by all follow-on developers.
TEA focus—The major factors which impact on individual or unit proficiency and which are addressed in a TEA study. These factors include soldiers, trainers, training/command environments, training subsystems, and hardware subsystems. See also TRADOC Reg 350-4.

TEA priority system—The automated TRADOC TEA priority system that will provide managers with essential information, provide input agencies with feedback and provide the basis for a three to five year TRADOC TEA plan. See also TRADOC Reg 350-4.

TEA handbook—The TRADOC published handbook that explains the concept, methodology, and the "how to" for the accomplishment of all types of training effectiveness analyses (TEA).

technical orders—Military regulations which deal with the specific nature of technical materials and equipment.

terminal learning objective—A specific description of the action, with conditions/standards, to be performed after training. Derived from job performance measure, TLO's are to be attained during training. TLO's are broken down into their component parts which are documented as learning objectives which may be further divided into learning steps.

terminal task—Normally a hierarchical grouping of Soldier's Manual tasks that results in the meaningful function of a job. However, a terminal task could be a single independent Soldier's Manual task. Each terminal task is independent of other actions and other parts of a job.

test—1. A process by which data are accumulated to serve as a basis for assessing the degree that a system meets, exceeds, or fails to meet the technical or operational properties ascribed to the system. 2. A series of questions or exercises or other means of measuring the skill, knowledge, intelligence, capacities, or other aptitudes of an individual or group. 3. Any device/technique used to measure the performance of a student on a specific task or subject matter. See also instrument/C1, AR 310-25.
test anxiety—Emotional apprehension on the part of some examinees concerning the prospect of taking a test, sufficiently severe so as to distort the results of the test.

test compromise—Unauthorized disclosure of a test or of test items, with the likelihood that prospective examinees will benefit from the disclosure, thereby distorting the results of the test.

test control officer—The individual responsible for the administrative functioning of SQT in the field. The TCO is the point of contact between the field and ITED. In TRADOC all TCO's are assigned within the operations staff section (CPT, G3); in some commands TCO's may be found in the administrative staff section (e.g., Gl, AG).

Test Development Agency—Schools and other organizations that develop and validate SQT.

test item analysis—Review of test items to verify their conformation to the adopted code and validity of each item.

testing constraints—Limitations such as time, money, personnel, facilities, and other resources, which prohibit job performance measures from being identical to the tasks they measure.

top-down analysis—The analysis process used to integrate collective tasks to individual tasks. A refinement process from mission statements to task statements.

TRADOC system manager—The user representative in the development and deployment of his system. He influences the process by sensing, coordinating, and facilitating all actions associated with his system. He is an energizer, organizer, integrator, and expeditor. He is the TRADOC counterpart of the DARCOM PM and is appointed by CG, TRADOC.

trainer—The individual/agency responsible for the conduct of individual/collective training designed to provide required performance skills: e.g., to operate and maintain items/equipment/systems; leadership, etc. See also C2, AR 310-25.
trainer/evaluator—In ARTEP, anyone who trains and/or evaluates; the dual integrated role of any leader (trainer or evaluator) involved in ARTEP. Training and evaluation are inherent in ARTEP. See also C2, AR 310-25.

trainer guidance—The "how to train" guidance for the NCO/supervisor that addresses environmental and equipment differences. This guidance provides information which allows the total integration of individual training into collective training and other day-to-day activities of the unit.

training—1. Activities designed to prepare individuals and teams/units for job/duty performance. 2. The teaching of job skills and knowledges. It can take a number of forms: e.g., self-teaching exportable packages, training manuals, individual learning packages, SOJT, institutional training, collective training, etc.

training administrator—The individual or team of individuals assigned to facilitate the trainee's learning. This does not consist of traditional instruction or passing of information but is a multi-faceted role of managing students and materials and functioning as a resource when required in the preparation, presentation, and validation of instruction. Also referred to as course manager/facilitator.

Training and Audiovisual Support Center—The agency which provides supported units with one-stop service for training and audiovisual equipment, devices, aids, and programs.

training and evaluation outline—A group of training objectives with suggested support requirements that support a specific mission/task for a given size and type unit.

training developer—1. In general, the agency/individual responsible for development of training strategy, training products and other requirements for both resident and unit training. 2. In developing systems, the command or agency responsible for the
development and conduct of the training which will provide the skills necessary to operate and logistically support materiel systems being developed or otherwise acquired. (For most equipment, this is TRADOC).

