

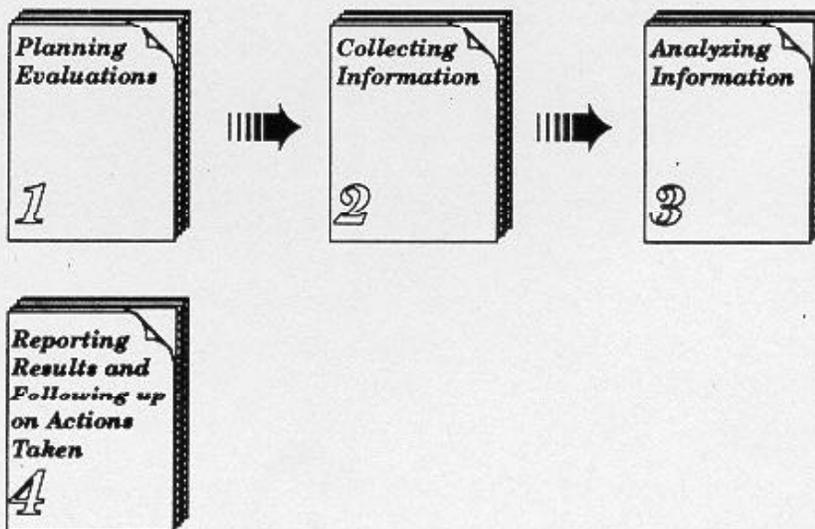
TRAINING EVALUATOR COURSE

M O D U L E T W O

S T U D E N T W O R K B O O K

The Evaluation Process

MODULE 2 LESSONS



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

SEPTEMBER 1992

TRAINING EVALUATOR COURSE

The Evaluation Process

PROPONENT ▼.....
TRADOC Schools, Integrating Centers, and HQ TRADOC developed the materials that make up the Training Evaluator Course as a team effort. We acknowledge the work of all individuals and organizations that directly participated in this effort. We thank them for the support they provided and congratulate them on a job well done.

▼.....
The proponent for this workbook, 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-CD, Fort Monroe, VA 23651-5000. Make telephone inquiries by calling DSN 680-5590 or COMM (804) 728-5590.

TRAINING EVALUATOR COURSE

The Evaluation Process

CONTENTS

INTRODUCTION	▼.....	
	Purpose of Workbook.....	1
	How to Use Workbook.....	3
	Module Overview.....	4
LESSONS	▼.....	
	Lesson 1. PLANNING EVALUATIONS	5
	Lesson Introduction.....	7
	Lesson Objective.....	7
	Lesson Activities.....	8
	• The Evaluation Plan.....	8
	• Job Aid for Planning Evaluations.....	12
	• Step 1 - Identify the Evaluation Problem.....	16
	• Step 2 - Research the Evaluation Problem.....	19
	• Step 3 - Develop the Draft Evaluation Plan.....	22
	• Step 4 - Develop the Final Evaluation Plan.....	28
	Lesson Review and Summary.....	29
	End-of-Lesson Exercise.....	33
	Lesson 2. COLLECTING INFORMATION	35
	Lesson Introduction.....	37
	Lesson Objective.....	38
	Lesson Activities.....	38
	• Data Collection Instruments.....	39
	• Step 1 - Decide on Type Instruments Needed.....	44
	• Step 2 - Develop Drafts of Instruments.....	46
	• Step 3 - Evaluate the Instruments.....	47
	• Step 4 - Administer the Instruments.....	48
	Lesson Review and Summary.....	49
	End-of-Lesson Exercise.....	51

TRAINING EVALUATOR COURSE

The Evaluation Process

Lesson 3. ANALYZING INFORMATION	56
Lesson Introduction.....	58
Lesson Objective	59
Lesson Activities.....	59
• What is Analysis?.....	59
• Qualitative and Quantitative Data.....	62
• Step 1 - Review the Raw Data for Integrity.....	63
• Step 2 - Summarize the Data	68
• Step 3 - Analyze the Data.....	71
• Step 4 - Interpret the Analysis Results	75
Lesson Review and Summary.....	78
End-of-Lesson Exercise	81
Lesson 4. REPORTING RESULTS AND FOLLOWING UP ON ACTIONS TAKEN	84
Lesson Introduction.....	86
Lesson Objective	87
Lesson Activities.....	87
• Reporting Results	87
- Step 1 - Prepare the Draft Report.....	87
- Step 2 - Staff Draft Report for Review/Concurrence.....	94
- Step 3 - Obtain Approval of Recommendations	95
- Step 4 - Distribute Report/ Recommendations for Action.	97
• Following up on Actions Taken	100
- Step 1 - Input Action Milestones into a Tracking System.....	101
- Step 2 - Conduct the Follow-up.....	102
- Step 3 - Prepare a Follow-up Report...	103
- Step 4 - Staff the Follow-up Report	105
Lesson Review and Summary.....	105
End-of-Lesson Exercise	107
CONCLUSION ▼.....	
End-of-Module Exercise	109
References and Suggested Readings	110

**■ PURPOSE OF
WORKBOOK**

INTRODUCTION

▼.....
This workbook is one of a series of workbooks that, with other training materials, is used in the Training Evaluator Course. The course was developed primarily for new training evaluators assigned to the Directorate of Evaluation and Standardization (DOES) in each TRADOC school. Although designed primarily for DOES personnel in TRADOC schools, the training may be beneficial to other personnel who have training evaluation responsibilities.

The Training Evaluator Course consists of a series of training modules. Each module will train you on a specific task or tasks that DOES training evaluators perform. This workbook will be your guide as you work through Module 2. The other modules that make up this program are shown in the Table 1 below.

Table 1
**Modules In The
Training Evaluator Course**

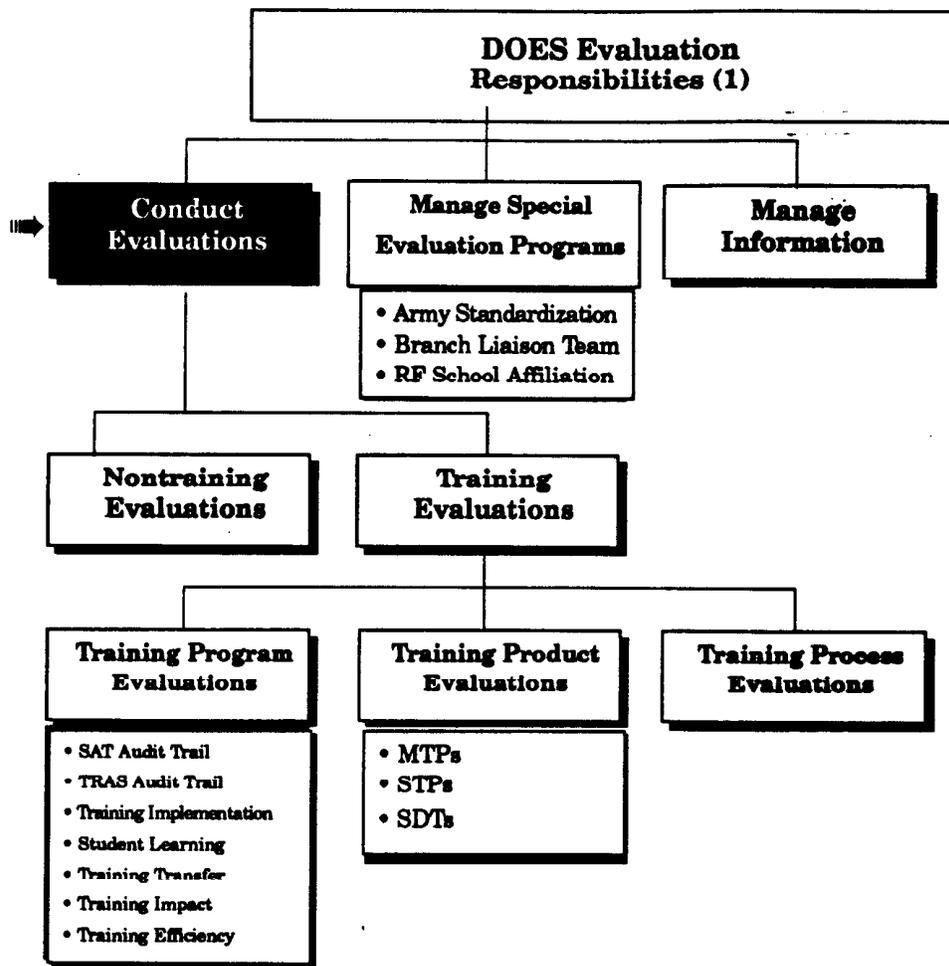
1. Introduction to DOES and Training Evaluation
2. **The Evaluation Process**
3. Evaluation of SAT Audit Trail Documents
4. Evaluation of TRAS Audit Trail Documents
5. Evaluation of Training Implementation
6. Evaluation of Student Learning
7. Evaluation of Training Transfer to the Job

TRAINING EVALUATOR COURSE

The Evaluation Process

In this module, we will discuss the process used to **Conduct Evaluations**. Figure 1, below, shows the relationship of this module, which is highlighted, to the other modules in the course. The figure also shows how the responsibility of conducting evaluations relates to the other evaluation responsibilities of DOES.

Figure 1
DOES Evaluation Responsibilities
with Course Module Numbers



TRAINING EVALUATOR COURSE

The Evaluation Process

HOW TO USE THE WORKBOOK

▼.....
This workbook and all other materials associated with the Training Evaluator Course were designed for you to use in a classroom situation with a course manager available. This course manager will help guide you through the various activities, provide feedback to you on your work, answer your questions, and provide any other assistance you require.

Although we recommend that you complete this workbook in a classroom situation, it can stand alone; you can complete it without assistance from a course manager, much like a correspondence course. If you work through the workbook by yourself, ignore the references made to course managers in the workbook. If you are using the workbook in a classroom situation with a course manager available, as it is intended to be used, follow all directions.

Following this introduction, you will complete a series of activities, including short reading assignments. To reinforce the readings, you will be required to complete short exercises following some readings. In these exercises, you will be asked to answer questions or perform certain skills discussed in the reading. After each exercise, the course manager will provide you feedback on how well you did on the exercise.

When you complete the workbook, you will be directed to see the course manager, who will provide you an End-of-Module Exercise. After you complete the End-of-Module Exercise, the course manager will check your work. The course manager will give you feedback on the exercise and then either direct you to do additional exercises in this module or provide materials for the next module.

As you have probably noticed, there is blank space on the left side of each page in this workbook. You can use this space for writing notes if you desire.

Take your time working through the workbook. If you have any questions, don't hesitate to ask the course manager.

TRAINING EVALUATOR COURSE

The Evaluation Process

MODULE OVERVIEW

▼.....
Your major responsibility in DOES will most likely be to conduct evaluations of your school's training programs, products, and processes. To conduct these evaluations you must have a system to follow. This module presents the process.

In the last lesson of Module 1 of this course we briefly discussed the evaluation process and the five phases that make up this process. These phases are Planning, Collecting, Analyzing, Reporting, and Follow-up. In this module we will discuss the procedures for conducting each of the five phases in more detail, and we will provide job aids to assist you in performing these procedures.

This module is made up of four lessons.

In **Lesson One** we will discuss the **Planning** phase of the evaluation process. This will include a discussion of how you should go about identifying the problem you are evaluating, researching the problem, and developing draft and final evaluation plans for evaluating the problem.

In **Lesson Two** we will discuss the **Collecting** phase of the evaluation process. This will include a discussion of how you develop, evaluate, and administer data collection instruments such as questionnaires and interviews.

In **Lesson Three** we will discuss the **Analyzing** phase of the evaluation process. This will include a discussion of how you review, summarize, and analyze the data you collected and how you interpret the results of your analysis.

In **Lesson Four** we will discuss the **Reporting and Follow-up** phases of the evaluation process. This will include a discussion of how to prepare and staff an evaluation report and how you conduct a follow up evaluation to see what happened as a result of your evaluation.

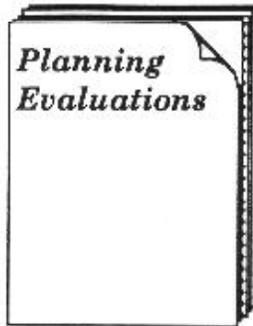
After completing the four lessons in this module you will complete an End-of-Module Exercise that will reinforce what was covered in the module lessons.

TRAINING EVALUATOR COURSE

M O D U L E T W O

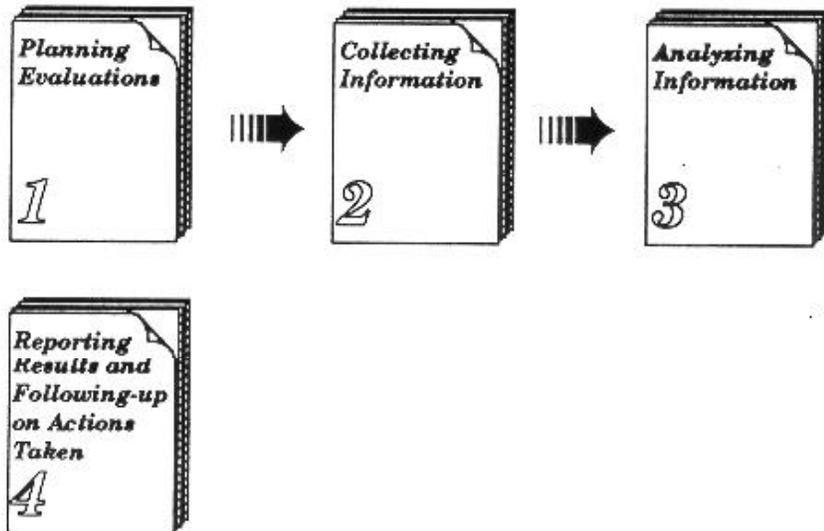
LESSON

1



Planning Evaluations

MODULE 2 LESSONS



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

SEPTEMBER 1992

Table 2
The Evaluation Process

Phase 1 - Planning

1. Identify the evaluation problem
2. Research the evaluation problem
3. Develop the draft evaluation plan
4. Develop the final evaluation plan

Phase 2 - Collecting

5. Decide on type instruments needed
6. Develop drafts of the instruments
7. Evaluate the instruments
8. Administer the instruments

Phase 3 - Analyzing

9. Review the raw data for integrity
10. Summarize the data
11. Analyze the data
12. Interpret the results of the analysis

Phase 4 - Reporting

13. Prepare the draft report
14. Staff draft report for review/concurrence
15. Obtain approval of recommendations
16. Distribute report/recommendations for action

Phase 5 - Follow-up

17. Input action milestones into tracking system
18. Conduct the follow-up
19. Prepare a follow-up report
20. Staff the follow-up report

■ **LESSON INTRODUCTION**

As you recall from the last lesson in Module 1, there are five things you must do when you conduct an evaluation. These are referred to as the five phases of the evaluation process. You must

1. **PLAN** the evaluation
2. **COLLECT** the information needed
3. **ANALYZE** the information collected
4. **REPORT** the results
5. **FOLLOW UP** on actions taken.

The purpose of this lesson is to discuss Phase 1 — Planning the evaluation. Table 2 on the preceding page outlines all the five phases of the evaluation process and the supporting steps within each phase. The Planning phase and the four major steps involved in planning evaluations are highlighted.

■ **LESSON OBJECTIVE**

The training objective for this lesson is shown below. This objective includes: the **action** you will be able to perform at the conclusion of this lesson, the **conditions** under which you will be able to perform this action, and the **standards** to which you will be able to perform the action.

Conditions - Given this workbook and a job aid for planning an evaluation.

Action - Write an evaluation plan.

Standards - The plan must include all critical actions for conducting an evaluation.

