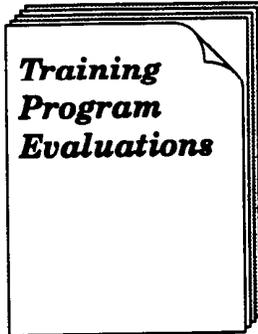


TRAINING EVALUATOR COURSE

M O D U L E O N E



JOB AID 1

***Training Program
Evaluations***

U.S. Army Training and Doctrine Command
Training Development and Analysis Directorate
Ft. Monroe, VA 23651-5000

SEPTEMBER 1991

■ **PURPOSE OF JOB AID**

TRADOC Schools, Integrating Centers, and HQ TRADOC developed this job aid in conjunction with other job aids and student workbooks that make up the Training Evaluator Course.

As a DOES evaluator, you can use this job aid to help you decide what type(s) of training program evaluation you should conduct when you have a problem concerning one of your school's training programs.

As a DOES manager, you can use this job aid to help you decide what type(s) of training program evaluations your organization should conduct as part of your long-range plans for the entire DOES evaluation program. DOES is required to annually develop and submit a Master Evaluation Plan that includes Fiscal Year and Five Year Plans.

■ **PROONENT**

The proponent for this job aid, and for the entire Training Evaluator Course, is the Commander, Headquarters Training and Doctrine Command (HQ TRADOC). Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, HQ TRADOC, ATTN: ATTG-CS, Fort Monroe, VA 23651-2405. Make telephone inquiries by calling AV 680-5590 or COMM (804) 728-5590.

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Training Program Evaluations

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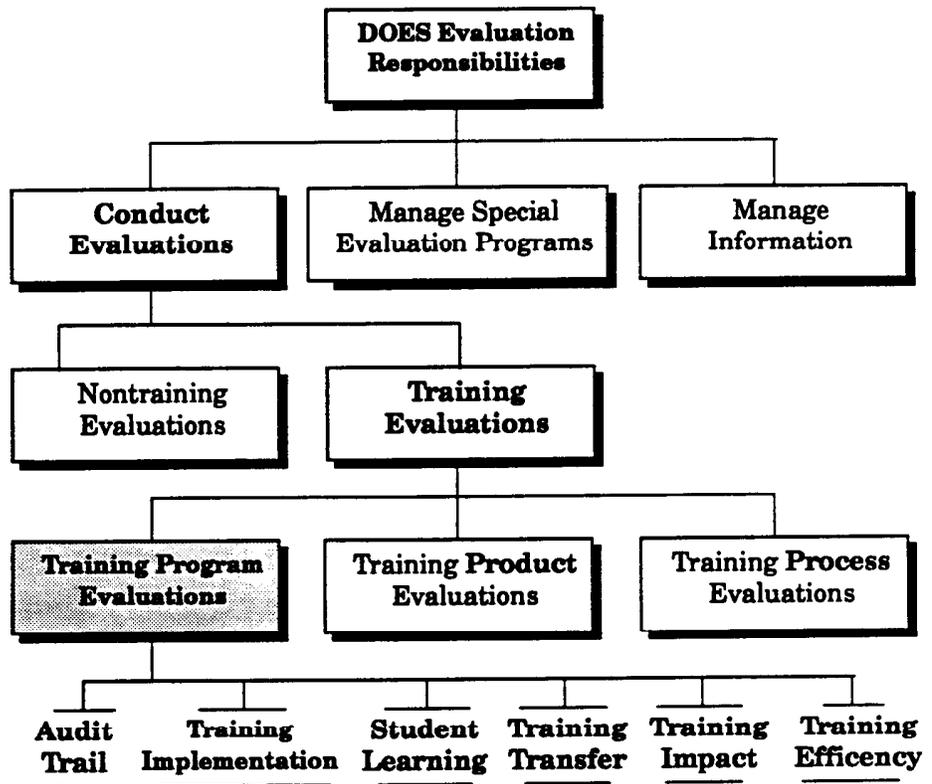
■ **DIRECTIONS**