Training Development Information System—An automated system which will provide the management and production support of training at the job and task level needed by training developers and training managers in the TRADOC schools and HQ TRADOC.

training developments study—A training effectiveness analysis (TEA) study conducted: a. After a system has been fielded; and, b. Preliminary to the conduct of a CTEA for developing system and non-system training devices. The TEA is designed to: (1) Find the most cost effective ways to fix training subsystems found deficient by a TSEA study; (2) Find the most cost effective way to change training subsystems which are not deficient but considered too costly or in need of revision; and, (3) Serve as a catalyst to initiate the CTEA process if the result of "a" and "b" above establish the need for a new training device. See also TRADOC Reg 350-4.

training device—Any three dimensional object developed, fabricated, or procured specifically for improving the learning process. Training devices may be either system devices or nonsystem devices. See also system/nonsystem device.

training device requirement—A document prepared by TRADOC or the school which gives operational, technical, and cost information relative to a training device requirement necessary to obtain HQDA approval.

training effectiveness analysis (TEA)—The systematic application of formal analytical procedures, empirical methodologies, and interdisciplinary approaches to: a. Insure that the appropriate level of scientific methods are used in the development of training subsystems during the acquisition process; b. Maximize soldier potential through the application of state of the art training principles/techniques to enhance the soldier-hardware and
soldier-training subsystem interfaces; c. Make an early determination as to whether or not fielded total weapon systems are attaining an actual effectiveness ($E_A$) approximating derived design effectiveness ($E_D$); d. Determine whether the causal agent for low $E_A$ is due, all or in part, to the training subsystem; e. Determine the most cost effective ways to improve deficient training subsystems; f. Determine if effective training subsystems can be modified to be less costly without significantly degrading $E_A$; g. Determine if the training subsystem is sole causal agent of degraded $E_A$ and to pinpoint other subsystems contributing to degraded $E_A$; H. Insure that the soldier, trainer, and training interface is considered during the analytical process; i. Assist in the development of cost effective, valid, and training effective non-system training devices for fielded systems; and, j. Insure that feasible alternative training subsystems are put together systematically and are scientifically examined as part of an evolutionary training development process. See also TRADOC Reg 350-4.

training equipment—Items of equipment, or their components such as rifles, vehicles, aircraft, motion picture projectors, engines and test equipment. Although used for training, they do not lose their identity as end items and therefore are not training devices.

Training Extension Course—Validated, interactive, performance-oriented, exportable training materials developed by contract or in-house and fielded under the sole direction of the US Army Training Support Center (ATSC). TEC materials are multimedia and are designed for individual-paced or small group study. TEC is designed to assist the field commander in maintaining the individual skills of his soldiers.

Training Extension Course Manager—Individual at each school who is responsible for the development of TEC lessons that cover the subject areas for which the school is responsible.

training instructor appraisal kit—A package of instructional materials designed to provide a training instructor with practice.
Training Management Instruction Packet—A series of documents which comprise the "how to train" and "how to use" information of the Job Training Package; a TMIP consists of: The job task list; training map; trainer guidance; soldier guidance; performance evaluation tools; and MOS certification instructions. Each of these components may be included in revisions of Commander's and Soldier's Manuals.

training map—A part of the Job Training Package TMIP; a graphic display of the task list which provides a recommended and alternative training sequence for the duty position; included in revisions of Commander's and Soldier's Manuals. See also course map.

training materials—Those materials developed as a result of task/learning analysis, that are provided to teach or evaluate a task. They include: TEC/ACCP/SQT/Job Training Packages and other training products used to train tasks listed in the Soldier's Manual to a prescribed standard.

Training Material Support Detachment—The office, located at Tobyhanna Army Depot, responsible for storage and distribution of all TEC materials. Excess TEC kits should be returned to TMSD.

training objective—See C2, AR 310-25.

training priorities—The order in which resources should be dedicated to training needs and objectives. In descending order, TRADOC priorities are: a. Priority One: Training to develop and sustain job proficiency; i.e., the efficient performance of critical job tasks will receive the highest priority treatment within the TRADOC; b. Priority Two: Training to develop and sustain knowledges and skills in subject or functional areas mandated by statute or Army Regulations; c. Priority Three: Specialty related training beyond that demanded to develop and sustain proficiency in critical job tasks; d. Priority Four: Any training not described in priorities one through three; and e. Exemption: socialization skills (e.g., military
adaptation) may be taught and are not included in priorities 1 through 4. See also socialization.

Training Requirements and Analysis System—The total systems approach to individual training. TRAS is an orderly and automated process of interfacing the Individual Training Plan (ITP) system with four external subsystems which impact on the ITP. The four subsystems are the Logistics, Personnel, Resource Management Systems, and the Life Cycle Systems Management Model (LCSMM).

training site selection—In training analysis/design, the decision regarding where a task should be trained: i.e., resident (also institution) vs unit (also job) site. See also instructional site.

training subsystem—Complete packages put together by training developers in accordance with Phases I, II, and III (analyze, design, and develop) of the Instructional Systems Development (ISD) model. Training subsystems so developed contain all of the media, materials, combinations and sequences needed by the trainer to implement (Phase IV of ISD) effective training programs. See also TRADOC Reg 350-4.

training subsystem effectiveness analysis—A training effectiveness analysis (TEA) study conducted after a system has been fielded, either subsequent to or in lieu of an ISTEA, in order to a. Determine if an existing performance gap is caused, all or in part, by the training subsystem; b. Examine the training subsystem in detail; c. Relate soldier, trainer, training environment, training subsystem, and hardware factors/variables to obtain high resolution of problem areas; d. Examine, by excursion, related subsystems (e.g., personnel and logistical support subsystems) that may be contributing agents to a performance gap; and, e. Identify potential solutions to training subsystem problems.

Training System Resource Management Plan—An annual panorama of all present and projected training functions and resource expenditures for each MOS in its entirety over a five-year period. The TSRMP will
document the school's five-year training plan, both resident/nonresident, for every MOS and detail the resources required.