TRAINING EVALUATOR COURSE

The Evaluation Process

■ LESSON ACTIVITIES

THE EVALUATION PLAN

▼.....
As you recall from Module 1, the end product of the Planning phase is an **evaluation plan**.

If you've previously done evaluations, you know that developing the evaluation plan is something that most evaluators don't like doing. Most evaluators have a tendency to want to "get on with the evaluation" and start collecting and analyzing information.

**"Getting on with the evaluation"
without doing thorough planning is a big mistake.**

You wouldn't give a briefing or take a trip without planning and, likewise, you should not do an evaluation without planning. If you plan a trip without budgeting for expenses and mapping out your route you may run out of money or get lost. If you give a briefing without doing some preparation and rehearsal you may make a fool of yourself. The same is also true for doing evaluations — without careful planning, you may run out of money, get lost, or make a fool of yourself.

Before we begin to discuss how to plan, we need to briefly discuss three questions you might have at this time:

- Why do I need a plan?
- When do I need a plan?
- What type of plan do I need?

Why do I need a plan?

There are many important reasons why you should carefully plan your evaluations and document your plans in a written **evaluation plan**. Some of these reasons follow:

- Planning helps ensure that there is a **valid need** for doing the evaluation
- Planning **focuses the intent of the evaluation** and prevents the evaluation from getting "off track"

TRAINING EVALUATOR COURSE

The Evaluation Process

- Planning forces the evaluator to “**think through**” the entire evaluation and plan for all actions required
- Planning helps identify and **optimize the use of the limited resources** you have for doing the evaluation
- Planning ensures that everyone involved in the evaluation is informed of and **understands their responsibilities.**

The evaluation plan answers basic questions regarding the upcoming evaluation. The major questions that the evaluation plan answers are:

- WHY is the evaluation being done?
- WHAT will the evaluation accomplish?
- HOW will the evaluation be done?
- WHO will conduct and support the evaluation?
- WHAT resources will the evaluation require?
- WHEN will the evaluation be done?
- WHAT references will be used during the evaluation?

When do I need a plan?

As an evaluator, you will be responsible for performing many different evaluation duties. Some of these duties will be **routine evaluation duties** such as conducting a classroom observation, reviewing a test, or analyzing a group of student end-of-course critiques. Obviously these “routine” duties do not require an in-depth evaluation plan. Procedures for performing these routine duties may be explained in a local SOP or local policy document.

In addition to performing the routine evaluation duties, you will also be required to conduct **major evaluations**. These will include in-depth evaluations of school training programs, products, or processes. We discussed some of the different types of training evaluations (SAT Audit Trail evaluations, Student Learning evaluations, SQT evaluations, etc.) in Lesson 1 of Module 1. When you must conduct any major evaluation, an evaluation plan is required.

TRAINING EVALUATOR COURSE

The Evaluation Process

What type of evaluation plan do I need?

The length of the evaluation plan and the detail in the plan will depend on different factors. The general rule is: **use common sense**. The factors that affect the evaluation plan include the following:

- The complexity of the evaluation
- The uniqueness of the evaluation
- The number of individuals/organizations involved in the evaluation
- The resources required to do the evaluation
- The experience of the evaluators
- The potential impact of the evaluation
- The decision maker who will approve evaluation recommendations
- The local policy on planning evaluations

In this lesson, we will walk you through the actions required in developing an evaluation plan. Although there are different formats for evaluation plans and different elements included in these different plans, there are certain critical elements that all evaluation plans must have. The evaluation plan format we will discuss in this module has **15 elements**. For the purposes of standardization, we recommend that you use the format we will discuss in this lesson as shown in Table 3.

Table 3
Evaluation Plan Elements

WHY is the evaluation being done?

1. **PROBLEM**
2. **IMPACT**

WHAT will the evaluation accomplish?

3. **LIMITATIONS**
4. **ASSUMPTIONS**
5. **ESSENTIAL ELEMENTS OF ANALYSIS (EEAs)**
6. **OBJECTIVES**
7. **PURPOSE**

HOW will the evaluation be done?

8. **DATA COLLECTION/ANALYSIS
METHODOLOGY**
9. **DATA REPORTING/FOLLOW-UP
METHODOLOGY**

WHO will conduct/support the evaluation?

10. **EVALUATION REPRESENTATIVES AND
RESPONSIBILITIES**

WHAT resources will be required?

11. **RESOURCE REQUIREMENTS**
12. **SUPPORT REQUIREMENTS**

WHEN will the evaluation be done?

13. **EVALUATION SCHEDULE**

WHAT references will be used?

14. **REFERENCES**
 15. **RELATED STUDIES**
-

TRAINING EVALUATOR COURSE

The Evaluation Process

For the remainder of this lesson, we will discuss the four major steps involved in planning an evaluation. These are shown below.

1. Identify the evaluation problem
2. Research the evaluation problem
3. Develop the draft evaluation plan
4. Develop the final evaluation plan

First, we will discuss some things you should do to determine what the problem is and why you are conducting the evaluation. This will include a discussion of two of the evaluation plan elements: the evaluation **Problem**, and the **Impact** of not solving the problem (Step 1).

We will provide an overview of some of the different types of feedback and training documents that you may need to review when doing initial research on the evaluation problem (Step 2).

We will walk you through step-by-step procedures involved in developing the other elements of your draft evaluation plan (Step 3).

We will then provide some guidelines for staffing and coordinating your draft plan and developing your final evaluation plan (Step 4).

JOB AID FOR PLANNING EVALUATIONS

▼.....
Place yourself in the following situation.

Situation:

Your supervisor just walked into your office and told you to conduct an evaluation of one of your school's courses. He says that the assistant commandant (AC) has just returned from a trip to the field and heard from field commanders that the course is not adequately preparing its graduates for the duties they are assigned in the field.

That is all the guidance you receive.

What is your next move?

TRAINING EVALUATOR COURSE

The Evaluation Process

This type of situation happens frequently. Evaluators are often assigned evaluations with little background information and little guidance on how to conduct the evaluation. As you already know, your next move should be to begin the first phase of the evaluation process — the Planning phase. To help evaluators, like yourself, plan evaluations, we have developed a comprehensive job aid to assist in planning any evaluation. You received it with this workbook. It is **Job Aid 2a** titled *Plan an Evaluation*.

This job aid will walk you through the entire planning phase from the time your supervisor says “conduct the evaluation” until your final recommendations are implemented.



Get out Job Aid 2a at this time.

Since almost everything you need to plan an evaluation is in the job aid, we will not spend a great deal of time discussing all the planning actions in the job aid. Rather, we will give you a quick introduction to the job aid and how to use it on the job.



Read the first 6 pages of the job aid. (This will include the Cover, Purpose, Table of Contents, and Directions.)

PROCEED AFTER YOU ARE FINISHED READING

Turn to the Table of Contents on page 3 of the job aid.

Not including the Cover, Table of Contents, and Directions there are three parts to the job aid:

- **Part 1** - This is a **worksheet** for recording information on evaluators and other points of contact (POC) who will work with you on the evaluation (page 7).
- **Part 2** - This is the “meat” of the job aid; it includes a **checklist** of all the individual actions required in planning

TRAINING EVALUATOR COURSE

The Evaluation Process

an evaluation (pages 9 - 51):

- **Part 3** - This part of the job aid will include a series of **enclosures** that you will collect and use as you plan and conduct your evaluation (page 52).



Scan through the job aid and find the beginning of each of these three parts of the job aid.

Let's get back to the situation you were given earlier, i.e., the situation of being tasked to do an evaluation of a course. Let's also say that when you were tasked to do the evaluation you had the job aid available to assist you in planning the evaluation.

As indicated in the job aid **directions**, prior to doing anything else, you should make a copy of the job aid, three hole punch it, and put in a three ring binder. We will refer to this three ring binder, which includes the job aid, as your **evaluation notebook**. Putting the job aid in the binder will allow you to use the job aid and add enclosures to Part 3 as you collect them.

Some of your first questions when your supervisor tasked you to do the evaluation would probably be similar to those below:

Is there a **written** tasking from the assistant commandant?

Were the **comments** from the field commanders recorded?

Was there a **trip report** prepared on the AC's trip?

From the time your supervisor says "do the evaluation", you will start collecting written documents. During the course of the evaluation, you will collect and use a large number of documents. Wouldn't it be nice if you had a place to keep these documents and a system for organizing the documents. Well, you do! You can add them, as enclosures, to the evaluation notebook that contains the job aid. If there was a

TRAINING EVALUATOR COURSE

The Evaluation Process

written tasking or a trip report, you should get copies and insert them in Part 3 of the job aid which you copied and put in your evaluation notebook. As you add enclosures to the notebook, you should record them in the list of enclosures included in the job aid Table of Contents on page 4.

Keeping everything in a notebook will ensure that all the information you collect is easily accessible. This will include written documents and any information you collect through your discussions. You will use the evaluation notebook throughout the evaluation. When the evaluation is complete, you will have a well-organized audit trail of your planning actions.

When your supervisor first tasked you to do the evaluation, in the situation given earlier, you might also ask questions similar to these:

Who went with the assistant commandant on the trip?

Who recorded the comments?

Who will represent the AC as my point of contact (POC)?

Who were the field commanders that made the comments?

In addition to collecting information in the form of written documents, you also begin collecting information on individuals or POC when you are first tasked to do the evaluation. Wouldn't it also be nice if you had a place to record and organize all the information on your POC. Again, you do have a place to record the information. The **worksheet** (Part 1) on page 7 of the job aid provides a place to record information (name, telephone number, address, etc.) on all the POC involved in the evaluation. When you need to contact a POC for any reason, you will have all the information on them in one place.

At this point, you've already started planning the evaluation and you haven't even read the first item in the **checklist of planning actions** (Part 2) the job aid. Let's now take a look at the checklist.



Turn to page 9 of your job aid (This is where the checklist of planning actions begins.)

TRAINING EVALUATOR COURSE

Evaluation Planning

As we discussed previously, there are four major steps involved in planning an evaluation. These are listed on top of page 9 in the job aid. The first step in the checklist is to **Identify the evaluation problem**. Actions required for identifying the evaluation problem and guidelines are listed on pages 9 through 18 of the job aid.

Lets take a quick look at how the checklist is laid out. As you can see in the checklist, the planning actions are listed in the middle of the page. There are spaces provided for you to record information to the left and right of the action. To the left of the action are spaces for you to record dates when you project completion of the actions and dates when you actually complete the actions. There is also a block for you to check off each action as it is completed.

To the right of the action is a space to reference any documents that you add as enclosures to the job aid. For example, in the earlier situation, if you received a written tasking to do the evaluation, you would attach that tasking as enclosure "A" in Part 3 of the job aid and put an "A" in the space beside the action. To the right of the space for referencing enclosures, there is space for you to record notes as you plan the evaluation.

Let's now spend some time looking at the individual planning actions required in each of the four steps involved in planning an evaluation.

STEP 1 IDENTIFY THE EVALUATION PROBLEM



1. Identify the evaluation problem
2. Research the evaluation problem
3. Develop the draft evaluation plan
4. Develop the final evaluation plan

As we stated earlier, actions required for completing Step 1 of the planning phase are provided on pages 9 through 18 of the job aid.



Read pages 9 through 18 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING

TRAINING EVALUATOR COURSE

The Evaluation Process

Why is the evaluation being done?

Step 1 of the planning process answers the big question, **Why is the evaluation being done?** There are ten actions, which you've just read, required to identify the evaluation problem and answer this question. Table 4, below, briefly summarizes these actions.

Table 4
**Actions Required in
Identifying the Evaluation Problem**

1. Obtain written documentation that initiated the evaluation
 2. Clarify why the evaluation was initiated
 3. Start developing a **list of questions** that need to be answered
 4. Get everyone's interpretation of the problem
 5. Discuss the problem with other evaluators
 6. Develop your initial interpretation of the **PROBLEM**
 7. Develop your initial interpretation of the problem **IMPACT**
 8. Make initial decision to stop (NO GO) or continue evaluation (GO)
 9. If evaluation is a NO GO, write a memo on why evaluation stopped
 10. If evaluation is a GO, write a memo requesting POCs
-

As stated in the job aid, the list of questions that you start developing at action number 3 is very important. Many of the evaluation plan elements will evolve from this list of questions.

TRAINING EVALUATOR COURSE

The Evaluation Process

As also stated in the job aid, the evaluation **PROBLEM** and problem **IMPACT** are the first two elements of the evaluation plan.

It is extremely important to identify and clarify the evaluation **PROBLEM** early in the planning process. As we discussed in Module 1, you should not evaluate training simply because it is there. You don't have the resources to do this. Remember — **if it isn't broke, don't try to fix it.**

There are many reasons why you should identify the problem early. Identification of the evaluation problem

- ensures that there actually is a problem
- focuses the intent of the evaluation on the problem
- helps you determine if you have the resources to find a solution to the problem
- helps you determine if the “payoff” from solving the problem is worth the effort required to do the evaluation
- enables you to make an initial recommendation on whether the evaluation should be conducted before resources are invested.

Our intent in developing the job aid is not to lock the planning process in concrete and require you to plan by our rules. Our intent is only to provide an aid to assist you in planning your evaluations. The specific actions required for planning an evaluation will vary depending on the particular evaluation. In the job aid we are offering a systematic approach to evaluation planning. You do not have to rigidly follow the actions. As discussed in the directions to the job aid, you may want to add additional actions required, or delete actions not required, for your particular evaluation.

Now that you have identified the evaluation **PROBLEM**, identified the **IMPACT** of not solving the problem, and made an initial decision on whether you should continue with the evaluation, your next step is to research the evaluation problem.

TRAINING EVALUATOR COURSE

The Evaluation Process

STEP 2 RESEARCH THE EVALUATION PROBLEM

- ▼.....
- √ 1. Identify the evaluation problem
 2. **Research the evaluation problem**
 3. Develop the draft evaluation plan
 4. Develop the final evaluation plan

Actions required for completing Step 2 of the planning phase are provided on pages 19 and 22 of the job aid.



Turn to page 19 of your job aid.

During this step, the second of the Planning phase, you will review feedback and training documentation pertinent to the problem. We have designated this as a separate step in the planning process. During most evaluations, however, you may begin research earlier during development of the evaluation problem and may continue it throughout the evaluation. The main thing to remember is: **you must research the problem.**



Read pages 19-22 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING

There are three actions, which you've just read, involved in researching the evaluation problem. Table 54 outlines these actions.

Table 5
**Actions Required in
Researching the Evaluation Problem**

1. Initiate a literature search, if required
 2. Begin to collect and review training feedback
 3. Begin to collect and review training documents
-

TRAINING EVALUATOR COURSE

The Evaluation Process

Initiate Literature Search

If you think there may be some existing studies pertinent to your evaluation, then you should initiate a literature search to locate them. There are different types of literature searches that can be done. You can do a local search, Armywide search, Department of Defense (DOD) search, or searches outside the DOD.

The list of literature search sources that follows is far from complete, but it will give you an idea of the many sources available. For more information on literature searches, contact your local library.

- Air University Library Index to Military Periodicals
- Defense Technical Information Center (DTIC)
- Defense Logistics Studies Exchange (DLSE)
- Educational Resources Information Center (ERIC)
- PTS Defense Markets Technology Dialog Information Retrieval Service

Review Training Feedback

In addition to conducting a literature search, you should also review training feedback for information pertinent to your evaluation problem. You should review feedback from different sources (existing studies, trip reports, test results, etc.) for many reasons, including those listed below:

- **to determine if the problem has been identified before** (determines if your problem is a one-time situation or represents a recurring trend)
- **to determine if the problem has been studied before** and if the information required to address the problem is already available (reduces the possibility of you duplicating something that has already been done)

TRAINING EVALUATOR COURSE

The Evaluation Process

- to determine if there are other related training problems that need to be evaluated as part of the evaluation.