1. When planning individual training program evaluations, you should use this job aid in conjunction with job aid 2 (Plan an Evaluation). Job Aid 2 provides step by step procedures for planning any major training evaluation. Job Aid 2 will refer you to this job aid once you start developing your Methodologies for collecting and analyzing data.
2. On the following page you will find a chart that shows how the DOES responsibility of conducting training program evaluations relates to the other DOES evaluation responsibilities.
3. This job aid has six sections. Each section provides information on one of the six types of training program evaluations. The sections include information on:
 - the **purpose** of each type of evaluation
 - some **questions** that each type of evaluation will answer
 - **different ways to collect information** for each type of evaluation
 - **advantages and disadvantages** of each type of evaluation
 - and **references** to other workbooks and job aids in the Training Evaluator Course where more information can be found.

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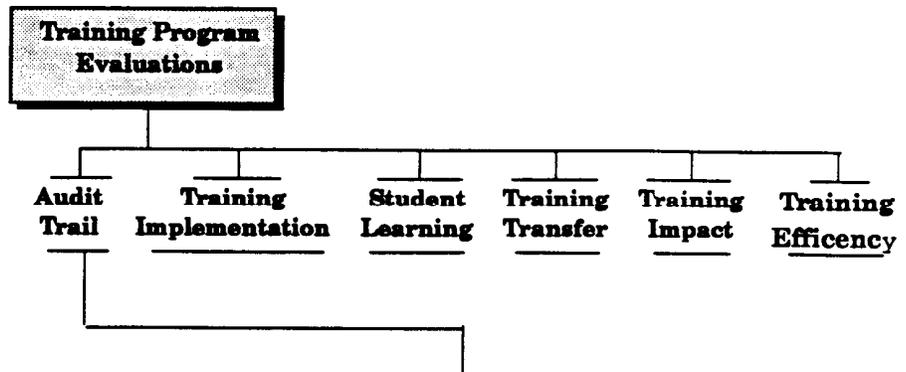
Training Program Evaluations

4. As with the other Training Evaluator Course materials, feel free to add additional information to the job aid as you wish.



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Training Program Evaluations



TYPE 1. AUDIT TRAIL EVALUATION

Purpose

There are two types of Audit Trail Evaluations discussed in the Training Evaluator Course. SAT Audit Trail Evaluations determine if the training program was developed using a Systems Approach to Training (SAT). TRAS Audit Trail Evaluations determine if TRAS (Training Requirements Analysis System) documents for the course are in order.

Questions Addressed

Some of the key questions that an Audit Trail Evaluation will answer are listed below. They are listed under the two primary types of Audit Trail Evaluations conducted—SAT and TRAS.

SAT Audit Trail Evaluations:

- Is there a mission and collective task analysis which provides an analysis of the collective tasks required to accomplish the unit mission?
- Is there a job analysis that provides an analysis of which individual tasks are performed by soldiers on the job? Do each of these individual tasks support a larger collective task conducted as part of the unit mission?
- Is there an individual task analysis providing an analysis of how individual tasks are performed by soldiers on the job?
- Is there a Course Design and Learning Analysis that provides an analysis of how to learn the

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Training Program Evaluations

tasks? Is the course design based on an analysis of how tasks should be taught?

- Are there well-written training objectives?
- Do tests and materials track with the training objectives?
- Are the training materials and tests validated?

- Is the Course Development based on training products that are the result of all previous analysis and design work?
 - Is there a job aid analysis?
 - Were existing materials reviewed prior to developing new materials?

TRAS Audit Trail Evaluations:

- Is there an Individual Training Plan (ITP) for each job that outlines long-range training plans (with milestones) to develop, implement, and revise an individual training program? The ITP should identify and justify additional resource requirements to permit initiation of resource acquisition actions covering at least five years out from the current year. It is tied to overall branch training strategy?

- Is there a Course Administrative Document (CAD) for each resident course that establishes or revises the course data elements used to determine instructor requirements and allocate manpower matching the ATRRS file database for each course?