Training Test Support Package—Information provided to the TRADOC Board to be used to evaluate training on new systems. This package includes the Program of Instruction, Soldier's Manual, Commander's Manual, ARTEP changes, training devices, SPAS Manuals.

transfer task—A task that can be characterized as possessing variability in its cues, elements, conditions, and standards. By definition, a transfer task can be accomplished/perform correctly in a variety of ways dependent upon the situation, the performer, and the conditions.

tryout—Practice test whose purpose is to make the tryout as realistic as possible by eliminating as many sources of unreliability as possible.

typical unit approach—In SQT, administration of the Hands-On Component with the resources (personnel and equipment) within a typical unit. The typical unit being that unit which soldiers are most likely to be assigned and most likely to administer the SQT (i.e., Infantry SQT, Infantry battalion). The typical unit should be able to administer the entire HOC to all MOS holders within an 8 hour period without having to borrow or consolidate resources from other units.

United States Army Reserve School—See Cl, AR 310-25.

US Army Training and Doctrine Command—The major command of the Army charged with the responsibility for the development, conduct, and evaluation of training; located at Fort Monroe, Virginia.

user—The command, organization, or unit designated to receive the materiel system from production for use in accomplishing a designated mission. The materiel
system is included in the user's TOE, TDA, or in an appropriate CTA. The user provides guidance to materiel and combat developers during the materiel acquisition process on matters pertaining to the expected operational employment and logistic support. (The designated "user representative" normally acts as the user during the materiel acquisition process). See also user representative.

**user representative**—The combat developer is designated to represent the user during the materiel acquisition process. The user representative, in coordination with the user, accomplishes this by ascertaining the needs of the user in order to influence constructively the design of the materiel system and to insure that new or appropriate product-improved materiel systems meet those needs. The command or agency filling this role represents the "mission-oriented" user and the "logistics-oriented" user by concerning itself with both the operational, personnel, training, and logistic support aspects of materiel systems.

**user testing**—A generic term encompassing operational testing (OT) and force development testing and experimentation (FDTE). See also Cl, AR 310-25.

**validation**—1. In training developments, testing instructional materials after product development to insure that the materials are effective and the students are mastering the learning objectives. 2. In evaluating the process of trying out an evaluation instrument to determine its effectiveness in measuring performance as required on the job. This effectiveness is usually expressed in terms of the correlation coefficient between scores on the instrument and scores on a criterion of proficiency in the job or in the training situation. 3. In SPAS, the process of confirming technical accuracy of content; for completion of requirements set by tasks for training; and for readability, and writing style. 4. In surveys, the act of confirming
questions in a survey instrument as being relevant to the purpose of the survey. 5. In SQT, the set of steps followed to insure that the test accurately and reliably measures soldier proficiency. It does this by insuring that the test is accepted by soldiers as a relevant measurement of the job; that the test differentiates between performers and nonperformers; and that the hands-on tests are scored uniformly by different scorers. See also field validation.

validation documentation—A report which describes in detail how a specific course of instruction was validated and for what target population.

validity—See C1, AR 310-25.

value engineering—The process of designing equipment or instruction to meet but not exceed the required outcomes. Ordinarily, it refers to the elimination of features or instructional objectives that have not been demonstrated to be positively necessary.

verbal test—Any test, theoretically, in which language is involved. In general usage the term is restricted to those tests in which the questions and responses are mainly expressed in language or which use language to a substantial degree. See also nonverbal test.

verification—1. In job analysis, the empirical determination that an MOS critical task list contains all the tasks appropriate to the MOS. This process includes dropping inappropriate tasks, and adding appropriate tasks in accordance with sound job analysis procedures. In this context, verification is contrasted with validation which is the determination of whether instructional materials teach what they are supposed to teach. A subject matter expert is required to conduct task verification; an instructional technologist is sufficient to perform validation of instructional materials. 2. In SPAS, the government acceptance trial of the validated SPAS materials; the evaluation of the final product. Verification requires a 100 percent test of all
tasks covered using a representative sample of soldiers. The government must supervise the trials.

visual—A rough drawing or layout of an illustration, chart, or graph, to be used as a guide in producing final artwork.

visual dummy—A stage in the development of printed material that illustrates how the narration and visuals will appear in the final draft.

visual form—In media selection, refers to whether alphanumeric or pictorial characteristics are required in a learning situation.

visual spectrum—The type of color required of instructional materials. Some must be with full color; others may be with black and white or shades of grey.

weapon system training effectiveness analysis—See training subsystem effectiveness analysis (TSEA). Weapon system training effectiveness analysis (WSTEA) studies have been redesignated training subsystem effectiveness analysis (TSEA studies.)

within-course tests—Tests administered during a course of instruction to assure that all students are "keeping up" with the learning objectives.

work sample—A small problem, representative of the job as a whole, chosen and adapted for the purpose of testing performance on important operations of the job as nearly under normal conditions as possible apart from an actual tryout on the job. Performance on a work sample is frequently used as a criterion against which prediction devices in evaluation are validated.
CHAPTER 3