Each DOES is required to establish and maintain a feedback system for organizing feedback from different sources. Establishment and maintenance of a feedback/information management system is discussed in Module 15 of the course, *Feedback and Information Management*.

Review Training Documents

In addition to collecting and reviewing feedback related to the problem being studied, you will also need to collect and review training documents. Primarily, you will review these training documents to familiarize yourself with the training program, product, or process that you are evaluating. You may also have to evaluate some of these training documents as part of your evaluation. The job aid provides a list of the different training documents you may need to review.

You've now completed the first two steps in the Planning phase of the evaluation process. Let's review very quickly where we are in the planning process.

Earlier in this lesson, you were put into a hypothetical situation. In that situation you were tasked to do an evaluation and given a job aid to assist you in planning the evaluation. Using the job aid, you put together an evaluation notebook to help you organize the information you collected as you planned and conducted the evaluation.

As part of the planning process, you also started development of a list of questions that need to be answered to address the problem you are evaluating. Using the list of questions and other information, you developed initial drafts of two of the evaluation plan elements--the evaluation PROBLEM and the IMPACT of not solving the problem. You then made an initial decision on whether you should continue with the evaluation. You then researched your evaluation problem by initiating a literature search, reviewing feedback, and reviewing training documents.

You are now ready for the third step in the Planning phase. In this step you will draft the other elements of the evaluation plan.

**STEP 3
DEVELOP THE
DRAFT
EVALUATION
PLAN**

▼.....

- √ 1. Identify the evaluation problem
- √ 2. Research the evaluation problem
- 3. Develop the draft evaluation plan**
- 4. Develop the final evaluation plan

As we discussed earlier, all the actions required in planning your evaluation are included in the checklist in Part 2 of Job Aid 2a.



Turn to page 23 of the job aid.

Guidelines for developing the draft evaluation plan (Step 3) are on pages 23 through 46 of the job aid. This step in the planning process includes several actions and is the most important and most difficult part of the planning process.



Read pages 23-25 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING

Page 23/24 of the job aid provides some broad guidelines for developing your evaluation plan.

Page 25 provides an outline of an evaluation plan with key questions that each element of the plan answers. The outline on page 16 is a very useful reference. It provides a condensed version of an evaluation plan. If you forget what an element is or how each element fits into the overall plan, you can use the outline as a quick reference.

As you can see on page 16, there are ten sections in the evaluation plan. Some sections have two elements and some contain only one element. There are a total of **15 separate elements** in the evaluation plan.

Guidelines for developing the individual elements of the plan begin on page 26 of the job aid. Although developing the elements is not a simple process that lends itself to a systematic approach, we have provided some organization to the process in the job aid. Developing the elements requires a

TRAINING EVALUATOR COURSE

The Evaluation Process

great deal of thinking, assessing, and reassessing.

To provide organization to the process, we have developed a linear approach to developing the elements. Using this approach, you will find that development of one element leads to development of the next.

As we discussed earlier, the elements of the evaluation plan answer certain questions regarding the evaluation. Again, these questions are shown below.

- WHY is the evaluation being done?
- WHAT will the evaluation accomplish?
- HOW will the evaluation be done?
- WHO will conduct and support the evaluation?
- WHAT resources will be required?
- WHEN will the evaluation be done?
- WHAT references will be used during the evaluation?

We have already answered the first question: WHY is the evaluation being done. The evaluation PROBLEM tells us WHY the evaluation is being done. We will now use the PROBLEM to develop other elements of the evaluation plan that answer the other questions.

WHAT will the evaluation accomplish?

There are five separate evaluation plan elements that describe what the evaluation will accomplish.

WHAT will the evaluation accomplish?

LIMITATIONS,
ASSUMPTIONS,
ESSENTIAL ELEMENTS OF ANALYSIS
(EEAs),
OBJECTIVES, AND
PURPOSE

Pages 26 through 46 of the job aid contain the guidelines for drafting up these five elements of the evaluation plan.

TRAINING EVALUATOR COURSE

The Evaluation Process



Read pages 26 through 35 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING

The pages you have just read provide actions and guidelines for developing the five elements that describe **what the evaluation will accomplish**. You will derive these elements from the list of questions that you start developing at the beginning of the planning phase. Answering these questions will help you define the evaluation REQUIREMENT.

There are 12 actions (actions 1c. through 1n.) in the job aid, which provide guidance on determining what the evaluation will accomplish. Table 6 briefly summarizes these actions.

Table 6
**Actions Required in
Determining
WHAT the Evaluation will Accomplish**

- 1c. Refine your list of questions that make up the evaluation PROBLEM
- 1d. Identify information needed to answer each question
- 1e. Determine if information required to answer each question is available
- 1f. Determine how you should collect/analyze the information required
- 1g. Determine if you have the resources to collect/analyze the information
- 1h. Identify intervening factors that will influence information collected
- 1i. Determine which questions you will and will not answer

TRAINING EVALUATOR COURSE

The Evaluation Process

- 1j. From list of questions you will not answer, develop
 - **LIMITATIONS**
 - L
 - 1k. Based on the LIMITATIONS, develop
 - **ASSUMPTIONS**
 - AS
 - 1l. From list of questions you will answer, develop
 - **EEAs**
 - 1m. Group similar EEAs together to form the evaluation
 - **OBJECTIVES**
 - 1n. From the OBJECTIVES, develop the evaluation
 - **PURPOSE**
-

The process of determining what the evaluation will accomplish results in five evaluation plan elements, LIMITATIONS, ASSUMPTIONS, ESSENTIAL ELEMENTS OF ANALYSIS (EEAs), OBJECTIVES, and PURPOSE. Due to time constraints, we have over-simplified the process for developing these elements to some extent. As we stated before there is a great deal of thinking, assessing, and reassessing required to develop these elements.

***Other
Questions
Addressed in
Plan***

So far you have drafted evaluation plan elements that provide answers to the questions: WHY is the evaluation being done? and WHAT will the evaluation accomplish? You now must draft the elements that answer the other questions.

- √ WHY is the evaluation being done?
- √ WHAT will the evaluation accomplish?
 - HOW will the evaluation be done?
 - WHO will conduct and support the evaluation?
 - WHAT resources will be required?
 - WHEN will the evaluation be done?

TRAINING EVALUATOR COURSE

The Evaluation Process

WHAT references will be used during the evaluation?

There are eight evaluation plan elements that answer these remaining questions. Table 7 outlines these elements.

Table 7

Other Evaluation Plan Elements

HOW will the evaluation be done?

**DATA COLLECTION AND ANALYSIS METHODS
DATA REPORTING AND FOLLOW-UP**

WHO will conduct and support the evaluation?

**EVALUATION REPRESENTATIVES AND
RESPONSIBILITIES**

WHAT resources will be required?

**RESOURCE REQUIREMENTS
SUPPORT REQUIREMENTS**

WHEN will the evaluation be done?

EVALUATION SCHEDULE

WHAT references will be used during the evaluation?

**REFERENCES
RELATED STUDIES**

Pages 36 through 44 of the job aid contain the guidelines for drafting up these eight remaining elements of the evaluation plan.



Read pages 36 through 44 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING

Using the guidance in the job aid, you have now developed initial drafts of all 15 evaluation plan elements. As we mentioned before, development of the evaluation plan is a

TRAINING EVALUATOR COURSE

The Evaluation Process

complex process. To some extent we have over-simplified the process simply because we don't have the time, in this course, to discuss every planning action in detail. There are many other evaluation topics that we need to discuss in the course. The important things to remember about developing evaluation plan elements are all included in the job aid.

Now that you have initial drafts of all elements, you need to coordinate your plans with all those who are either involved in the evaluation or affected by the evaluation. Although you will do a lot of coordination with individuals as you develop initial drafts of the elements, you now need to get everyone together to discuss your plans.

As you might recall from reading the job aid, you were required to prepare and distribute a memorandum that informed everyone of the evaluation and set up a meeting to discuss your plans (See Action 10 on page 17 of the job aid). This will be your first meeting with all your POCs to discuss the evaluation. Guidelines for preparing for and conducting this meeting, and for making revisions to the evaluation plan elements as a result of the meeting, are on page 45 and 46 of the job aid.



Read pages 45 and 46 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING.

After the meeting you should prepare and distribute a memorandum on the results of the meeting.

Based on the meeting, you then refine the initial drafts of the evaluation plan elements and put them together to form the **draft evaluation plan**.

You are now ready for the fourth and last step of the planning phase, which is to develop the final evaluation plan.

TRAINING EVALUATOR COURSE

The Evaluation Process

- STEP 4** ▼.....
DEVELOP THE
FINAL
EVALUATION
PLAN
- √ 1. Identify the evaluation problem
 - √ 2. Research the evaluation problem
 - √ 3. Develop the draft evaluation plan
 - 4. Develop the final evaluation plan**

Guidelines for developing the final evaluation plan are on pages 47 through 51 of the job aid.

Read pages 47-51 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING.

There are 10 actions, that you've just read, required in developing the final evaluation plan. Table 8 briefly summarizes these actions.

Table 8
Actions Required in
Developing the Final Evaluation Plan.

1. Prepare draft evaluation plan for staffing
 2. Staff draft plan within DOES
 3. Staff draft plan outside DOES
 4. If POC meeting is scheduled, prepare for meeting
 5. If POC meeting is scheduled, conduct meeting
 6. If POC meeting is held, prepare an MFR on meeting
 7. Make revisions to plan based on staffing/meeting
 8. Staff **final evaluation plan** within DOES
 9. Staff final plan with Decision Maker for approval
 10. Distribute final plan to all concerned
-

We have now discussed all the actions required in the Planning phase of the evaluation process. Let's quickly review what we've discussed in this lesson and complete an end-of-lesson exercise.

■ **LESSON REVIEW AND SUMMARY**

In this lesson, we have discussed the following key points:

1. The **Planning phase** is the first of five phases involved in the evaluation process.
2. The end product of the planning phase is an **evaluation plan**.
3. There are four major steps involved in planning an evaluation:
 1. Identify the evaluation problem
 2. Research the evaluation problem
 3. Develop the draft evaluation plan
 4. Develop the final evaluation plan
4. Evaluation plans are developed to:
 - focus the intent of the evaluation
 - determine if there is a valid need for the evaluation
 - identify and optimize the use of limited evaluation resources
 - inform everyone of their evaluation responsibilities
 - force the evaluator to think through and plan all actions required.
5. An evaluation plan is needed for every major evaluation you conduct and should be used in all evaluations.
6. The detail required in the evaluation plan will depend on many factors to including the:
 - complexity of the evaluation
 - uniqueness of the evaluation
 - number of individuals/organizations involved in evaluation
 - resources required to do evaluation
 - experience of the evaluators

TRAINING EVALUATOR COURSE

The Evaluation Process

- potential impact of the evaluation
 - the decision maker who will approve the recommendations
 - local policy on planning evaluations.
7. After being assigned an evaluation, you should use **Job Aid 2a, Plan an Evaluation**, to put together an **evaluation notebook** for each evaluation you conduct.
8. The evaluation notebook with job aid will serve as:
- a **worksheet** for you to record information, and planning decisions
 - a **checklist** to remind you of all planning actions required
 - an **audit trail** of decisions and documents used in the evaluation
 - a **file** for organizing written materials you will use during the evaluation.
9. Step 1, of the four steps in the Planning phase, is to **Identify the evaluation problem.**
10. The evaluation problem is identified and clarified early in the planning phase to:
- ensure that there is a problem that needs fixing
 - focus the intent of the evaluation on the problem
 - determine if you have the resources to find a solution to the problem
11. Step 2, of the four steps in the Planning phase, is to **Research the evaluation problem.**
12. The evaluation problem is researched to:
- determine if the problem has been identified before
 - determine if the problem has been studied before
 - determine if there are other related problems
 - familiarize the evaluator with the area being evaluated.

TRAINING EVALUATOR COURSE

The Evaluation Process

13. Step 3, of the four steps in the Planning phase, is to **Develop the draft evaluation plan.**
14. There are **15 elements** that make up the evaluation plan.
15. All the evaluation plan elements derive from the evaluation PROBLEM and the **list of questions (EEAs)** that need to be answered to address the problem.
16. The elements of the evaluation plan answer seven basic questions regarding the evaluation. Table 9 on the next page shows each question and the elements that answer that question.
17. After initial drafts of evaluation plan elements are developed, a meeting is conducted with all evaluators and evaluation POCs. Evaluation plan elements are revised as a result of meeting.
18. Step 4, of the four steps in the Planning phase, is to **Develop the final evaluation plan.**

TRAINING EVALUATOR COURSE

The Evaluation Process

Table 9
Evaluation Plan Elements

WHY is the evaluation being done?

- 1. PROBLEM**
- 2. IMPACT**

WHAT will the evaluation accomplish?

- 3. LIMITATIONS**
- 4. ASSUMPTIONS**
- 5. ESSENTIAL ELEMENTS OF ANALYSIS (EEAs)**
- 6. OBJECTIVES**
- 7. PURPOSE**

HOW will the evaluation be done?

- 8. DATA COLLECTION/ANALYSIS METHODOLOGY**
- 9. DATA REPORTING/FOLLOW-UP METHODOLOGY**

WHO will conduct/support the evaluation?

- 10. EVALUATION REPRESENTATIVES AND RESPONSIBILITIES**

WHAT resources will be required?

- 11. RESOURCE REQUIREMENTS**
- 12. SUPPORT REQUIREMENTS**

WHEN will the evaluation be done?

- 13. EVALUATION SCHEDULE**

WHAT references will be used?

- 14. REFERENCES**
 - 15. RELATED STUDIES**
-

TRAINING EVALUATOR COURSE

The Evaluation Process

■ END-OF-LESSON EXERCISE

Answer each question below in the spaces provided. You can use the workbook, job aid, or any other references you need to answer the questions. When you are finished, see your course manager for feedback on the exercise.

1. In this lesson, we discussed numerous reasons for developing evaluation plans? Can you think of two other reasons for developing evaluation plans that we did not discuss? Write them in the spaces below.

a. _____

b. _____

2. For each of the situations below, indicate whether the situation would INCREASE or DECREASE the detail required in the evaluation plan. Place an "I" or "D" in the spaces provided.

_____ a. You will be doing an evaluation that will require the collection of data from many different sources.

_____ b. You will be doing a type of evaluation that you have not done before.

_____ c. You will be doing an evaluation that could result in very significant changes to a lengthy and resource-intensive training program.

_____ d. You will be the only evaluator and will be doing an evaluation very similar to two other evaluations you have recently completed.

TRAINING EVALUATOR COURSE

The Evaluation Process

3. Using the Job Aid 2a, *Plan an Evaluation*, rank order the following planning actions in the order in which they should be conducted. Place a "1" in front of the action that should be conducted first, and so on.

- a. Begin developing a List of Questions that the evaluation will need to address.
- b. Develop your initial interpretation of the IMPACT of not solving the evaluation PROBLEM.
- c. Make an initial decision on whether to continue with the evaluation.
- d. Get interpretations of the evaluation problem from different individuals that will be involved in or affected by the evaluation.
- e. Develop your initial interpretation of the evaluation PROBLEM.

4. Using the job aid, rank order the following ten planning actions just as you did in question 3.

- a. Develop the ESSENTIAL ELEMENTS OF ANALYSIS.
- b. Meet with all evaluation POCs.
- c. Develop the DATA COLLECTION AND ANALYSIS METHODOLOGY.
- d. Develop the ASSUMPTIONS.
- e. Determine what information is needed to answer each question involved in the evaluation PROBLEM.
- f. Develop the evaluation PURPOSE.