- Is there a Program of Instruction (POI) for each course that outlines the complete course content, duration, and resources required to conduct one iteration? The POI should track with the Course Design and Learning Analysis and address both peacetime and mobilization training requirements.

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Training Program Evaluations

Ways to collect information

Information required for doing Audit Trail Evaluations is collected primarily in the following ways:

- Review of audit trail documentation using structured checklists
- Interviews with trainers (instructors, developers, administrators, and managers) using structured interview guides.

Advantages

The primary advantages of conducting Audit Trail Evaluations are:

- Audit Trail Evaluations indicate whether a Systems Approach to Training was employed.
- they encourage quality control and perform quality assurance to ensure quality control is exercised.
- They point to areas that may be problems and are deserving of closer scrutiny.

Importance of Audit Trail Evaluations:

- Audit Trail Evaluations provide a quick reference of how and why training decisions were made.
- they provide continuity in the way training is conducted over time.
- They discourage trainers from changing training just for the sake of change..
- They provide justification for training resources.
- They reduce duplication of effort when similar training or training products must be developed.
- They identify the training required to support development of a soldier throughout his career, the "cradle-to-grave" concept.

Disadvantages

The disadvantages of doing Audit Trail Evaluations are:

- They can interfere, to some extent, with the day to day administration of the training.
- There may be a tendency to get caught up in the details of the documentation and lose sight of other types of evaluations required (e.g., Training Implementation Evaluations, Student Learning Evaluations, Training Transfer Evaluations, etc.).

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Systems Approach to Training (SAT)

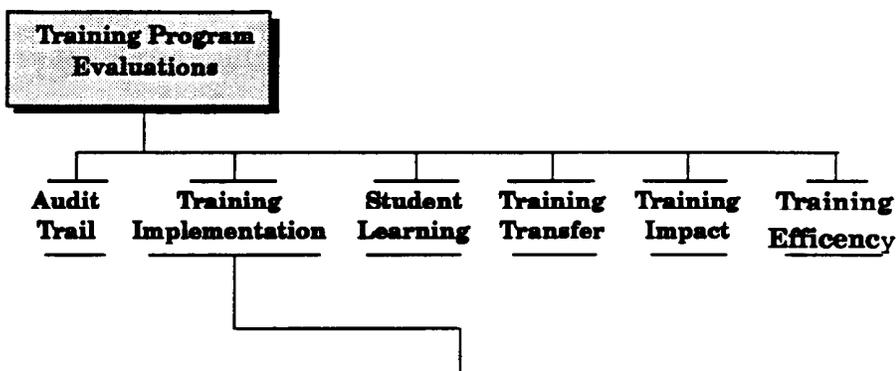
- They are extremely difficult to do if the proper documentation is not present. This usually leads to a recommendation to establish an audit trail in order that a meaningful evaluation can be done at a later time.
- They may create anxiety if the people responsible for maintaining audit trails don't fully understand their importance.

***References to
other
course
materials:***

In Module 3 of the Training Evaluator Course, we will discuss Audit Trail Evaluations of **SAT documents**. Checklists for evaluating audit trail documents are included the job aid provided with the module workbook.

In Module 4 of the Training Evaluator Course, we will discuss Audit Trail Evaluations of **TRAS documents**. Checklists for evaluating TRAS documents are included in the job aid provided with the module workbook.

Training Program Evaluations



TYPE 2. TRAINING IMPLEMENTATION EVALUATION

Purpose Training Implementation Evaluations determine if the results of the SAT process carry over to the actual training. These evaluations answer the basic question—Are we training the rights things and are we training them well?

Questions Addressed Some of the key questions that a Training Implementation Evaluation will answer are:

- Is the training based on the results of previous **SAT analysis, design, and course development work** and documentation (e.g., task list, POI, lesson plan, etc.)?
 - Are the correct tasks taught?
 - Are the tasks taught to the standards and under the conditions stated in the training objectives?
 - Are the methods and media appropriate for the tasks taught?
- Is the training **environment** conducive to learning?
- Are the **methods and media** used effective?
- Are training **materials** effective?
- Is the **instructor** effective?
- Are **students** actively involved in the training?
- Is the **overall training strategy** effective?