GLOSSARY OF ABBREVIATIONS AND BREVITY CODES:
INDIVIDUAL/COLLECTIVE TRAINING AND DEVELOPMENT

A

AA__active Army
AAC__Army Audiovisual Center
AAP__Army Apprenticeship Program
AC__active component
ACCP__Army Correspondence Course Program
ACN__action control number
ACSI__Assistant Chief of Staff for Intelligence
ACTO__Army Communicative Technology Office
AD__acquisition director
AIMINCEN__US Army Administration Center and Fort Benjamin Harrison
ADT__active duty for training
AEATS__Army Extension Training System
AFS__Air Force specialty
AIMS__Automated Instructional Management System
AIT__advanced individual training
AMSAA__Army Materiel Systems Analysis Agency
AO__audio-only
AOP__allied ordnance publication
AOSP__Army Occupational Survey Program
(Formerly MODB)
AOT  assignment oriented training
AP  acquisition plan
AR  Army regulation
ARCOM  United States Army Reserve Command
ARI  Army Research Institute for the Behavioral and Social Sciences
ARO  United States Army Research Office
ARPRINT  Army Program for Individual Training
ARR  Army readiness regions
ARTEP  Army Training and Evaluation Program
ARTS  Army training study
ASARC  Army Systems Acquisition Review Council
ASI  additional skill identifier
ASOPD  Army Special Operations Pictorial Detachment
AT  annual training
ATA  additional training assemblies
ATARRS  (The) Army Training Requirements and Resource System
ATB  Army Training Board
ATC  Army Training Center
ATCPS  audio tape cassette player set
ATECP  Army Training Extension Course Program
ATGM  antitank guided missile
ATLP  Army-wide Training Literature Program
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSC</td>
<td>Army Training Support Center</td>
</tr>
<tr>
<td>AV</td>
<td>audiovisual</td>
</tr>
<tr>
<td>AVLO</td>
<td>audiovisual liaison officer</td>
</tr>
<tr>
<td>BAT</td>
<td>branch assistance team</td>
</tr>
<tr>
<td>BCE</td>
<td>baseline cost estimate</td>
</tr>
<tr>
<td>BCT</td>
<td>basic combat training (Now BT)</td>
</tr>
<tr>
<td>BER</td>
<td>budget execution review</td>
</tr>
<tr>
<td>BII</td>
<td>basic issue items</td>
</tr>
<tr>
<td>BITE</td>
<td>built-in test equipment</td>
</tr>
<tr>
<td>BMG</td>
<td>budget and manpower guidance</td>
</tr>
<tr>
<td>BOC</td>
<td>best operational capability</td>
</tr>
<tr>
<td>BOI</td>
<td>basis of issue</td>
</tr>
<tr>
<td>BOIP</td>
<td>basis of issue plan</td>
</tr>
<tr>
<td>BOIP-C</td>
<td>basis of issue plan-complete</td>
</tr>
<tr>
<td>BOIP-T</td>
<td>basis of issue plan-tentative</td>
</tr>
<tr>
<td>BT</td>
<td>basic training</td>
</tr>
<tr>
<td>BT/AIT</td>
<td>basic training/advanced individual training</td>
</tr>
<tr>
<td>BTM</td>
<td>battalion training model</td>
</tr>
<tr>
<td>CA</td>
<td>contractor assisted</td>
</tr>
<tr>
<td>CAFTD</td>
<td>commercially available/fabricated training device</td>
</tr>
</tbody>
</table>
TRADOC Cir 350-3

CAFTDR -- commerically available/fabricated training device requirement
CAI -- computer aided instruction/computer assisted instruction
CANOE -- capital area network for organizational requirement
CARDS -- category of approved requirement documents
CATTS -- combined arms tactical training simulator
CCSS -- coordination and contract summary sheet
CD -- combat development
CERL -- Computer-Based Education Research Laboratory
CEP -- Concept Evaluation Program
CFP -- concept formulation package
CM -- Commander's Manual
CMI -- computer managed instruction
CMF -- career management field
CNDI -- commercial nondevelopmental items
COB -- command operating budget/close of business
CODAP -- comprehensive occupational data analysis program
COEA -- cost and operational effectiveness analysis
COMSEC -- communications security
CONUS -- Continental United States
CONUSA - - - - - - the numbered armies in the Continental United States
COR - - - - - - contracting officer's representative
COTR - - - - - - contracting officer's technical representative (alternate term for COR)
CRI - - - - - - criterion-referenced instruction
CRM - - - - - - camera-ready mechanical
CRT - - - - - - criterion-referenced test/cathode raytube
CT - - - - - - collective training
CTA - - - - - - common table of allowances
CTEA - - - - - cost and training effectiveness analysis
CTP - - - - - - collective training plan/coordinated test program
CTS - - - - - - commandant's training strategy/computerized training system
CY - - - - - calendar year