TRAINING EVALUATOR COURSE

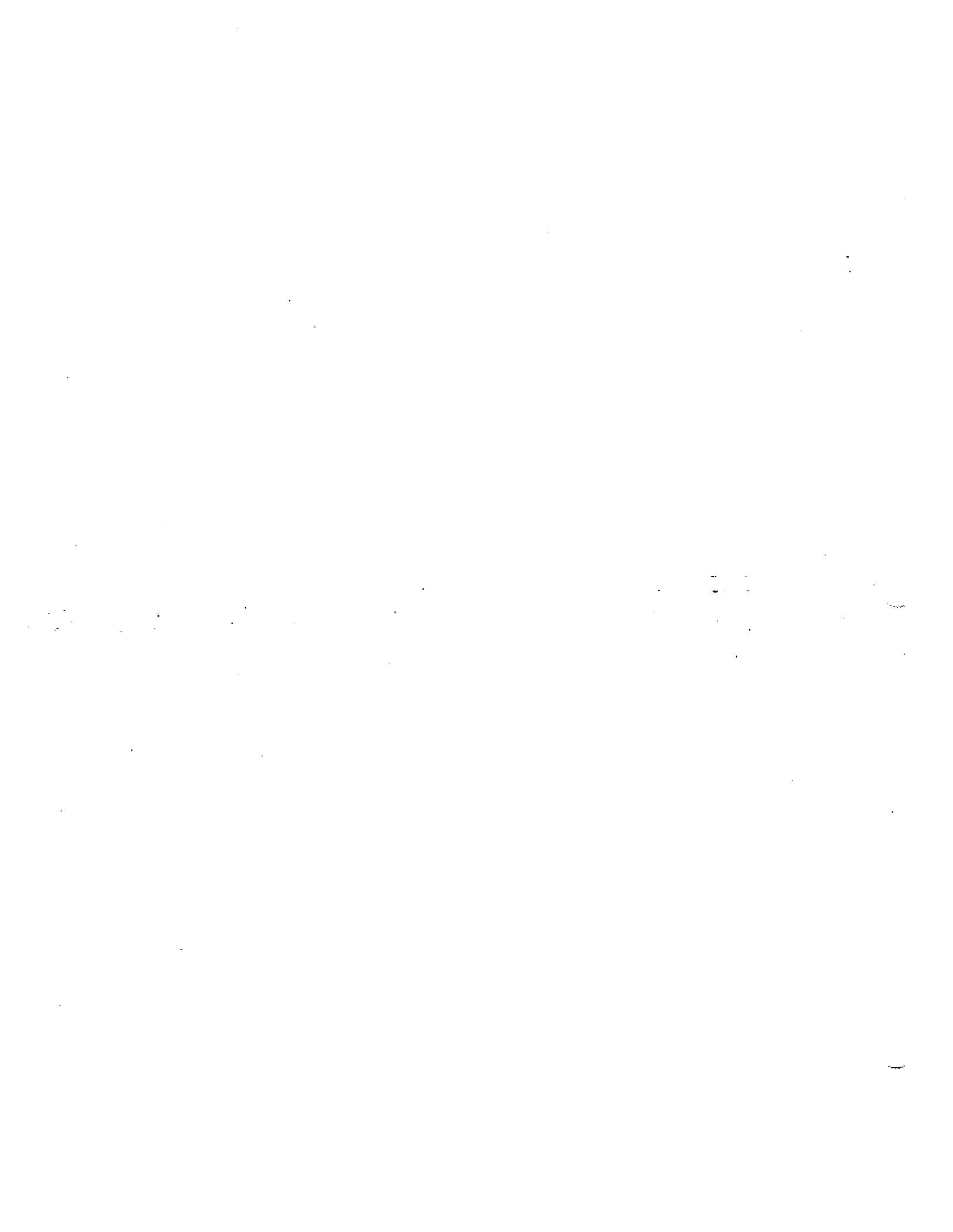
The Evaluation Process

- ___ g. Staff draft evaluation plan.
- ___ h. Determine which questions involved in the PROBLEM you will and will not answer.
- ___ i. Develop the LIMITATIONS.
- ___ j. Distribute final evaluation plan.



When you are finished, see your course manager.

You've finished Lesson One of this Module. In this lesson, we discussed the first phase of the evaluation process, Planning your evaluation. In Lesson Two, we will discuss the next phase, which involves collecting the information needed for your evaluation.

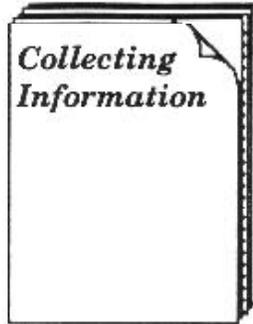


TRAINING EVALUATOR COURSE

M O D U L E T W O

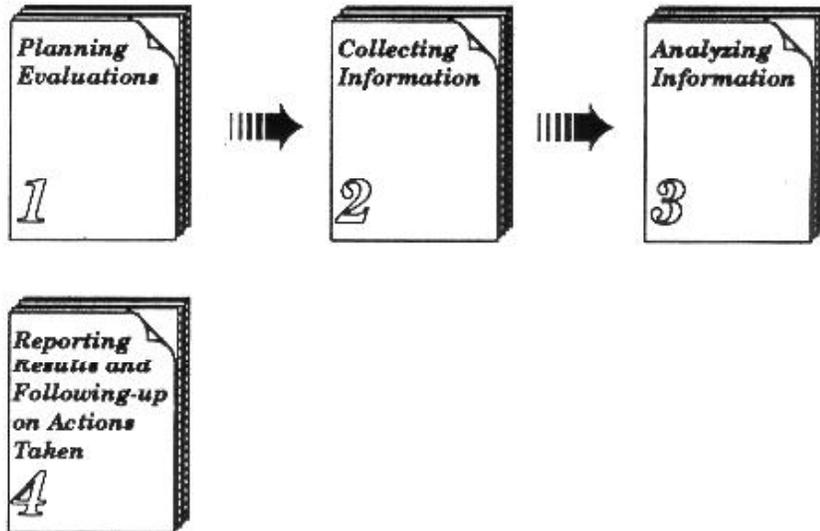
LESSON

2



Collecting Information

MODULE 2 LESSONS



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

SEPTEMBER 1992

Table 2
The Evaluation Process

Phase 1 - Planning

- √ 1. Identify the evaluation problem
- √ 2. Research the evaluation problem
- √ 3. Develop the draft evaluation plan
- √ 4. Develop the final evaluation plan

Phase 2 - Collecting

- 5. Decide on type instruments needed
- 6. Develop drafts of the instruments
- 7. Evaluate the instruments
- 8. Administer the instruments

Phase 3 - Analyzing

- 9. Review the raw data for integrity
- 10. Summarize the data
- 11. Analyze the data
- 12. Interpret the results of the analysis

Phase 4 - Reporting

- 13. Prepare the draft report
- 14. Staff draft report for review/concurrence
- 15. Obtain approval of recommendations
- 16. Distribute report/recommendations for action

Phase 5 - Follow-up

- 17. Input action milestones into tracking system
- 18. Conduct the follow-up
- 19. Prepare a follow-up report
- 20. Staff the follow-up report

■ **LESSON INTRODUCTION**

During the Planning Phase of the evaluation process, discussed in **Lesson 1**, you identify the evaluation problem, research the problem, and develop a draft then a final evaluation plan. When developing the evaluation plan, you identify the information you must have to address the overall evaluation problem, and you identify the individual questions (EEAs) that make up the problem. In the evaluation plan, you include plans on how you will collect the required information. During the **Collection phase** of the evaluation process, you collect the information. In this lesson, we will discuss the Collection phase of the evaluation process.

The five phases of the evaluation process (Planning, Collection, Analysis, Reporting, and Follow-up) are not clearly separated. There is always some overlap from one phase to another. Although you will collect most of your information during the Collection phase, you have already collected much information during the Planning phase. During your review of feedback and training documentation, as you researched the evaluation problem, and through your discussions with other evaluators and SMEs, as you developed the evaluation plan, you collected a great deal of information. So, although you will collect most of the information needed during the Collection phase, you also collect information during other phases of the evaluation process.

Table 2, on the opposite page, shows the five phases of the evaluation process and the supporting steps within each phase. The collection phase and the four major steps involved in collecting information, which we will discuss in this lesson, are highlighted.

TRAINING EVALUATOR COURSE

The Evaluation Process

■ LESSON OBJECTIVE

The training objective for this lesson is shown below. This objective includes: the **action** you will be able to perform at the conclusion of this lesson, the **conditions** under which you will be able to perform this action, and the **standards** to which you will be able to perform the action.

Conditions - Given this workbook, a job aid for developing and administering questionnaires and interviews.

Action - You will collect data necessary to support specific evaluation.

Standards - You will analyze the problem in the evaluation and identify the type of data collection instrument you need. Develop and field test instrument which shown to be valid to satisfaction of scorer..

■ LESSON ACTIVITIES

As you recall from Lesson One, while you develop the evaluation plan, you also make initial plans on how you will collect and analyze the information you need to address the individual questions (Essential Elements of Analysis) that make up the evaluation problem. These plans are included in the evaluation plan under the **Data Collection and Analysis Methods**. Using these plans, you now must make final decisions on the types of data collection instruments you will need. You must then develop, evaluate, and administer the instruments. The end product of the Collection phase is **raw information**, which you will analyze during the next phase of the evaluation process, the Analysis phase.

Note: We will use the terms "information" and "data" interchangeably through this and following lessons. Both terms mean the same thing. Generally, however, we refer to "information" that we are collecting or analyzing as "data."

TRAINING EVALUATOR COURSE

The Evaluation Process

DATA COLLECTION INSTRUMENTS

▼.....
Data collection involves more than just observing training, reviewing documents, talking to individuals, and then jotting down some notes on what you have observed, reviewed, or discussed. Data collection must be structured. Structured data collection requires structured **data collection instruments**. Data collection instruments are simply the tools you will use to collect information.

The data collection instruments you will primarily use, as a training evaluator, include: checklists, tests, questionnaires, and interview guides.

- **Checklists** are used primarily for observing training programs, observing individual or unit performance, or for reviewing training documents, products, or processes.

- **Tests** are used primarily for measuring student learning that results from training programs, or for assessing individual or unit performance.

- **Questionnaires** and **interview guides** are used primarily for collecting information from individuals associated with or affected by training programs, products, or processes.

Although you will collect the vast majority of the information you need through the use of one of the structured data collection instruments above, you may also collect some information through unstructured means, such as informal discussions with trainers.

Prior to discussing the procedures for determining what type instrument you need, and for developing, evaluating, and administering the instruments, let's briefly discuss the four types of data collection instruments you will use.

Checklists

Checklists are very useful tools for evaluators. They are referred to as worksheets, observation forms, job aids, etc. Checklists are used for collecting information during the evaluation of any training program, product, or process. For

TRAINING EVALUATOR COURSE

The Evaluation Process

example, they are used to collect information while reviewing trail documents during an **Audit Trail Evaluation**; they are used to collection information while observing training during **Training Implementation Evaluations**; and they are used to collect information on testing procedures during **Student Learning Evaluations**. They can also be used to collect information while observing individual job performance or unit performance during **Training Transfer or Training Impact Evaluations**.

Most of the job aids that we have provided with this course include checklists. As you recall from Lesson One, the job aid for planning an evaluation includes a checklist of all the actions required in developing an evaluation plan. In Modules 3 and 4 of the course, we will give you checklists for conducting Audit Trail Evaluations of training programs at your school. In Module 5, we will give you a checklist of conducting training observations as part of a Training Implementation Evaluation. In later modules of the course, we will provide checklists for evaluating training products that your school produces.

All the checklists we provide in this course are incorporated into **job aids**, which provide directions for using the checklists and other pertinent information. If you develop a checklist that you will use repeatedly or other evaluators will use, you probably should spend some time and incorporate the checklist into a formal job aid that includes directions for using the checklist.

You can use the checklists we have provided in this course as examples for developing any local checklists you might need.

Tests You will probably become involved with tests from the standpoint of evaluating them to determine if they accurately measure student learning that results from training programs at your school (Student Learning Evaluation). You most likely will **not** be required to develop tests.

Although you may not *normally* have to develop tests, you may have to develop and administer tests as part of special studies in which you may get involved. For example, if you get involved in a Post Fielding Training Effectiveness

TRAINING EVALUATOR COURSE

The Evaluation Process

Analysis (PFTEA), you might be required to develop and use tests for assessing individual soldier or unit proficiency in the field.

Since one of the prerequisites for you to take this course was that you had received training in test development, we will not discuss test development in this course. If you are required to develop tests as part of one of your evaluations and need guidance, contact your Staff and Faculty Development Division (SFDD). They may conduct a test development workshop locally. If there is not a local workshop on test development, SFDD personnel can probably provide some materials to assist you in developing tests.

Questionnaires

As we mentioned previously, **questionnaires** and **interview guides** are used to collect information from individuals associated with or affected by the training program, product, or process being evaluated. We will discuss questionnaires and interview guides throughout the remainder of this lesson.

Questionnaires are sometimes called surveys, critiques, or by other names. Questionnaires are normally administered by requiring individuals to read the questions and provide written responses on the questionnaire or on an associated answer sheet. They can be used to collect information from students, instructors, training developers, training managers, training administrators, graduates, field personnel, or others. They can be used to collect information as part of any training program, product, or process evaluation. They can be mailed or administered in person.

One of the major advantages of questionnaires is that they are a relatively easy and inexpensive means of collecting a lot of information from a lot of individuals. Although it is easy to develop a questionnaire, it is hard to develop a good questionnaire. To collect valid information, the questionnaire must be well designed and easy for the respondent to complete. Later in this lesson we will discuss questionnaires in more detail.

TRAINING EVALUATOR COURSE

The Evaluation Process

Interview Guides

Interviews are another means of collecting information from individuals. As with questionnaires, they can be used to collect information from students, instructors, administrators, or anyone else associated with, or affected by, the training program, product, or process being evaluated.

Interviews are normally administered in person with the evaluators (interviewer) one-on-one with the respondent (interviewee). To conduct a meaningful interview that results in valid information, you must develop a structured **interview guide**. The interview guide includes the introduction to the respondent, the questions you will ask, and space for recording the respondent's answers. Using the interview guide, you (interviewer) ask the questions, the respondent answers the questions, and you record the respondent's answers on the interview guide. The interview guide ensures that the interviewer asks the same question in exactly the same way of each respondent.

Interviews can also be used to collect information as part of any training program, product, or process evaluation. As stated above, they are normally conducted in person, one-on-one with the person being interviewed; however, they also can be conducted over the telephone or with more than one respondent at a time.

One of the major advantages of interviews is that they are easy on the person being interviewed. The respondent is not required to read or write anything. The information resulting from interviews is more valid than that collected through the use of questionnaires.

Just as it is easy to develop a bad questionnaire, it is also easy to conduct a bad interview. Anyone can sit and talk with someone, then jot down a few notes as a result of the discussion. It is much more difficult to develop a structured interview guide, administer a structured interview, and record meaningful results. Interviews will also be discussed in more detail later in this lesson.

Let's summarize what we've discussed regarding data collection instruments. There are four major types of data collection instruments you will be using to collect information. You will use **checklists** for observing training programs or reviewing training documents, products, or processes. You could possibly be required to use **tests** for

TRAINING EVALUATOR COURSE

The Evaluation Process

measuring student learning or assessing individual or unit proficiency. You will use **questionnaires** and **interviews** for collecting information from individuals associated with or affected by the training program, product, or process that you are evaluating.