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Training Program Evaluations

Way to collect information

Information required for conducting Training Implementation Evaluations is collected primarily in the following ways:

- Observe Training using a structured observation checklist
- Review training documentation (e.g., Task List, POI, Lesson Plans, etc.) using structured checklists
- Interview trainers (instructors, developers, administrators, and managers) using structured interview guides
- Use student questionnaires/critiques at the conclusion of training.

Advantages

The primary advantages of conducting Training Implementation Evaluations are they:

- Ensure that results of SAT (products of Analysis, Design, and Development) carry over to the actual training.
- Are relatively easy to do and require little expertise once data collection instruments are developed and evaluators are trained.
- Encourage local quality control of training implementation.
- Promote standardization of training if different instructors are teaching the same subject.
- Can provide information on job relevancy of training, if students are experienced (such as Officer Advanced and NCO students).

Disadvantages

The disadvantages of doing Training Implementation Evaluations are they:

- Can interfere, to some extent, with the day to day administration of the training.
- Can be very time consuming.
- Do not measure Student Learning, Training Transfer, or Training Impact on unit.
- May provide false information because instructors may change the way they do things if they know they are being observed.

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Training Program Evaluations

Advantages

The primary advantages of doing Student Learning Evaluations are they:

- Ensure that results of SAT (products of Analysis, Design, Development) carry over to the testing of students
- Can serve as a good indicator of the effectiveness of the training
- Are a more effective, quicker means of measuring training effectiveness than observing training.

Disadvantages

The disadvantages of doing Student Learning Evaluations are they:

- Do not measure Training Transfer to the job or Training Impact on unit performance.
- Require evaluator expertise in principles of test development.

References to other course materials

In Module 6 of the Training Evaluator Course, we will discuss Student Learning Evaluations. Checklists for conducting Student Learning Evaluations are included in the job aid provided with the module workbook.

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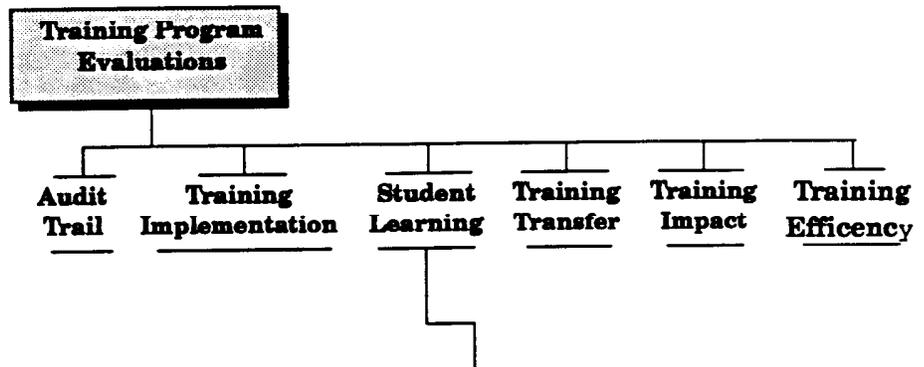
Training Program Evaluations

- It can be affected by biased student opinions (mood, like or dislike of an instructor, etc.)

In Module 5 of the Training Evaluator Course, we will discuss Training Implementation Evaluations. A sample checklist for conducting Training Implementation Evaluation is provided in the job aid provided with the module workbook.

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Training Program Evaluations



TYPE 3. STUDENT LEARNING EVALUATION

Purpose

Student Learning Evaluations determine if students learn the tasks taught in the training program.

Questions Answered

Some of the key questions that Student Learning Evaluations will answer include:

- Are tests a product of a SAT process?
- Were the tasks identified for resident training tested?
- Are tasks other than these tasks tested?
- Are tasks tested under conditions and to the standards established in the training objectives?
- Can students perform the tasks to the established standards?
- Are tests constructed well?
- Are tests valid?