D

DA - - - - - - Department of the Army
DAAP - - - - - Department of the Army Audiovisual Program
DAAVMPP - - - - Department of the Army Audiovisual Media Production Program
DADS - - - - - Defense Audiovisual Depository System
DAMP/TVPP - - - - Department of the Army Motion Picture/Television Production Program
DARCOM - - - - US Army Materiel Development and Readiness Command
DASPO  Department of the Army Special Photographic Office
DATA  drawing for Army training aids
DAVA  Director(ate) of Audiovisual Activities
DAVBADS  Defense Audiovisual Booking and Distribution System
DAVIS  Defense Audiovisual Information System
DAVSA  Defense Audiovisual Support Activity
DCAS  Defense Contract Administration Services
DCD  Directorate of Combat Developments
DCSCL  Deputy Chief of Staff for Combat Developments
DCSOPS  Deputy Chief of Staff for Operations and Plans
DCSPER  Deputy Chief of Staff for Personnel
DCSRM  Deputy Chief of Staff for Resource Management
DCST  Deputy Chief of Staff for Training
DEV  Director(ate) of Evaluation
DFAE  Director(ate) of Facilities and Engineering
DIF  Difficulty-Importance-Frequency
DINFOS  Defense Information School
DIO  Director(ate) of Industrial Operations
DOD  Department of Defense
DOS  defense occupational specialties/
      Director(ate) of Support
DOT  Director(ate) of Training
DS  direct support/drill sergeant/direct staffing
DSARC  Defense Systems Acquisition Review Council
DST&DD  Developing Systems Training and Devices Directorate
DT  development testing
DTD  Directorate of Training Developments
DTM  draft technical manual
DT/OT  development test/operational test

E
EA  actual effectiveness
ED  design effectiveness
EIB  expert infantry badge
ELT  entry level training
EOCCT  end-of-course comprehensive testing
EOE  element of expense
EPMS  enlisted personnel management system
ERECC  Enlisted Records and Evaluation Center
ETM  extension training materials
ETN  educational telephone network
ETV  educational television

F
FDTE  Force Development Testing and Experimentation
FEA front end analysis
FLO film liaison officer
FM field manual
FOE follow-on evaluation
FOJT formal on-the-job
FORSCOM United States Army Forces Command
FQQPRI final qualitative and quantitative personnel requirements information
FSD field services division
FSED full scale engineering development
FSSP film strip sound projector
FSTS flight simulated training system
FSTC Foreign Science and Technology Center
FTS field target screen
FTTD full time training duty
FTX field training exercise
FY fiscal year
FYTP five year test program
FYTDP five year training development plan
G
GAGK graphic arts guidance kit
GED general educational development
GFM Government furnished materials
GOCOM United States Army Reserve General Officer Command
GPO - Government Printing Office
GS - general support/general staff
GTA - graphic training aid
GTAO - graphic training aids officer

H
HD - hardware design
HDL - Harry Diamond Laboratories
HOC - Hands-On Component
HQ - headquarters
HTF - how to fight (manuals)