Using Computers to Assist in Data Collection

As we mentioned earlier, you should plan for data collection and analysis during the Planning phase of the evaluation process. As part of these plans, you should also plan for use of automation support. One thing you should definitely consider is the use of computer scan sheets for collecting and inputting data into your computer. Using scan sheets drastically reduces the time required for inputting data and reduces the chance of data being input incorrectly. The use of scan sheets will be discussed more thoroughly in the next lesson, *Analyzing Information*.

In the remainder of this lesson, we will discuss the four major steps involved in the Collection phase of the evaluation process. Although we will primarily discuss questionnaires and interviews, many of the procedures also apply to the development of checklists and tests.

TRAINING EVALUATOR COURSE

The Evaluation Process

**STEP 1
DECIDE ON
THE TYPE
INSTRUMENTS
NEEDED**

▼.....

1. **Decide on the type instruments needed**
2. Develop drafts of the instruments
3. Evaluate the instruments
4. Administer the instruments

In the first step of the Collection phase, you determine the type of data collection instruments you must have to collect the information required to address the evaluation problem. Earlier, during the Planning phase, you have make some initial decisions about the type of instruments required. You have included these decisions in the Evaluation Plan. Now you make final decisions on the instruments you need.

It is safe to say that no matter what type of training evaluation you must do, **you will require one or more checklists**. We have included several checklists in the job aids provided with this course. If you must develop a new checklist or revise an existing checklist, use the checklists we have provided as examples. As we stated previously, if you need to develop a checklist you will use repeatedly, incorporate the checklist into a job aid.

Just as it is safe to say that you will require a checklist, it is also reasonably safe to say that **you will not require a test**. You will only have to develop a test if you must measure student learning as a result of a training program or if you must measure soldier or unit proficiency during your evaluation. If you must develop a test as part of your evaluation, refer to other references on test development procedures or get guidance from your SFDD personnel or others involved in test development at your school.

It is also reasonably safe to say that no matter what type training evaluation you must do, you will need to collect information from individuals either associated with or affected by the training program product, or process you are evaluating. to collect this information, you must use structured data collection instruments. This means **you will require one or more questionnaires and/or an interview guide**.

Assuming that you will use checklists and will not use tests to collect information, your major decision at this point is whether to develop a questionnaire, an interview guide, or possibly both. to assist you in making this decision, and to assist you in

TRAINING EVALUATOR COURSE

The Evaluation Process

developing, evaluating, and administering questionnaires and interviews,, we have developed Job Aid 2b, *Development and Administration of Questionnaires and Interviews*. You were given this job aid when you started this module.



Get out Job Aid 2b at this time.



Read the first 5 pages of the job aid. (This includes the Cover, Purpose, Table of contents, and Directions.)

AFTER YOU ARE FINISHED READING, TURN TO THE TABLE OF CONTENTS ON PAGE 3.

As you can see, the format of this job aid is similar to the other job aids you received with the course. The "meat" of the job aid, on pages 6 through 19, provides guidance for developing and administering questionnaires and interviews. the information is organized in a step-by-step process that follows the four steps required in the Collection phase of the evaluation process.

Guidelines for conducting Step 1 (Decide on type Instruments Needed) of the Collection phase are presented on pages 5 and 6.



Read pages 6 through 8 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING.

As you've discovered from reading the job aid, the first major step of the Collection phase is divided into two smaller steps.

Prior to deciding on the type of instrument (questionnaire or interview guide), you must first consider some questions regarding the information that you need to collect. If you followed the evaluation process we have discussed in this course, you would have already considered these questions as part of the

TRAINING EVALUATOR COURSE

Evaluation Planning

Planning phase of the evaluation and answered them in the evaluation plan.

If for some reason you have not developed an evaluation plan, we have provided a list of questions that you should consider (**Step 1a**) prior to making a decision on the type instrument you need. What we are saying here is: if you have not already done your planning, you should do it at this time.

After the planning in Step 1a, you then make a decision on whether to develop a questionnaire or an interview (**Step 1b**). You should consider the advantages of each type of instrument. You must also consider the time and other resources you have available to develop and administer the instrument.

After clarifying what information you need to collect and deciding on whether to go with a questionnaire or interview, you start development of your instrument, which is Step 2 of the Collection phase.

STEP 2 DEVELOP DRAFTS OF THE INSTRUMENTS

- ▼.....
- ✓ 1. Decide on the type instruments needed
 2. Develop drafts of the instruments
 3. Evaluate the instruments
 4. Administer the instruments

We have divided Step 2, the development of the draft instrument, into four smaller steps, Steps 2a through 2d. You first **select** the type of questions you will use on the instrument (Step 2a). You then **construct** the questions (Step 2b), **sequence** the questions (Step 2c), and **format** the instrument (Step 2d). Guidelines for performing each of these steps are included in Job Aid 2b.



Read pages 9 through 13 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING.

TRAINING EVALUATOR COURSE

The Evaluation Process

If you have not developed questionnaires or interview guides before, you should obtain instruments other evaluators have developed for similar evaluations. Use these as examples. One of the primary things to remember about developing questionnaires and interviews is:

Make it easy for the respondent.

Almost everyone hates completing questionnaires. You should keep questionnaires as short and as simple as possible, especially if you are going to mail the questionnaire to respondents. If it is difficult to complete, the respondent will either not complete it or not make a sincere effort to complete it.

Job Aid 2b provides some of the things you should consider when you develop questionnaires and interviews. As we stated at the beginning of the job aid, feel free to add any additional ideas, tips, or lessons learned to the job aid. You could base these on your own experiences or obtain these from one of the many good references available on questionnaires and interviews. A list of references is on page 22 of the job aid.

You now have a draft of your instrument and are ready for the third major step in the collection phase which is to evaluate the instrument.

STEP 3 EVALUATE THE INSTRUMENTS

- ▼.....
- √ 1. Decide on the type instruments needed
 - √ 2. Develop drafts of the instruments
 - 3. Evaluate the instruments**
 - 4. Administer the instruments

A brief set of guidelines for evaluating your instrument is on page 14 of Job Aid 2b.



Read page 14 of the job aid at this time.

TRAINING EVALUATOR COURSE

The Evaluation Process

PROCEED AFTER YOU ARE FINISHED READING.

As outlined in the job aid, to evaluate your instrument you should first get SMEs and other evaluators to review it closely. You should then pretest it with a small group of individuals from the target population for whom you designed it. If you have the time and resources, you should then field test it by administering it to individuals from the target population in the environment in which it will be administered. After the review, pretest, and field test, you should make any revisions required.

Again, if you have questions regarding evaluation of your data collection instruments, refer to some of the other references available.

You are now ready for the last major step in the Collection phase of the evaluation process. During this step, which is the actual "data collection" step, you will administer the instruments and collect the information you need to address the evaluation problem.

STEP 4 ADMINISTER THE INSTRUMENTS

- ▼.....
- √ 1. Decide on the type instruments needed
 - √ 2. Develop drafts of the instruments
 - √ 3. Evaluate the instruments
 - 4. Administer the instruments**

Guidelines for administering questionnaires and interviews are also in Job Aid 2b. this includes guidelines for administering questionnaires by mail or in person.



Read pages 15 through 19 of the job aid at this time.

PROCEED AFTER YOU ARE FINISHED READING.

TRAINING EVALUATOR COURSE

The Evaluation Process

That completes the Collection phase of the evaluation process. You now have collected a lot of information and must analyze it.

There is much more to data collection than we have discussed in this short lesson. As we've stated repeatedly, if you have any questions regarding development and administration of questionnaires or interviews, get help from other evaluators or use some of the other references that are available.

Let's quickly review what we've discussed in this lesson then complete a short end-of-lesson exercise.

▼..... LESSON REVIEW AND SUMMARY

1. Although you will collect the majority of information during the Collection phase, you will also collect information during other phases of the evaluation phase.
2. Your initial plans on how you will collect the information that you must have to address the evaluation problem are included in the evaluation plan under the **Data Collection and Analysis Methods**.
3. The four major steps involved in collecting information are:
 1. **Decide** on the type instruments needed
 2. **Develop** drafts of the instruments
 3. **Evaluate** the instruments
 4. **Administer** the instruments
4. The end product of the Collection phase is **raw information** that addresses the evaluation problem and answers the questions (EEAs) that make up the problem.
5. Data collection must be structured; this requires the development and administration of **structured data collection instruments**.

TRAINING EVALUATOR COURSE

The Evaluation Process

6. the data collection instruments that you will primarily use, as a training evaluator, include **checklists, questionnaires, interview guides, and possibly, tests.**
 - **Checklists** are used primarily for observing training programs, observing individual or unit performance, or for reviewing training documents, products, or processes
 - **Questionnaires and interview guides** are used primarily for collecting information from individuals associated with or affected by the training program, product, or process you are evaluating.
 - **Tests** are used primarily for measuring student learning that results from training programs, or for assessing individual or unit performance..

7. During most training evaluations, you will probably require **one or more checklists and one or more questionnaires/interview guides. You probably will not require a test unless you are measuring student learning assessing performance.**

8. **Job Aid 2a** provides guidelines for development and administration of questionnaires and interviews.

■ **END-OF-LESSON EXERCISE**

Answer each question below in the spaces provided. You can use the workbook, job aid, or any other references you need to answer the questions. When you are finished, see your course manager for feedback on the exercise.

1. For each of the situations below, indicate what type of data collection instrument you would require to collect information. If a checklist is required, place a "C" in the space provided. place a "Q" for questionnaire. an "IG" for interview guide, and a "T" for test.

- ___ a. You will be doing a Training Implementation Evaluation on one of your school's courses. You need to collect information from ten instructors that administer the training. You must get their opinions on some recommended changes to the training that are being considered.
- ___ b. You will be conducting a Training Transfer Evaluation to determine if the training in a course transfers to the job. You must collect information from graduates of the course. Graduates are distributed between several units worldwide. Your TDY funds are severely limited
- ___ c. You have been tasked to conduct a special study to determine the effects of different training methods on student learning. You must measure the effect of each training method on a different group of students, then make a recommendation on which method is more effective.
- ___ d. You have been tasked to conduct an evaluation to determine if training departments are developing and administering tests in accordance with local testing policy. You need to collect information to determine if training departments are following the established policies.

TRAINING EVALUATOR COURSE

The Evaluation Process

2. Job Aid 2b, which we provided with this lesson, provides a list of advantages of using both questionnaires and interviews (page 6). It also mentions some disadvantages.

Questionnaire Disadvantages

- a. _____

- b. _____

3. Using the list of criteria for constructing questions on page 8 of Job Aid 2b, review each question below. Each question violates one of the 14 criteria listed in the job aid. In the space provided in front of each question, place the number (1-14) that corresponds to the criteria violated.

- ___ a. Did you find the training informative and interesting?
- ___ b. Which of the following statements do not represent the way you feel about the training?
- ___ c. Do you think the instructors were incompetent?
- ___ d. Based on your experiences since graduating from the course, and your experiences while in the course, how do you feel about the training you received?
- ___ e. If you have it to do all over again, would you take the course?

4. Briefly comment on what you would do if you were placed in each of the following situations.
- a. You have developed a draft questionnaire to be administered by mail. Other evaluators and SMEs have reviewed it. You have set up a pretest with a few Skill Level 1 soldiers from the target population. The

TRAINING EVALUATOR COURSE

The Evaluation Process

soldiers on whom you will be pretesting the questionnaire have arrived for the pretest with two of their supervisors. The supervisors ask if they can stay in the room with the soldiers and complete the questionnaire

Should you allow the supervisors to main in the room and complete the questionnaire? (Briefly explain your answer).

b. The questionnaire that you are pretesting, in the situation above, is to be administered by mail. It includes an introduction stating the purpose of the questionnaire and includes instructions for completing the questionnaire.

Should you read the introduction and instructions to the soldiers to ensure they complete the questionnaire properly? (Briefly explain your answer.)

The Evaluation Process

c. You have finished pretesting and evaluating the questionnaire in the situation above. You have prepared a cover memo to distribute the questionnaire and have asked your director to sign the cover memo. You director asks what your sample size is (how many soldiers you will be surveying) and how you came up with the figure. you suddenly realize that you have not considered sample size before.

What do you do?

d. You are in the process of administering structured interviews. During the interviews, the first two of the twelve individuals you will interview, mention a problem that you had not previously anticipated and addressed in the interview guide. It appears to be a significant problem that should be investigated more thoroughly by asking the other individuals, to be interviewed, about the apparent problem..

Should you develop additional questions to add to the interview guide to address the problem, or should you just see if other respondents will mention the problem on their own? (Briefly explain your answer.)



When you are finished, see your course manager.

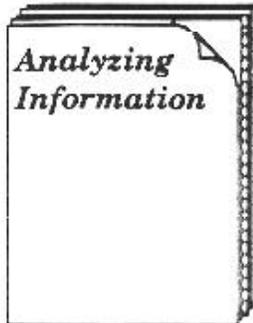
You've finished Lesson Two of this Module. In this lesson, we discussed the second phase of the evaluation process, the Collection phase. In lesson Three, we will discuss the next phase, the Analysis phase, during which you analyze the information you've collected.

TRAINING EVALUATOR COURSE

M O D U L E T W O

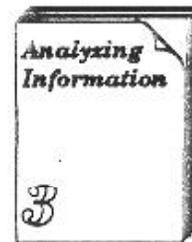
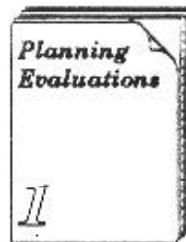
LESSON

3



Analyzing Information

MODULE 2 LESSONS



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

SEPTEMBER 1992

Table 2
The Evaluation Process

Phase 1 - Planning

- √ 1. Identify the evaluation problem
- √ 2. Research the evaluation problem
- √ 3. Develop the draft evaluation plan
- √ 4. Develop the final evaluation plan

Phase 2 - Collecting

- √ 5. Decide on type instruments needed
- √ 6. Develop drafts of the instruments
- √ 7. Evaluate the instruments
- √ 8. Administer the instruments

Phase 3 - Analyzing

- 9. Review the raw data for integrity
- 10. Summarize the data
- 11. Analyze the data
- 12. Interpret the results of the analysis

Phase 4 - Reporting

- 13. Prepare the draft report
- 14. Staff draft report for review/concurrence
- 15. Obtain approval of recommendations
- 16. Distribute report/recommendations for action

Phase 5 - Follow-up

- 17. Input action milestones into tracking system
- 18. Conduct the follow-up
- 19. Prepare a follow-up report
- 20. Staff the follow-up report

■ LESSON INTRODUCTION

In **Lesson 1** (*Planning Evaluations*), of this module, you learned how to identify the evaluation issue and plan an evaluation to address that issue. During the planning phase, you answered questions regarding Why, What, When, Where, and How the evaluation will be conducted. You learned to make initial decisions on what information is needed to address the evaluation issue and on how to collect and analyze that information. These initial plans were staffed in the form of a draft evaluation plan and the draft plan was then revised, as required. The end product of the planning phase was a **final evaluation plan**.

In **Lesson 2** (*Collecting Information*) of this module, you learned how to collect the information needed to address the evaluation issue. In Lesson Two, you received guidance on how to decide on types of data collection instruments needed and how to develop, evaluate, and administer the instruments. The end product of the collection phase was **raw information** in the form of completed questionnaires, interviews guides, observation checklists, etc.

In this lesson, **Lesson Three** (*Analyzing Information*), you will receive guidance and some tools for analyzing the raw information that you have collected. The overall goal of this phase is to reduce the huge volumes of information that you have collected into a series of **initial findings** regarding the evaluation issue and specific questions, or **Essential Elements of Analysis**, that make up the issue.