Ways to collect information

Information required for conducting Student Learning Evaluations is collected primarily in the following ways:

- Review training documentation (e.g., Task List, POI, Lesson Plans, Grade Point Plan, etc.) using structured checklists
- Review tests using structured checklists
- Observation test administration using structured observation checklists
- Review test results using structured checklists/automated analysis
- Interviews trainers (instructors, developers, administrators, and managers) using structured interview guides.

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Training Program Evaluations

- **Interview graduates and their supervisors** using structured interview guides
- **Administer questionnaires** to graduates and supervisors on the job
- **Mail questionnaires** to graduates and supervisors
- **Interview field returnees** (course graduates or supervisors) using structured interview guides
- **Review feedback data** on job performance (unit reports, Army Occupational Survey Program [AOSP] data, study results from studies such as Post Fielding Training Effectiveness Analyses [PFTEA], etc.).

Advantages

The primary advantages of conducting Training Transfer Evaluations are:

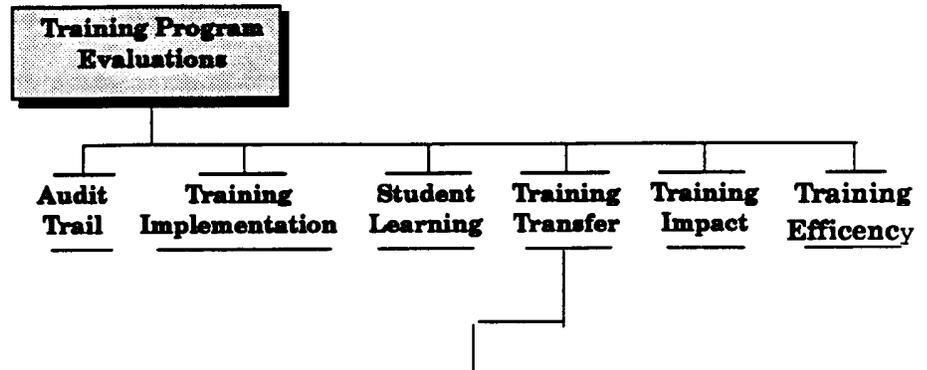
- They focus directly on one of the major goals of the training program—to enable soldiers to perform critical tasks on the job. This type of evaluation collects information on job performance and measures the effects of the training program on that performance.
- There are a variety of ways to collect information required for conducting Training Transfer Evaluations depending on the resources available.
- Although it is difficult to determine the extent to which training transfers to the job, as indicated in the disadvantages below, some of the information required for Training Transfer Evaluations, can be easily obtained.

Disadvantages

Although Training Transfer Evaluations are one of the most important types of training program evaluations to do, they are also one of the most difficult. Reasons that measuring the effects of a training program on job performance is difficult include:

- Job performance is affected by many factors other than training. These factors include **motivational factors** such as the individual's chain of command and incentives he receives in his unit. Job performance is also affected by **environmental factors** such as equipment available in the unit or

Training Program Evaluations



TYPE 4. TRAINING TRANSFER EVALUATION

Purpose Training Transfer Evaluations determine if the training students receive in the course transfers to their performance on the job.

Questions Addressed Some of the key questions that a Training Transfer Evaluation will answer include:

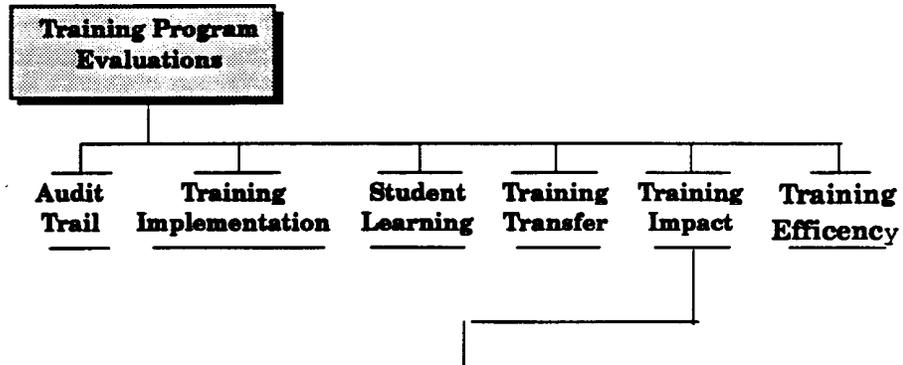
- What tasks do graduates perform on the job?
- Do graduates perform the tasks taught in the training program on the job?
- How frequently do graduates perform the tasks on the job?
- How well do graduates perform the tasks on the job?
- Are tasks performed the same way on the job as they are taught in the course?
- Are the amount and type of training received in the training program sufficient to enable graduates to perform tasks on the job?
- Are there any tasks performed on the job, but not taught in the training program, that should be taught?
- Are there tasks taught in the training program that are not performed on the job?

Ways to collect information Information required for doing Training Transfer Evaluations is collected primarily in the following ways:

- Observe graduates perform on the job using structured observation checklists

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Training Program Evaluations



TYPE 5. TRAINING IMPACT EVALUATION

Purpose

Training Impact Evaluations determine the impact that a training program has on the unit's ability to accomplish its mission.

Questions Addressed

Some of the key questions that Training Impact Evaluations may answer include:

- Can units to whom training program graduates are sent perform collective tasks required to accomplish their units mission?
- If units cannot perform collective tasks to established standards, does the training program contribute to the deficient unit performance?

Ways to collect information

Information required for conducting Training Impact Evaluations is collected primarily in the following ways:

- Review documentation on collective tasks and unit performance (This review could include: results of major training exercises, National Training Center rotation results, Army Training and Evaluation Program [ARTEP] results, readiness reports, special studies on unit performance, etc.)
- Observe unit performance on collective tasks using structured observation checklists (Observations could be made during major training exercises, National Training Center rotations, ARTEP administration, etc.)

Training Program Evaluations

the buildings where the tasks are performed on the job.

- It is difficult to measure the effects of training on a soldier's job performance in any one unit. It is even more difficult to measure training effects on job performance in units across the Army, which is what we must do when we conduct this type of evaluation. Soldiers are assigned to many different duty positions in many different types of units worldwide. Since the **motivational and environmental factors in each unit vary**, it is difficult to measure the overall affect of the training program on all graduates of the program as a group.
- The more reliable forms of measuring on-the-job performance such as observations or interviews in the units **require significant resources** (e.g., travel costs, time, temporary duty pay, etc.).

***References to
other course
materials***

In Module 7 of the Training Evaluator Course, we will discuss Training Transfer Evaluations. Checklists for conducting Training Transfer Evaluations are included in the job aid provided with the module workbook.

One of the primary means of evaluating transfer of training to the job, is through Branch Liaison Team (BLT) visits to field units.

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Training Program Evaluations

- The more reliable forms of conducting Training Impact Evaluations, such as observations of training exercises or interviews on the job, **require significant resources** (e.g., travel costs, time, temporary duty pay, etc.). In some cases, this type of evaluation also requires more **evaluator expertise** and even **subject matter expertise**.

References to other materials

One of the primary means of collecting information necessary for evaluating the impact of a training program on unit performance is through your feedback and information management system. Another means is through Branch Liaison Team (BLT) visits to field units.

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Training Program Evaluations

- **Interview unit personnel** knowledgeable of unit performance (e.g., commanders, training officers, senior NCOs, etc.) using structured interview guides
- **Administer questionnaires** to key unit personnel on the job
- **Mail Questionnaires** to key unit personnel.

Advantages

The primary advantages of conducting Training Impact Evaluations are:

- They focus directly on the overriding goal of the training program—to contribute to the units ability to accomplish its mission.
- As with Training Transfer Evaluations, there are a variety of ways to do Training Impact Evaluations depending on the resources available.