I
ICI - individual/collective integration
ICTP - Individual/Collective Training Plan
IDT - inactive duty training
I&E - Information and Editorial (Program for Army civilians)
IEP - individual evaluation plan/independent evaluation plan
IER - individual evaluation report/independent evaluation report
IET - initial entry training
IH - in-house
IKP - instructor and key personnel
IKPT - instructor and key personnel training
ILS - Integrated Logistics Support
IOC_ initial operational capability
IPD_ (The) Army Institute for Professional Development
IPISD_ interservice procedures for instructional systems development
IPR_ in-process review
IRP_ Industry Recognition Program
ISD_ instructional systems development
ISR_ individual soldier's report
ISS_ installation support school
ISTEA_ initial screening training effectiveness analysis
IT_ individual training; instructional technology
ITP_ Individual Training Plan
ITPP_ Individual Training Plan Proposal
ITRO Interservice Training Review Organization
ITV_ instructional television
J
JA_ job aid
J&TA_ job and task analysis
JB_ job book
JPG_ job performance guide
JPA_ job performance aid
JPM_ job performance measure
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JSC</td>
<td>Job-Site Component</td>
</tr>
<tr>
<td>JSPMRC</td>
<td>Joint Service Program Management Review Committee</td>
</tr>
<tr>
<td>JTA</td>
<td>Joint Table of Allowance</td>
</tr>
<tr>
<td>JTP</td>
<td>Job Training Package</td>
</tr>
<tr>
<td>JWG</td>
<td>Joint Working Group</td>
</tr>
<tr>
<td>K</td>
<td>Kit Design Approach</td>
</tr>
<tr>
<td>LADA</td>
<td>Lesson Analysis Design Approach</td>
</tr>
<tr>
<td>LAI</td>
<td>Lesson Administrative Instructions</td>
</tr>
<tr>
<td>LAW</td>
<td>Light Antitank Weapon</td>
</tr>
<tr>
<td>LCA</td>
<td>Lesson Content Analysis</td>
</tr>
<tr>
<td>LCSMM</td>
<td>Life-Cycle Systems Management Model</td>
</tr>
<tr>
<td>LEA</td>
<td>Logistic Evaluation Agency</td>
</tr>
<tr>
<td>LO</td>
<td>Learning Objective</td>
</tr>
<tr>
<td>LOA</td>
<td>Letter of Agreement</td>
</tr>
<tr>
<td>LOGC</td>
<td>Logistics Center</td>
</tr>
<tr>
<td>LON</td>
<td>Letter of Notification</td>
</tr>
<tr>
<td>LR</td>
<td>Letter Requirement</td>
</tr>
<tr>
<td>LRC</td>
<td>Learning Resource Center</td>
</tr>
<tr>
<td>LS</td>
<td>Learning Step</td>
</tr>
<tr>
<td>LSA</td>
<td>Logistics Support Analysis</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>MACOM</td>
<td>major Army command</td>
</tr>
<tr>
<td>MAHOC</td>
<td>manual for administration of hands-on component</td>
</tr>
<tr>
<td>MCA</td>
<td>Military Construction, Army (major projects)</td>
</tr>
<tr>
<td>MAJSC</td>
<td>manual for administration of job-site component</td>
</tr>
<tr>
<td>MAPCC</td>
<td>manual for administration of the performance certification component</td>
</tr>
<tr>
<td>MENS</td>
<td>mission element needs statement</td>
</tr>
<tr>
<td>MFP</td>
<td>materiel fielding plan</td>
</tr>
<tr>
<td>MILES</td>
<td>multiple integrated laser engagement system</td>
</tr>
<tr>
<td>MILPERCEN</td>
<td>United States Army Military Personnel Center</td>
</tr>
<tr>
<td>MIS</td>
<td>management information systems</td>
</tr>
<tr>
<td>MISO</td>
<td>Management Information Systems Office</td>
</tr>
<tr>
<td>MMCA</td>
<td>minor military construction, Army</td>
</tr>
<tr>
<td>MODB</td>
<td>Military Occupational Data Bank (Now AOSP)</td>
</tr>
<tr>
<td>MOS</td>
<td>military occupational specialty</td>
</tr>
<tr>
<td>MOSC</td>
<td>military occupational specialty code</td>
</tr>
<tr>
<td>MQS</td>
<td>military qualification standard</td>
</tr>
<tr>
<td>MSP</td>
<td>maintenance support plan</td>
</tr>
<tr>
<td>MTS</td>
<td>multiple target screen</td>
</tr>
<tr>
<td>MUSARC</td>
<td>Major US Army Reserve Command</td>
</tr>
<tr>
<td>MUTA</td>
<td>Multiple Unit Training Assembly</td>
</tr>
<tr>
<td>MWO</td>
<td>modification work orders</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>NA</td>
<td>not applicable</td>
</tr>
<tr>
<td>NCO</td>
<td>noncommissioned officer</td>
</tr>
<tr>
<td>NCOES</td>
<td>Noncommissioned Officer Education System</td>
</tr>
<tr>
<td>NET</td>
<td>new equipment training</td>
</tr>
<tr>
<td>NETC</td>
<td>United States Navy Education and Training Command</td>
</tr>
<tr>
<td>NETP</td>
<td>new equipment training program</td>
</tr>
<tr>
<td>NETT</td>
<td>new equipment training team</td>
</tr>
<tr>
<td>NGB</td>
<td>National Guard Bureau</td>
</tr>
<tr>
<td>NLT</td>
<td>not later than</td>
</tr>
<tr>
<td>NMIL</td>
<td>new materiel introductory letter</td>
</tr>
<tr>
<td>NMIT</td>
<td>new materiel introduction team</td>
</tr>
<tr>
<td>NOTAP</td>
<td>Naval Occupational Task Analysis Program</td>
</tr>
<tr>
<td>NSIA</td>
<td>National Security Industrial Agency</td>
</tr>
<tr>
<td>NTC</td>
<td>National Training Center</td>
</tr>
<tr>
<td>NTEC</td>
<td>Naval Training Equipment Center</td>
</tr>
<tr>
<td>NTEC PE</td>
<td>Naval Training Equipment Center, Project Engineer</td>
</tr>
<tr>
<td>OAP</td>
<td>Outline Acquisition Plan</td>
</tr>
<tr>
<td>OBC</td>
<td>officer basic course</td>
</tr>
<tr>
<td>OBE</td>
<td>overtaken by events</td>
</tr>
<tr>
<td>OCAR</td>
<td>Office of the Chief, Army Reserve</td>
</tr>
</tbody>
</table>
OCPA_ Office Chief of Public Affairs
OE_ organizational effectiveness
OEC&S_ Organizational Effectiveness Center and School
OENCO_ organizational effectiveness noncommissioned officer
OESO_ organizational effectiveness staff officer
OPTCON II_ October FORSCOM/TRADOC Commanders Conference II
OICTP_ Outline Individual and Collective Training Plan
OJE_ on-the-job experience
OJT_ on-the-job training
OJTA_ officer job/task analysis
OMA_ operation and maintenance, Army
OPA_ other procurement, Army
OPMS_ Officer Personnel Management System
ORSA_ Operations Research/Systems Analysis
OSD_ Office Secretary of Defense
OSR_ occupational survey report
OST(1)_ one-station training (1)
OST(2)_ one-station training (2)
OSUT_ one-station-unit training/on-site user test
OT_ operational test(ing)
Operational Test and Evaluation Agency

Outline test plan

Program analysis and resources review

Program budget guidance

Pre-command course

Project engineer

Program Evaluation and Review Technique

An Advanced Research Projects Agency sponsored evaluation of the PLATO IV system by the Computer Based Education Research Laboratory (CERL) in conjunction with the University of Illinois.