In the next lesson (*Reporting Results and Following-up on Actions Taken*), we will discuss how you use these findings to develop conclusions and possible recommendations on how to resolve the evaluation issue. We will also discuss how you provide the recommendations to the decision maker for approval and how you follow-up after they are approved to see if they're actually implemented.

The Evaluation Process

■ **LESSON OBJECTIVE**

The training objective for this lesson is shown below. This objective includes: the **action** you will be able to perform at the conclusion of this lesson, the **conditions** under which you will be able to perform this action, and the **standards** to which you will be able to perform the action.

Conditions - Given this workbook and completed evaluation instruments.

Action - You will analyze the data.

Standards - You will determine integrity of the data, summarize data in useful ways, analyze the data, and interpret results to satisfaction of scorer.

■ **LESSON ACTIVITIES**

WHAT IS ANALYSIS?

▼.....
When most people hear the word "**analysis**" they automatically think of statisticians with PhD.s doing detailed calculations with mathematical and statistical formulas. This is very far from what we will discuss in this module

You do not have to have a PhD. in statistics or mathematics to do analysis. You do "analysis" all the time. Any decision that you make requires some analysis. When you buy a product, such as a car, you do an analysis. Some of the things you might do when buying a car include collecting information on prices, maintenance records, mileage, looks, size, etc. You then review, summarize, and interpret all this information and through some system of your own come up with some findings. Some of the findings might be that one make of car is cheaper, another has a better maintenance record, etc. You then use the findings of this analysis to make a decision.

As you can see from this example, you do analysis all the time--you just don't think of it as analysis.

'**Analysis**' is simply the process of reviewing, summarizing, and processing information to develop initial findings concerning the issue you are evaluating.

TRAINING EVALUATOR COURSE

The Evaluation Process

Do not confuse this analysis with the analysis process of the *Systems Approach to Training*.

You might be wondering why it is important to do analysis. Why not just make recommendations to the decision maker after you've collected the information without wasting all the time analyzing the information. There are many important reasons why you should carefully analyze the information you have collected. Some of these are shown below.

- If you remember from Module 1, the definition we gave of "evaluation" was **to provide information to aid in decision making**. The decision maker does not have time to review, summarize, and analyze piles of information. That is your job. If you give the decision maker huge volumes of information, without summarizing and analyzing it, in most cases, nothing will happen as a result of your work.
- Decision makers not only do not have time to do detailed analysis, they probably do not have the knowledge of the issue and topics being evaluated to make wise decisions without your analysis. When you do an evaluation, you get very deeply involved in the issue and topics being evaluated. As a result of this, you are probably more qualified than anyone to do the detailed analysis and make recommendations.
- Decision makers probably also do not have the expertise in evaluation necessary to do analysis.
- The tremendous amount of information collected during a major evaluation can be overwhelming. You must have a system for reviewing, summarizing, and analyzing the information.
- Analysis enables you to see certain characteristics of the information that you cannot see otherwise. Analytic techniques, including statistics, enable us to see the information for what it represents. We then interpret the results of the analysis for the decision makers.

The Evaluation Process

So to sum all this up, do do detailed analysis because decision makers do not have the time or expertise to do it. You also do analysis because you cannot make recommendations based on raw information.

Place yourself in the following situation.

Situation:

You have just been assigned as a training evaluator in the Directorate of Evaluation and Standardization in your school. You have no previous experience in evaluation. The NCO you are replacing, SFC Jones, has just completed his tour in the school and has left for an assignment in Germany. SFC Jones was in the middle of a major course evaluation when he left. He developed an evaluation plan and has collected information on the training through classroom observations, end-of-course student questionnaires, instructor interviews, and interviews with personnel who administer the course. In short, he has collected a huge amount of information that someone now must analyze to obtain initial findings concerning the course.

Your supervisor has tasked you to take over the evaluation, conduct an analysis, and write a report with findings, conclusions, and recommendations.

Where do you go from here?

Situations similar to this happen in DOES all the time. Personnel are constantly rotating in and out of the directorate. As a result of this turnover, evaluations frequently change hands while in progress.

If you were put into this situation, you would obviously need a system and a plan for doing the analysis. Initial plans for doing the analysis should be in the evaluation plan under the **Data Collection and Analysis Methods**. The system for doing the analysis includes the four major steps that follow.

1. Review the raw data for integrity
2. Summarize the data
3. Analyze the data
4. Interpret the analysis results

TRAINING EVALUATOR COURSE

The Evaluation Process

The end product of the Analysis phase is a series of **initial findings** that address the EEA (Essential Elements of Analysis) which make up the evaluation PROBLEM. The way you do the analysis will depend on a number of factors including the evaluation problem, the type of information collected, and the resources available to do the analysis.

Prior to discussing the steps required in doing analysis, we will briefly discuss the different types of information that you might collect as part of your evaluation.

What we have previously referred to as "information" we will now refer to as "data". As we mentioned in Lesson Two, there is really no difference between "information" and "data"; generally, we refer to "information" that we are analyzing as "data".

QUALITATIVE AND QUANTITATIVE DATA

▼.....
There are many different ways in which we can categorize data. For the purposes of this course, we will categorize information or "data" into two types: **qualitative** data and **quantitative** data.

Qualitative data generally can be thought of as perceptions about the quality of something. Qualitative data is difficult to quantify. Qualitative data generally consists of **written comments** by the person being surveyed or written comments by the evaluator based on the evaluator's observations, interviews, discussions, or review of documents. Qualitative data cannot be represented using statistics and, therefore is sometimes referred to as **nonstatistical data**. Although it is difficult to represent qualitative data with numbers, the data can be summarized and numbers can be used to represent the number of same or similar perceptions.

Quantitative data, on the other hand, is information that we have quantified as we collected it. Quantitative data can generally be thought of as information that can be represented by **numbers**. These number may represent time spent on a task, test scores, percent performing a task, etc. The numbers can also represent perceptions. When we categorize or quantify perceptions, they become quantitative data. Examples of perceptions that have been quantified would include the number of people that rated the quality of training on a scale of 1 to 5. Normally, we try to quantify perceptions by developing rating

TRAINING EVALUATOR COURSE

The Evaluation Process

scales of some type. But sometimes it is good to ask open-ended questions and record qualitative perceptions when we are looking for ideas or recommendations to improve a training program. Quantitative data can be analyzed and certain characteristics of the data can be represented as **statistics**. For this reason, quantitative data is sometimes referred to as **statistical data**.

When you think of qualitative data, think of **written comments** that represent someone's perceptions.

When you think of quantitative data, think of **numbers** that could represent many different things--including perceptions.

To analyze qualitative comments, we should quantify them in some way. If we ask for recommendations to improve a training program and we receive 92 separate comments, it is difficult to do anything with the individual perceptions. But if we look for similarities between the comments, we might find that 21 of those comments recommended adding a particular block of training to the program. We can now quantify the information and say that 21 of 92 comments recommended adding the block of training to the program. We can similarly group all the remaining same or similar comments, summarize them, and present them in a table that includes the number of individuals that gave the same or similar comments.

Just as we should use automation to assist in data collection, we should also use automation capabilities to assist us in analyzing. With the limited resources we have as evaluators, we must make full use of such automation capabilities as automated statistical packages for analyzing data.

We will not briefly discuss each of the four steps involved in the Analysis phase of the evaluation phase.

STEP 1 REVIEW THE RAW DATA FOR INTEGRITY

- ▼.....
1. Review the raw data for integrity
 2. Summarize the data
 3. Analyze the data
 4. Interpret the analysis results

TRAINING EVALUATOR COURSE

The Evaluation Process

Getting back to the situation you were put in earlier--You have a stack of completed end-of-course student questionnaires, a stack of completed training observation checklists, and a stack of completed interview guides. Now, what do you do with all this raw information? Well, before you do anything, you need to make sure that the data you have has **integrity**.

We mentioned in the last lesson that the reasons for carefully developing and evaluating your data collection instruments and for training data collectors was to ensure that you collect "good" data. Even though you take these precautions in the Collection phase, it is still possible of you to collect data that has no integrity.

What is data integrity?

You might be asking yourself, how can data have integrity? and what is data integrity?

Integrity is simply a term used to mean that the data you have is good, valid data that can be analyzed.

Your next question might be, what could cause data not to have integrity?

There are many different things that could result in data without integrity. For example: if you have a number of different data collectors doing interviews or observations for you, their interpretation of what they see or hear will not be the same as yours. The records they make of their observations or the notes they record as a result of the interviews **may be interpreted** in different ways. You must make sure that you can understand what they recorded and that your interpretation is the same as theirs. If you are administering questionnaires, you must be able to read and understand the respondents' answers. If you cannot, the data has no integrity and cannot be analyzed.

Why should I review data for integrity?

"Bad" data will result in invalid findings, conclusions, and recommendations. Rather than solving the evaluation problem, the evaluation may end up making the problem worse. You have probably heard the phrase "garbage in, garbage out" in reference to data processing and computers. The same phrase applies to evaluations. If you collect and analyze bad data ("garbage in"), then your evaluation will result in bad recommendations ("garbage out").

The Evaluation Process

As an evaluator, you are in a unique position where you can improve the quality of your school's training. And just the same if you collect and analyze data without integrity, you can hurt your school's training. doing an evaluation and making recommendations based on invalid data not only affects the one evaluation you're working on but will also affect the credibility of yourself and your organization, DOES. **You must review data for integrity** prior to doing any analysis.

In addition to ensuring that your evaluation is based on good valid data, reviewing data for integrity will also reduce the time consuming job of data analysis.

When should I review data integrity?

You should check data integrity as part of every evaluation you do. It is especially important to check for integrity when there are a number of different data collectors involved in an evaluation. The more collectors, the more need to be concerned about data integrity.

The less control you have on how the data is collected, the closer you should check for integrity. If you mail questionnaires as opposed to administering them in person, you have little control over how the data is collected and, therefore, you must check data very closely.

Also, if you collect data through unstructured data collection methods, such as informal discussions with individuals, you need to closely review the data for integrity.

Closely review data for integrity when you:

- use more than one data collector
 - mail questionnaires
 - use unstructured data collection methods
-

Although we say that you need to review data for integrity as part of the Analysis phase, you should plan for the review in the Planning phase and you will probably review data during the Collection phase. Following the procedures we discussed in the last lesson for developing, evaluating, and administering data collection instruments helps ensure that the data you collect has integrity.

TRAINING EVALUATOR COURSE

The Evaluation Process

How do I review data for integrity?

If you are using different data collectors, they must be trained and a system must be developed for recording and coding their responses. Data collection instruments must be structured. You should review data with data collectors immediately after it is collected. Make sure that you understand what was recorded.

If you are administering questionnaires, check the data closely before it is summarized. If you are using administrative personnel, who are unfamiliar with the evaluation, to assist in summarizing data, it is extremely important that you review the data thoroughly.

You must review every data collection instrument (questionnaire, interview guide, or checklist) completed by respondents or data collectors. Review responses on data collection instruments to ensure responses are complete, readable, understandable, consistent, uniform, and appropriate.

- Ensure responses are **complete**.

All items should be completed. A blank next to a question on an interview guide or observation checklist could mean "don't know", "refused to answer", or that the question was not applicable. You must be able to distinguish between these different meanings.

- Ensure responses are **readable**.

Regardless of whether responses are completed by the respondent on a questionnaire or by a data collector during an interview or observation, the responses must be written so that the person doing the analysis can read them. If you are using different data collectors, check each instrument when it is handed in to ensure it is legible. If you are using mailed questionnaires, provide plenty of space and lines for written responses. If a response cannot be read, you may have to discard that response.

- Ensure responses are **understandable**.

If you are using different data collectors to administer interviews or observations, check their responses when they hand in the instruments and question them if you don't understand what they have written. If you are using questionnaires, make questions very clear. Follow the principles for good questionnaire development that we discussed in the last lesson.

Evaluation Planning

- Ensure responses are **consistent**.
Ensure that different responses pertaining to a subject on the same instrument are consistent. Consistency checks can be built into questionnaires. For example you might ask the same question in two different ways to see if you get the same answer. If you don't get the same answer, you must assume that the respondent did not make a sincere effort to complete the questionnaire and you may need to discard the instrument as invalid. On questionnaires where respondents are required to use rating scales for rating a list of items, look for patterns of responses which may indicate the respondent did not seriously answer the questions. If inconsistencies appear on interview guides and observation checklists, discuss the inconsistencies with the data collector and resolve them.
- Ensure responses are **uniform**.
If you are using different data collectors for administering interviews or observations, make sure that collectors follow uniform procedures for collecting and recording data. If necessary, check the uniformity with which they have followed the instructions.
- Ensure responses are **appropriate**.
If a response does not pertain to the purposes of the evaluation or the question being asked, it will be necessary to discard the responses.

***What do I do if I
have "bad"
data?***

If you find data that does not meet the requirements above, you must resolve the problem or discard the data. If the data was collected by your data collectors, it may be possible to discuss the problem with them and resolve the problem. If you have bad questionnaire data, it may be possible to contact the respondent and resolve the problem. If you cannot resolve integrity problems, you should discard the data. You will then need to make a decision on whether to do analysis without the data or collect additional data.

You now have reviewed the raw data for integrity and are now ready for step two of the Analysis phase which is to **summarize** the data.

TRAINING EVALUATOR COURSE

The Evaluation Process

STEP 2 SUMMARIZE THE DATA

- ✓ 1. Review the raw data for integrity
2. Summarize the data
3. Analyze the data
4. Interpret the analysis results

Let's get back to the situation you were put into earlier. You still have a stack of completed end-of-course student questionnaires, training observation checklists, and interview guides. You have gone through all the data collection instruments and reviewed the data for integrity, so you are now confident you have "good" data to work with. Before you start your analysis you will need to **summarize the data**. When you summarize data, you simply condense the data down so that you can work with it.

Why should I summarize data?

You summarize or condense data so you can analyze it. For example: in reference to qualitative data (comments), if you have 123 separate comments in response to an open-ended question on an interview or questionnaire you can't do much with 123 separate comments. You probably will not provide the decision maker the original 123 comments and ask him to make a decision. He doesn't have time to read them and even if he did read them, he probably would ask you questions regarding the comments. These questions might include such questions as:

- How many respondents made the same or similar response?
- What was the most frequently given response?
- Are there any trends in the data?

To answer these questions, you must summarize the comments.

The same is true for quantitative data. If you ask 123 course graduates to rate a task, using a five-point rating scale, on how frequently they have performed the task since graduating from the course, you will get 123 responses. You must add up the responses, preferably by using a computer, to determine how many responses you received in each category on the rating scale. If you are using a computer, you simply input the numbers corresponding to the responses into the computer and the computer summarizes the data for you. We will discuss the use of computers for data analysis a little later in this lesson.

The Evaluation Process

***How do I
summarize
data?***

For quantitative data (numbers) the answer to this question is simple: you let a computer do the summarizing for you. That's what computers are made for. For qualitative data (written comments), you will have to do the summarizing yourself or get assistance from other evaluators.

***Summarizing
quantitative
data***

We have computers to summarize quantitative data for us. All we have to do is input the data into the computer, although this can be time consuming. Once the data is in the computer however, you can do anything you want with it.

***Summarizing
qualitative data***

Computers cannot summarize written comments. It's much more difficult to accurately and effectively summarize written comments than it is to input numbers into a computer. Summarizing written comments may require: background knowledge of the subjects being evaluated, analytical ability at condensing and grouping responses into categories, and the ability to interpret responses and give the correct meaning to the responses.

Summarizing written comments is not a science. there are certain things that evaluators have learned through trial and error, however, that may help you. Table 10 lists some of these "lessons learned", in a step-by-step format.