Disadvantages

The disadvantages of conducting Training Impact Evaluations are very similar to those for conducting Training Transfer Evaluations. Although this is also a very important type of evaluation, Training Impact Evaluations can be difficult to conduct for the following reasons:

- Just as job performance is affected by many factors other than training, so is unit performance. **Unit performance on collective tasks is affected by a large number of factors, including:** physical work environment, unit personnel, morale, unit management, unit training programs, etc. It is very difficult to isolate the impact of a training program on unit performance.
- In addition to there being many different factors within one unit that affect unit performance, **there are factors that vary from one unit to another.** These factors include: geographical location of unit, unique mission of the unit, etc. To measure the impact of a training program on one unit is hard enough, but to measure the impact of the training program on units Army-wide is even more difficult.

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Training Program Evaluations

- **Administer questionnaires/critiques** to students at the conclusion of training
- **Tests** to compare student learning using one method of training as opposed to another.

Advantages

The primary advantages of conducting Training Efficiency Evaluations are:

- Because of the current and projected resourcing cuts that the Army and TRADOC are experiencing, there is a need for Training Efficiency Evaluations . If cuts in training must be made, areas to be cut should be identified through well planned and well executed evaluations.
- Training Efficiency Evaluations have a great potential pay off for the school and DOES. Findings generate a great deal of interest and recommendations resulting in cost savings are understood by decision makers. If savings are identified, the resources required to do the evaluations are easily justifiable. Training Efficiency Evaluations provide a means for DOES and the entire evaluation program to gain credibility by showing concrete results in terms of cost savings.
- Identifying savings in training programs that are meaningful and supportable during times of extensive resource reductions.

Disadvantages

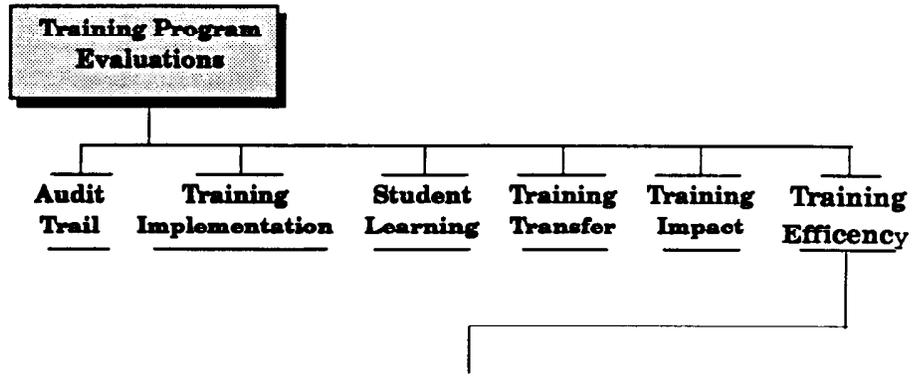
The primary disadvantages of conducting Training Efficiency Evaluations include:

- They are controversial. All organizations fear resourcing cuts. This makes it difficult to obtain information, get access to training and trainers, and get other support required from organizations that may be cut.
- They are difficult, time consuming, and may require expertise in resourcing areas and evaluation techniques that are not used frequently.

References to other materials

Some training efficiency issues may be examined while doing other types of evaluations such as Audit Trail Evaluations and Training Implementation Evaluations.

Training Program Evaluations



TYPE 6. TRAINING EFFICIENCY EVALUATION

Purpose Training Efficiency Evaluations determine if the training is efficient/cost effective.

Questions Addressed Some of the key questions that Training Efficiency Evaluations may answer include:

- Is the training worth the costs of developing and conducting it?
- Are there less costly training methods/media that would result in the same level of student proficiency?
- Do all students being trained actually need the training for job performance?
- Could the length of the course be cut without affecting training on critical tasks?
- Are the training facilities and equipment requirements for the program excessive?
- Are training facilities, equipment, and other support being used to their full potential?

Ways to collect information

Information required for conducting Training Efficiency Evaluations is collected primarily in the following ways:

- Review training documentation (e.g., Task List, POI, Lesson Plans, etc.) using structured checklists
- Interview trainers (instructors, developers, administrators, and managers) using structured interview guides
- Observe Training using structured observation checklists