Project manager

Project management/manager office

Project manager for training devices

Project manager for training devices, acquisition director

Project officer

Point of contact

Program(s) of instruction

Program objective memorandum

Planning programming and budgeting system

Provisional qualitative and quantitative personnel requirements information

Printed text
PQPRI — provisional qualitative and quantitative personnel requirements information
PT — printed text
Q
QQPRI — qualitative and quantitative personnel requirements information

R
R&D — research and development
RAG — Regimental Artillery Group (Soviet)
RAM — reliability, availability and maintainability
RC — reserve components
RCS-ATTNG-55 — requirements control symbol for quarterly TEC product requirement
RCTC — Reserve Components Training Center
RDTE — research, development, test and evaluation
REALTRAIN — Training realism in tactical training for combined arms elements
REDCOM — Readiness Command
RETO — review of education and training for officers
RFP — request for proposal
RG — readiness group
RGL — reading grade level
ROC — required operational capability
RPPO — Regional Printing Procurement Office
RPSTL    repair parts and special tools list
RS    resident school/resume sheet
SAAD    Sacramento Army Depot
S&K    skills and knowledges
SATMO    Security Assistance Training Management Office
SAVMO    Service Audiovisual Management Office
SC    soldier capabilities/specialty code/subcours/skill component
SCOPES    squad combat operations exercise, simulation
SFDE    staff and faculty development elements
SG    student guide
SIS    student instruction sheet
SL    skill level
SLS    student lesson sheets
SM    Soldier's Manual
SME    subject matter expert
SOJT    supervised on-the-job training
SOP    standing/standard operating procedure
SPAS    skill performance aids (formerly ITDT/SPA)
SPSS    statistical package for the social sciences
SQI    special qualifications identifiers
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQT</td>
<td>Skill Qualification Test</td>
</tr>
<tr>
<td>SRAM</td>
<td>skill qualification test requirements alert message</td>
</tr>
<tr>
<td>SRAN</td>
<td>skill qualification test requirements alert notice</td>
</tr>
<tr>
<td>SSI</td>
<td>specialty skill identifier</td>
</tr>
<tr>
<td>SSP</td>
<td>scientific services program</td>
</tr>
<tr>
<td>STEP</td>
<td>self-teaching exportable package</td>
</tr>
<tr>
<td>SU</td>
<td>scorable unit</td>
</tr>
<tr>
<td>TA</td>
<td>technical advisor</td>
</tr>
<tr>
<td>TAK</td>
<td>trainer appraisal kit</td>
</tr>
<tr>
<td>TAADS</td>
<td>The Army Authorization Documents System</td>
</tr>
<tr>
<td>TAGCEN</td>
<td>United States Army Adjutant General Center</td>
</tr>
<tr>
<td>TAK-004</td>
<td>SQT test announcement/requisitioning document</td>
</tr>
<tr>
<td>TAS</td>
<td>test answer sheets</td>
</tr>
<tr>
<td>TASA</td>
<td>Television Audio Support Activity</td>
</tr>
<tr>
<td>TASC</td>
<td>Training Aids Support Center/Training and Audiovisual Support Center</td>
</tr>
<tr>
<td>TASO</td>
<td>Training Aids Service Office (Now TASC)</td>
</tr>
<tr>
<td>TC</td>
<td>training circular/type classification</td>
</tr>
<tr>
<td>TCO</td>
<td>test control officer</td>
</tr>
<tr>
<td>TD</td>
<td>training developments</td>
</tr>
<tr>
<td>TDA</td>
<td>Test Development Activity/tables of distribution and allowances</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>TDI</td>
<td>Training Developments Institute</td>
</tr>
<tr>
<td>TDIS</td>
<td>Training Development Information System</td>
</tr>
<tr>
<td>TDLOA</td>
<td>training device letter of agreement</td>
</tr>
<tr>
<td>TDLR</td>
<td>training device letter requirement</td>
</tr>
<tr>
<td>TDO</td>
<td>Training Development Office</td>
</tr>
<tr>
<td>TDR</td>
<td>training device requirement</td>
</tr>
<tr>
<td>TDRRC</td>
<td>training device requirements review committee</td>
</tr>
<tr>
<td>TDS</td>
<td>training developments study</td>
</tr>
<tr>
<td>TDY</td>
<td>temporary duty</td>
</tr>
<tr>
<td>TEA</td>
<td>training effectiveness analysis</td>
</tr>
<tr>
<td>TEC</td>
<td>Training Extension Course</td>
</tr>
<tr>
<td>TECOM</td>
<td>United States Army Test &amp; Evaluation Command</td>
</tr>
<tr>
<td>T&amp;EO</td>
<td>training and evaluation outline</td>
</tr>
<tr>
<td>TES</td>
<td>technical engagement simulation</td>
</tr>
<tr>
<td>TI</td>
<td>traditional instruction</td>
</tr>
<tr>
<td>TLD</td>
<td>terminal learning objective</td>
</tr>
<tr>
<td>TLD</td>
<td>terminal learning objective</td>
</tr>
<tr>
<td>TM</td>
<td>technical manual</td>
</tr>
<tr>
<td>TMDO</td>
<td>Training Management Development Office</td>
</tr>
<tr>
<td>TMIP</td>
<td>Training Management Instruction Packet</td>
</tr>
<tr>
<td>TMSD</td>
<td>Training Material Support Detachment</td>
</tr>
<tr>
<td>TOE</td>
<td>Table(s) of Organization and Equipment</td>
</tr>
<tr>
<td>TP</td>
<td>target population</td>
</tr>
</tbody>
</table>
TPD = Training Programs Directorate
TRAS = Training Requirements Analysis System
TRADOC = United States Army Training and Doctrine Command
TREDS-NRI = TRADOC Educational Data System-Non Resident Instruction
TRAMIS = TRADOC Management Information System
TRASANA = US Army TRADOC Systems Analysis Activity
TRM = TRADOC review of manpower
TSC = See ATSC (preferred)
TSE = total subsystem evaluation
tSEA = training subsystem effectiveness analysis (supersedes WSTEA)
TSM = test site manager/TRADOC system manager
TSP = Test Support Package
TSRMP = Training System Resource Management Plan
TTC = training technology centers