TRAINING EVALUATOR COURSE

The Evaluation Process

Table 10
Summarizing Qualitative Data (Written Comments)

1. Sort the completed instruments by type of instrument (questionnaire, interview guide, observation checklist, etc). Put each type in a separate stack.
2. Number the completed data collection instruments sequentially to keep track of them and for easy reference if, later, you need to go back to a particular comment. You may also want to code them in some way to indicate who completed the instrument, where and when the instrument was completed, etc.
3. Open each instrument to the first open-ended item where comments (qualitative data) are recorded. Read through the response recorded on the first item. Go back and read the response again. This time, using a colored pen; underline, circle or highlight the key statement(s) in the response.
4. After highlighting the key statements, type or rewrite each key statement on a separate piece of paper. condense the statement if required. If one respondent provides more than one key statement in the response, list each statement separately. Some respondents may provide many separate comments in response to a single open-ended question. As you rewrite each key statement, put a check beside it on the instrument make sure all statements are recorded and to ensure you don't record the same statement more than once.
5. After you have recorded the response to the first question on the first instrument, go to the same question on the next instrument, and so on. Summarize all responses received from all respondents one question at a time. Stay with the same question until all responses are summarized. This keeps your train of thought on one subject and makes it easier to summarize the responses.
6. As you go through the responses, make up categories for grouping responses. For example, if someone said, "Make the course longer"; your category entry might be: "Make course longer" followed by a tick mark (|). Then each time someone else said something like that you would put another tick mark (||) after the first one. When you get five similar comments put a slash (||||) through the first four tick marks. When you are finished you can then tally up the number of responses in each category.
7. If you have comments that do not fit into any category, you should put them into a category labeled "Other comments" or Miscellaneous" category. You will probably have to redo your categories as you summarize the responses.
8. If you run into any comment that you don't understand, make a note of it with a reference to the instrument number. Later, you can get with the data collector or the respondent that recorded the comment to clarify the comment. If you have a technical comment that you don't understand, you may need to clarify the comment with an SME.
9. After you finish summarizing all responses received on the first question (item), go back to the beginning of the stack and follow the same procedures for summarizing responses received on the next item, and so on.
10. Rather than rewriting or typing each comment on a piece of paper, you may want to consider entering them into a computer data base so they can be sorted more easily.

Summarizing qualitative data is very time consuming. For this reason, there may be a tendency to breeze over the summarization or give the task to someone else who is not familiar with the evaluation. We recommend that you take time and do it right. The qualitative data can be very valuable to the overall evaluation and provide insights into many things that you cannot obtain from the quantitative data. The comments can also be used to improve your report.

The qualitative data, if collected and summarized correctly, can be the most valuable information you will collect during the evaluation.

You've now reviewed all the data in your instruments to ensure you have "good" data, and you've summarized the data. You now are ready for the third step in the Analysis phase, which is to **Analyze the data**.

**STEP 3
ANALYZE
THE DATA**

- ▼.....
- ✓ 1. Review the raw data for integrity
 - ✓ 2. Summarize the data
 - 3. Analyze the data**
 - 4. Interpret the analysis results

You now have all your quantitative data (numbers) entered into the computer and you have all your qualitative data (comments) summarized and condensed into categories. you're ready to do the analysis. But before we discuss the analysis, lets discuss why you should analyze data.

Why should I analyze data?

You should not evaluate training simply because it's there, and you should not analyze data simply because it's there.

You analyze data to find answers to the specific questions (EEAs) that make up the Evaluation Problem.

Remember the EEAs (Essential Elements of Analysis) and the Evaluation Problem? The EEAs are the specific questions that the evaluation is addressing. You must stay focused on them when doing planning, data collection, and

TRAINING EVALUATOR COURSE

The Evaluation Process

when doing your analysis. Some people enjoy doing analysis and working with numbers just for the sake of number crunching; try to avoid this.

For **qualitative** data (written responses), the analysis may involve nothing more than further categorizing the comments, counting the number of comments in each category, and rank ordering the categories to determine which comments were made most and least frequently.

For **quantitative** data (numbers), the analysis is more involved. Your analysis could be very simple or it could be very complex. If you are simply asking a group of respondents to rate the training using a rating scale of some sort, the data analysis will be relatively simple. On the other hand, if you are testing different groups of students to see how well they learned after receiving different training programs, the analysis can be complex.

Some type of **statistics** are required for analyzing quantitative data. The statistics simply show you things about the data that you could not otherwise see. The statistics also can be simple or complex. If complex statistics are required, you may need the assistance of a statistician or other evaluators experienced in statistics. As we mentioned in Lesson One, if you need analysis assistance, you should try to make this determination during the planning phase of the evaluation and plan for the assistance needed.

There are two broad categories of statistics. The first category is **descriptive statistics**, which give us measurements that simply "describe" the data collected. Descriptive statistics include measurements such as the mean (or the average value), the range (or the extreme values), and the standard deviation (or the degree to which the values are dispersed).

The other category of statistics is **inferential statistics**. Inferential statistics "infer" something about the total population being studied based on the sample of the population from which your data was collected. Inferential statistics include measurements such as t-tests which are used to infer something about two different populations based data collected from a sample of each of the populations.

The Evaluation Process

We will not attempt to teach you statistics, since that is far beyond the scope of this course. As we have already said, if you need to use statistics that are beyond your capability, consult with a statistician or another evaluator experienced in statistics; or use one of the many statistical textbooks and other references available.

***Analyzing
quantitative
data***

As we mentioned earlier, you should use computers and computer software programs to do your summarization and analysis of quantitative data.



Get out Evaluation Reference 4, *Automation and Statistics* at this time. turn to the Table of Contents on page 1.

As you can see, the DOES at the Defense Information School developed this reference and based it on their experiences and "lessons learned" from using computers to do data analysis. Although we will not spend time using the reference in this course, we would like to give you a quick overview of what is in the reference so you can use it back on the job.

As you can see from the Table of contents, the reference is divided into ten sections. Following is a brief summary of what is contained in the reference.

**Overview of Evaluation Reference 4
*Automation and Statistics***

Section 1 provides an introduction to the use of computers for doing data analysis.

Section II provides information on computer equipment and software programs your organization will need to use SPSS. The section also provides some guidelines on how and where to get the equipment and software.

Section III provides detailed instruction on using the SPSS data entry program to enter your data into the computer.

TRAINING EVALUATOR COURSE

The Evaluation Process

This section includes hands-on, step-by-step instructions. Once you get the hardware and software required, this section will be very useful to you in getting started with SPSS.

Section IV provides information on using computer scan sheets for inputting your data into the SPSS package. As we mentioned earlier, the computer can summarize and analyze your data, but you must input it into the computer. **We strongly encourage the use of scan sheets.** Using scan sheets drastically reduces the time required for inputting data and reduces the change of data being input incorrectly. If your organization currently has this capability or is considering getting the capability, this section will also prove very useful. This section provides information on:

- how to get the hardware and software required for scanning
- how to get the different scan sheets available
- how to get sheets specially designed
- how to check sheets prior to scanning
- how to use the AIMS (Automated Information management System) for scanning.

Sections V and VI provide an overview of commonly used statistical terms and how to use SPSS to perform the statistical procedures required by your analysis. This section provides clear explanations of what the statistical procedures are used for to include examples of when they should be used.

Section VII provides a short hands-on practical exercise using SPSS.

Section VIII provides information on using SPSS without the Data Entry Program mentioned in Section III.

Section IX provides some brief guidelines for analyzing qualitative data.

Section X provides a list of references.

At the back of the reference, are a number of appendices which are mentioned in the sections discussed above.

TRAINING EVALUATOR COURSE

The Evaluation Process



Read pages 2 and 3 (the Introduction) of Reference 4 at this time.

PROCEED AFTER YOU ARE FINISHED READING

As we stated before, if your organization is currently using computers for data analysis or is considering getting the hardware and software required to use computers, the reference should prove very valuable. Use it on the job.

Analyzing qualitative data

The analysis of qualitative data is usually relatively simple. The hard work has already been done in the summarizing of the data. During the summarization of the written responses, you extracted the key statements from the responses and categorized them. The analysis may involve further categorization, or it may involve nothing more than rank ordering the categories.

You've now reviewed all the data in your instruments to ensure you have "good" data; you've summarized the data; and you've analyzed the data. You are now ready for the fourth and last step in the Analysis phase, which is to **interpret the results of the analysis.**

STEP 4 INTERPRET THE ANALYSIS RESULTS

- ▼.....
- √ 1. Review the raw data for integrity
 - √ 2. Summarize the data
 - √ 3. Analyze the data
 - 4. **Interpret the analysis results**

You have analyzed your quantitative data (numbers) and have obtained certain statistics that represent the data. You have also analyzed your qualitative data for each open-ended item on each instrument, you have a list of key statements categorized based on how frequently the statements were made. You now must interpret the results of the analysis.

TRAINING EVALUATOR COURSE

The Evaluation Process

Why should I interpret the analysis results?

Just as you should not give the decision maker raw data that has not been summarized and analyzed, you should also not give the decision maker a lot of detailed analysis results. In most cases, the decision maker will not understand the analysis. He is interested in the bottom line; i.e., **What does it all mean?** You must interpret the analysis results in common sense terms and be able to explain "what it all means" in relation to the overall evaluation problem.

The interpretation of the analysis results is one of the most difficult steps in the Analysis phase and in the overall evaluation process. It is relatively easy to summarize written responses and plug numbers into a computer to get statistics that represent the data. The hard part is interpreting the written responses and the statistics and developing some initial finding that answer the questions (EEAs) involved in the evaluation problem.

Just as you must stay focused on the EEAs during the data analysis, **you must also stay focused on the EEAs** while interpreting the analysis results.

There is no system or secret to interpreting the results of your analysis of qualitative data. It is not a scientific process and may call for subjective decisions on your part.

Interpreting quantitative analysis results; although more scientific, will obviously be more difficult than interpreting qualitative analysis results. You must thoroughly understand the particular statistical procedure being used and, if you don't you will again need to get assistance from another evaluator or a statistician.

The end product of the entire Analysis phase of the evaluation process and the end product of this step is a series of **initial findings** that address the EEA of the evaluation.

You have now completed all four steps in the Analysis phase of the evaluation process.

- √ 1. Review the raw data for integrity
- √ 2. Summarize the data
- √ 3. Analyze the data
- √ 4. Interpret the analysis results

TRAINING EVALUATOR COURSE

The Evaluation Process

Right now, all this may seem overwhelming and overly complicated. It really isn't. Only when you get involved in complex statistics does analysis get complicated. Most DOES evaluations do not require complex statistics. The main thing required for any data analysis is **common sense**.

If your evaluation requires statistical analysis beyond your capability, as we've said before, get assistance from other evaluators or statisticians who are familiar with the statistics required. Plan for and get commitments for analysis support during the Planning phase of the evaluation. Include the support requirements, to include organizations responsible for providing support, in the evaluation plan. One of the key things to keep in mind about data analysis is:

Keep it as simple as possible.

Remember that the purpose of evaluation is to **aid decision makers**. If your decision maker cannot understand how you analyzed the data and "**what it all means**" he will be reluctant to approve your recommendations. Also remember,

"Don't do analysis to the point of paralysis".

This simply means, don't get caught up in the analysis process and lose sight of the specific questions (EEAs) you are trying to answer.

Let's now review what we've discussed in this lesson.

■ **LESSON REVIEW AND SUMMARY**

During this lesson, we have discussed the following key points:

1. There are **four major steps** involved in the Analysis phase of the evaluation process. These are:
 - (1) Review the raw data for integrity
 - (2) Summarize the data
 - (3) Analyze the data
 - (4) Interpret the analysis results.
2. Data is analyzed to **assist the decision maker in making decisions**. The decision maker probably does not have the time, subject matter expertise, or evaluatio **skills** required to analyze raw data.
3. The end product of the Analysis phase is a series of **initial findings** that address the questions (EEAs) that make up the evaluation problem.
4. Initial decisions on how to do the analysis are made in the Planning phase of the evaluation and are included in the **evaluatio plan**.
5. Data can be categorized as **qualitative data** or **quantitative data**.
 - Qualitative data can be thought of as **written comments**
 - Quantitative data can be thought of as **numbers**
6. Qualitative data cannot be represented using statistics and is sometimes referred to as **nonstatistical data**.
7. Quantitative data can be represented using statistics and is sometimes referred to as **statistical data**.
8. You must take full advantage of automation capabilities, such as statistical software packages, for summarizing and analyzing data.

TRAINING EVALUATOR COURSE

The Evaluation Process

9. During the **first step** of the Analysis phase, you review your raw data for **integrity**. The review is conducted to
 - Ensure that the evaluation findings, conclusions, and recommendations are based on valid data.
 - Reduce the chance of time consuming problems arising later due to invalid data
 - Increase the credibility of yourself as an evaluator and the credibility of your organization as a whole.
10. The following factors will increase the need to check data for integrity:
 - using more than one data collector
 - mailing questionnaires as opposed to administering in person
 - using unstructured data collection methods.
11. Responses on data collection instruments must be checked for integrity. Responses must be checked to ensure all responses are
 - **completed** by respondents or data collectors
 - **readable** by the analyst
 - **understood** by the analyst
 - **consistent** throughout the instrument
 - **uniform** when different data collectors are used
 - **appropriate** to the purpose of the evaluation
12. If your data integrity check reveals invalid or "bad" data, you must resolve the problem through discussions with the respondent or the data collector. If you cannot resolve the problem, you must discard the data.
13. During the **second step** of the Analysis phase, you summarize data so that you can analyze it.
14. You should use computer support to summarize quantitative data (numbers). **Evaluation reference 4, *Automation and Statistics***, will assist you in summarizing quantitative data.

TRAINING EVALUATOR COURSE

The Evaluation Process

15. You should summarize qualitative data (written comments) by condensing and categorizing the key statements in the comments.
16. During the **third step** of the Analysis phase (Analyze the data) you must stay focused on the evaluation Problem, and the questions (EEAs) that make up the Problem.
17. The analysis of qualitative data is relatively simple. It usually involves nothing more than further categorizing the comments and rank ordering the frequency of the responses given.
18. The analysis of quantitative data requires the use of **statistics** that can range from the very simple to the very complex.
19. There are two broad categories of statistics--**descriptive** and **inferential**. Descriptive statistics "**describe**" the data; inferential statistics "**infer**" something about the population being studied based on the sample from which the data was collected.
20. You should use computers and computer software programs, such as SPSS (the *Statistical Package for the Social Sciences*), to analyze quantitative data. Evaluation reference 4, *Automation and Statistics*, provides guidelines and procedures for using computers and, particularly, using SPSS for analyzing quantitative data.
21. During the **fourth step** of the Analysis phase, you interpret the analysis results. The end products of this step and the entire Analysis phase are **initial findings** that address the EEAs of the evaluation.
22. One of the most important things to remember about data analysis is: **Keep it as simple as possible.**

The Evaluation Process

■ **END-OF-LESSON EXERCISE**

1. Match the terms in column A with the information given in column B. Place the letters from column B in the spaces provided before each term in column A.

A	B
___ 1. descriptive statistics	a. product of Analysis phase
___ 2. quantitative data	b. numbers
___ 3. initial findings	c. used to describe
___ 4. inferential statistics	d. written comments
___ 5. qualitative data	e. used to infer

2. In this lesson we discussed reasons for conducting each of the four steps involved in the Analysis phase of the evaluation process. Can you think of another reason, other than those we've discussed, for conducting each step? List them in the spaces below.

Step 1. _____

Step 2. _____

Step 3. _____

Step 4. _____

TRAINING EVALUATOR COURSE

The Evaluation Process

3. Indicate in which step of the Analysis phase each of the following actions is usually conducted. Put the number corresponding to the step (1-4) in the space provided.