U

USAREUR = US Army, Europe
USASA = US Army Security Agency
USATB = US Army Training Board (formerly CATB)
USATC = US Army Training Center
USATSC = US Army Training Support Center
UTA = unit training assembly
WARS - Worldwide Ammunition Reporting System

WSTEA - weapon system training effectiveness analysis (superseded by TSEA)
APPENDIX

QUICK FEEDBACK PROCEDURE


NOTE: This form is restricted to individual user inputs only. Staff office/school feedback will be requested via separate correspondence six months after publication date.

Instructions for Form Completion/Mailing

1. See Quick-Feedback form for TRADOC Cir 350-3: next page (fig A-1).

2. Purpose of Quick-Feedback. Individual users are encouraged to provide input (additions/deletions/revisions/comments/suggestions), to this glossary of terms. Since the methodology for training developments is a highly emergent endeavor, it is essential that TRADOC receive timely feedback on staff/school usage of TRADOC Cir 350-3 so that it can be refined in due course to meet the needs of all users.

3. Guidelines. Complete/mail Quick-Feedback in accordance with following guidance:

- Remove Quick-Feedback Form carefully as possible. (Suggestion: Before completing, make extra copy(s), front/back, for later use)
- Complete/send form as often as changes require.
- Definitions must accompany any new terms.
- All inputs must be in writing.
- All inputs must be provided NLT ninth month after publication.
- Fold/tape form properly before mailing.
## QUICK-FEEDBACK

**INDIVIDUAL/COLLECTIVE TRAINING DEVELOPMENT GLOSSARY**

(TEADOC CI, 350-3)

**NOTE:** This Quick-Feedback is restricted to individual user inputs only. Staff Office/School feedback will be requested via separate correspondence six months after publication date.

### SUGGESTED CHANGES

<table>
<thead>
<tr>
<th>Page #</th>
<th>Para #</th>
<th>Line #</th>
<th>Suggested Changes/Reason</th>
</tr>
</thead>
</table>

### USEFULNESS/STYLE/FORMAT/Coverage

1. Is this Glossary useful to you?  [ ] Yes  [ ] No

2. If this Glossary is renewed as a Circular what changes would you suggest in its style/format/coverage?

### OTHER COMMENTS/SUGGESTIONS - (If more space required use additional copy(s). Staple before mailing)

---

**TRADOC FORM** Nov 79 126-R  
**Figure A-1.**
Director
Training Developments Institute
ATTN: ATTNCG-TDI-ORA (Dr. Longo)
Fort Monroe, VA 23651

DEPARTMENT OF THE ARMY
HQ TRADOC
PT MONROE, VA 23651
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300
TDI-ORA

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DOD 514

NO TRADOC 1378/1000 Replaces HQ Command Label 1000.
The proponent for this pamphlet is the Office of the Deputy Chief of Staff for Training. Users are invited to send comments and suggested improvements on quick feedback form (page 111)/DA Form 2028 (Recommended Changes to Publications) through channels to Cdr, TRADOC, ATTN: ATTNG-TDI-ORA, Fort Monroe, Virginia 23651.

FOR THE COMMANDER:

OFFICIAL:

[Signature]

R. N. WAGENER
Colonel, GS
Adjutant General

DISTRIBUTION: (SPECIAL)

H1; H3; S1 (except NCO Academies)
ATTN: Dir, Tng Dev (45 cys),
Dir, Eval (5 cys); S2; CD (except USACDEC & TRADOC Test Bd); T

Copies furnished:
H2; J3 (except MTMC & MDW); S3 (except JMPTC)
HQDA (DAFC-MSP) (5 cy)
HQDA (DAAG-AMS-P) (10 cy)
Cdr
USA CA Cen & Ft Leavenworth (1 cy)
USA QM Cen & Ft Lee (2 cy)
Army Research Institute (ARI-PERI, ARI-ITSE) (5 cy)
DDC (1 cy)
Defense Log Agency (1 cy)

JOHN B. BLOUNT
Major General, GS
Chief of Staff
DATE
ILMED
8