- ___ 1. Develop initial findings that address the EEAs that make up the evaluation Problem.
- ___ 2. Use computer support to obtain statistics on quantitative data.
- ___ 3. Condense and categorize written comments.
- ___ 4. Check data on completed data collection instruments to ensure you can read the written responses.

4. Briefly comment on what you would do if you were placed in each of the following situations?

- a. As part of a Training Transfer evaluation of one of your school's courses, you have developed a questionnaire, mailed it to graduates of the course, and received completed questionnaires back from graduates in the field. As you are reviewing the raw data on the completed questionnaires for data integrity, you notice that the responses on all twelve questionnaires returned from skill level 1 soldiers in one unit have identical responses, even on the open-ended questions.

What do you do?

TRAINING EVALUATOR COURSE

The Evaluation Process

- b. You have been directed to take over an on-going evaluation after data has been collected using different methods of data collection. You ask for the evaluation plan to determine what questions (EEAs) the evaluation is addressing and you are told that there is no evaluation plan.

What do you do?

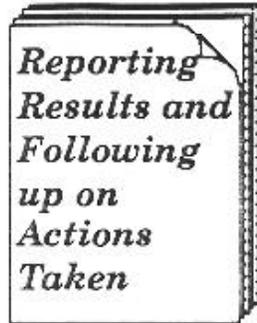


When you are finished, see your course manager.

You've now finished Lesson Three of this module. In this lesson, we discussed the Analysis phase of the evaluation process. In Lesson Four, we will discuss the last two phases of the evaluation process, the **Reporting phase** and the **Follow-up phase**.

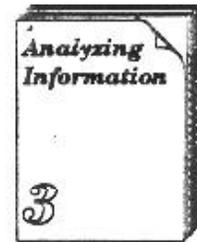
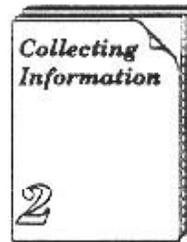
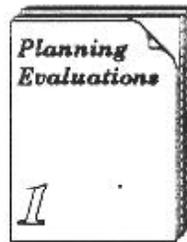
LESSON

4



Reporting Results and Following up on Actions Taken

MODULE 2 LESSONS



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

TRAINING EVALUATOR COURSE

The Evaluation Process

Table 2
The Evaluation Process

Phase 1 - Planning

- √ 1. Identify the evaluation problem
- √ 2. Research the evaluation problem
- √ 3. Develop the draft evaluation plan
- √ 4. Develop the final evaluation plan

Phase 2 - Collecting

- √ 5. Decide on type instruments needed
- √ 6. Develop drafts of the instruments
- √ 7. Evaluate the instruments
- √ 8. Administer the instruments

Phase 3 - Analyzing

- √ 9. Review the raw data for integrity
- √ 10. Summarize the data
- √ 11. Analyze the data
- √ 12. Interpret the results of the analysis

Phase 4 - Reporting

- 13. Prepare the draft report
- 14. Staff draft report for review/concurrence
- 15. Obtain approval of recommendations
- 16. Distribute report/recommendations for action

Phase 5 - Follow-up

- 17. Input action milestones into tracking system
- 18. Conduct the follow-up
- 19. Prepare a follow-up report
- 20. Staff the follow-up report

■ LESSON INTRODUCTION

So far you have **PLANNED** your evaluation and developed an evaluation plan to address the evaluation problem. You have **COLLECTED** the raw information you need to answer the questions (EEAs) pertinent to the evaluation problem. And you have **ANALYZED** the raw information to obtain a series of initial findings that answer the essential elements of analysis (EEAs) of the evaluation.

Now, you are ready to take these initial findings and **REPORT** the results of the evaluation. The end product of the Reporting phase is an **evaluation report**, which includes a series of findings, conclusions, and recommendations. After the results of the evaluation are reported, approved by the decision maker, and staffed, a **FOLLOW-UP** is scheduled to determine what actually happens as a result of your evaluation. The end product of the Follow-up phase is a **follow-up report**.

We will discuss both the Reporting and Follow-up phases of the evaluation process in this lesson. Policies and procedures for reporting and follow-up are determined locally, by your school, and should be included in your local evaluation policy document(s). The procedures vary significantly from one school to another. For this reason, we will not discuss reporting and follow-up procedures in great detail. We will, however, provide some guidelines and discuss what you should do as a minimum when reporting evaluation findings and following-up on actions taken. We will also provide some formats for evaluation and follow-up reports.

As with the other phases of the evaluation process, during the Planning phase of the evaluation you will make initial decisions about how to report the results of the evaluation and how to conduct the follow-up. You will include these decisions in the evaluation plan under the **Reporting and Follow-up Methodology**.

Table 2, on the opposite page, shows the evaluation process with the Reporting phase highlighted.

The Evaluation Process

■ **LESSON OBJECTIVE**

The training objective for this lesson is shown below. This objective includes: the **action** you will be able to perform at the conclusion of this lesson, the **conditions** under which you will be able to perform this action, and the **standards** to which you will be able to perform the action.

Conditions - Given this workbook, secretarial assistance, and analysis data interpretation.

Action - You will report on the evaluation.

Standards - The draft report must be logical and concise, completely staffed, structured so that recommendations may be efficiently reviewed by decision maker for approval, and prepared for distribution, all to satisfaction of scorer.

■ **LESSON ACTIVITIES**

**STEP 1
PREPARE THE
DRAFT
REPORT**

▼.....
We will divide the Reporting phase of the evaluation process into the following four steps:

1. **Prepare the draft report**
2. **Staff draft report for review/concurrence**
3. **Obtain approval of recommendations**
4. **Distribute report/recommendations for action**

In Step 1 of the Reporting phase, you will refine the initial findings that address the EEAs of the evaluation. From these findings, you will develop conclusions and, if the conclusions include problems, you may develop recommendations to solve the problems. You will then write up the findings, conclusions, recommendations plus other appropriate information as a **draft evaluation report**.

TRAINING EVALUATOR COURSE

The Evaluation Process

Types of Evaluation Reports

The length of the evaluation report and the format of the report will vary, depending on the complexity of the evaluation, the intended audience, and the impact that the evaluation will have. Your goal should be to keep the report as short and as simple as possible, but ensure that you include all the required information.

Although the report length and format can vary significantly, for purposes of standardization, we have categorized reports into two types, which we will refer to as **Executive Summary** and **Detailed Evaluation Report**.

An **Executive Summary** is written to briefly communicate the results of the evaluation and get a response to the evaluation recommendations. The Executive Summary is a memorandum that very briefly explains why the evaluation was done (Background), what the evaluation was designed to accomplish (Purpose and Objectives), how the evaluation was done (Methods), and what the major results of the evaluation are (Findings and Recommendations). It is staffed to the organizations responsible for implementing the recommendations and, therefore, has a suspense date for a response. It is usually not more than five or six pages in length.

For most of your evaluations, the Executive Summary will probably be sufficient. For example, if you are reporting on the results of a routine audit trail evaluation or a training product evaluation, a short report probably will do the job.

A **Detailed Evaluation Report**, on the other hand, is a lengthy, formal evaluation report that explains in much more detail those items included in the short report (Background, Purpose, Objectives, Methods Findings, and Recommendations). In addition to the items included in the Executive Summary, the long report also contains other items, such as the Executive Summary, Limitations, Assumptions, EEAs, and numerous appendices for data summaries and such things as copies of Data Collection Instruments, the Evaluation Plan, etc.

A Detailed Evaluation Report may be required if: the **intended audience** extends outside your installation; the evaluation will have a very significant **impact** on training; or the evaluation involves very **complex** data collection or analysis methodologies that need to be explained and

TRAINING EVALUATOR COURSE

The Evaluation Process

supported with data. Let's discuss these three reasons for preparing a long report.

- If the **intended audience** for the evaluation extends outside your school and installation, a long report may be required. If the audience is local, you can easily explain or provide any methods you used or data you collected. If the audience extends beyond your installation, however, the report must support itself; it must thoroughly explain how the evaluation was done, and must include supporting data. You can also provide evaluation documents such as the evaluation plan and data collection instruments as appendices to the report.
- If the evaluation results will have a significant **impact** on training or training resources, either at your installation or beyond your installation, you may need to develop a long report to adequately support and document your findings. If the results are controversial, you also may have to write a long report.
- If the evaluation involves **complex data collection or analysis methodologies**, a long report may be required to thoroughly explain how you collected and analyzed the data.

If the intended audience for your evaluation is within your installation, the potential impact is not overly significant, and the evaluation is not overly complex, **you should probably prepare an Executive Summary**. The major advantage of writing a the Executive Summary is that it requires much less time and effort. Supporting data, evaluation documents, and long explanations of how the evaluation was done are not needed in the report. If individuals question the findings, you can easily provide data, documents, and explanations.

If you do prepare an Executive Summary, make sure that you keep on file the supporting data and documentation required to explain and support the findings. You may have to justify or clarify your findings and recommendations at a later date.

TRAINING EVALUATOR COURSE

The Evaluation Process

Regardless of whether the report is short or long, we recommend that you keep the report as brief as possible. Only include information that the intended reader needs. Keep it simple. Don't use acronyms unknown to readers. Don't write at a reading level drastically above or below the reader. Use the new Army Writing Style (AR 600-70, DA Pam 600-67). Explain in simple terms any complex data collection or analysis methodologies. And, as with the other phases of the evaluation process, stay focused on the evaluation problem and the EEAs when writing the report.

To sum all this up, you should...

**Write the report for the intended reader
and
Keep the report as brief and as simple as possible.**

Some information for your report will come directly from the evaluation plan. This is another good reason to develop a thorough evaluation plan early in the evaluation process. You can prepare some sections of the report, such as the background, references, and appendices early in the evaluation process when time is available. This will allow you to concentrate on the hard part—formulating the findings, conclusions, and recommendations of the evaluation.

Format for Evaluation Reports

To provide standardization TRADOC-wide, we recommend that you prepare your reports in the formats provided in Tables 11 and 12, which follow. These tables provide formats for short and long reports and give brief guidelines and explanations of each section of the reports.



Scan the report formats in Tables 11 and 12 and read the guidelines for preparing each section of the reports.

Table 11
Format for Executive Summary

(Include the following information in the body of a Memorandum. Total length of the memorandum will usually not exceed five or six pages.)

PURPOSE

1. This paragraph gives the purpose of the memorandum, i.e., to provide evaluation findings and get concurrence/nonconcurrence on recommendations made as a result of the evaluation. Include a suspense date for responses. Explain that you will provide the report, recommendations, and concurrences/nonconcurrences to the decision maker for final approval.
2. **Evaluation Background** - This section includes one or a few paragraphs on why you initiated the evaluation. It should include a brief Problem statement and Impact statement. These can come from the evaluation plan.
3. **Evaluation Purpose** - This section includes a brief statement of what the evaluation was designed to accomplish. It should include a list of the Objectives of the evaluation and possibly the EEAs. These can also come from the evaluation plan.
4. **Evaluation Methods** - This section includes one or a few paragraphs explaining how you did the evaluation, i.e., how you collected and analyzed the data. Although this can come from the evaluation plan, the explanation should be shorter and more to-the-point than that in the evaluation plan.
5. **Evaluation Findings/Recommendations** - This section includes very brief explanations of the major findings of the evaluation and the recommendations that resulted from those findings. Although you can include positive findings that do not result in recommendations, you should not include every minor finding of the evaluation. List separately each recommendation, with supporting findings. The organization responsible for implementing the recommendation and space for the organization's approving authority to concur or nonconcur with the recommendation should follow each recommendation. Explain that they must provide in writing the reasons for nonconcurrences. The suggested format for this section follows.

TRAINING EVALUATOR COURSE

The Evaluation Process

- a **Finding (s):**
Recommendation 1:
Responsible Organization:
Concur _____ Nonconcur _____

- b **Finding (s):**
Recommendation 2:
Responsible Organization:
Concur _____ Nonconcur _____

- c *etc., etc., etc.*

6. This paragraph provides POC (name/telephone number) for evaluation and any other information required.

Signed by DOES Director or Representative

Table 12
Format for Detailed Evaluation Report

- Title Page** (This page includes report title, organization preparing report, organization's address, and date report is published.)
- Acknowledgment/Disclaimer Page** (This page includes acknowledgment of those individuals and organizations that conducted/supported the evaluation and a disclaimer statement reflecting that findings do not represent an official DA position.)
- Table of Contents Page(s)** (This includes page numbers for sections of the main body of the report and for appendices.)
- Main Body of Report**
- Executive Summary** (This includes a one- to two-page abstract with a very brief summary of the evaluation purpose, methodology, conclusions, and recommendations.)
 - Evaluation Purpose** (This can come straight from the evaluation plan.)
 - Background** (From the evaluation plan)
 - Problem**
 - Impact**
 - Scope** (From the evaluation plan)
 - Limitations**
 - Assumptions**
 - Objectives/Essential Elements of Analysis** (These can come from the evaluation plan. List EEAs under the objective (s) they support.)
 - Methods** (This can come from the evaluation plan, but you may need to rewrite it if you did not implement the methodology as you planned.)
 - Findings** (You should present these under the evaluation objectives to which they pertain and possibly under the EEAs that they answer.)
 - Conclusions** (Summarize significant findings and use them to develop and support the conclusions. Base the conclusions entirely on the data presented in the report.)
 - Recommendations** (Examine any problems addressed in the conclusions of the report and make recommendations for solutions to these problems.)
- Appendices** (This section will include such things as the Evaluation Plan, Data Collection Instruments, Data Summaries, Individuals/Units Sampled, Report Distribution, etc.)

TRAINING EVALUATOR COURSE

The Evaluation Process

If the evaluation results and the evaluation report will not be available for a considerable amount of time, and organizations affected by the evaluation cannot wait for the report, you may want to consider interim reports of emerging results. The formats for these interim reports can vary. Periodic briefings may be sufficient to provide emerging results.

After the draft evaluation report is developed using the formats presented in Tables 11 and 12, you must staff the report for review and concurrence on the recommendations made. This takes us into the next step of the Reporting phase.

STEP 2 STAFF DRAFT REPORT FOR REVIEW/ CONCURRENCE

- ▼.....
- √ 1. Prepare the draft report
 2. Staff draft report for review/concurrence
 3. Obtain approval of recommendations
 4. Distribute report/recommendations for action

In step two, you should first distribute the draft report for review within DOES. Other evaluators/project officers should review the report content and it should be thoroughly edited. You should then staff the draft report through the DOES chain of command to the Director for review/approval. The director should sign a memorandum to distribute the report to organizations outside DOES.

If you are preparing a short report (see Table 11), the director will sign the report itself since it is a memorandum. If you prepare a long report, you must prepare an accompanying memorandum requesting concurrence on the recommendations. The memorandum must include organizations responsible for implementing recommendations. You can format the memorandum similar to paragraph five of the short report outlined in Table 11.

The draft report is then staffed outside DOES to all organizations affected by the evaluation for their review and concurrence (or nonconcurrence) on the recommendations made.

TRAINING EVALUATOR COURSE

The Evaluation Process

You will then receive comments, concurrences, and nonconcurrences. If you receive nonconcurrences on recommendations, you should attempt to resolve any disagreements prior to sending the final report to the decision maker (usually the Assistant Commandant). Coordination meetings may be necessary to resolve disagreements. If you cannot reach agreements on nonconcurrences, you may have to send the report with explanations of all nonconcurrences to the decision maker for a final decision. Obtaining final approval of recommendations is the next step in the Reporting phase.

STEP 3 OBTAIN APPROVAL OF RECOMMEN- DATIONS

- ▼.....
- √ 1. Prepare the draft report
 - √ 2. Staff draft report for review/concurrence
 - 3. Obtain approval of recommendations**
 - 4. Distribute report/recommendations for action

As you probably recall, at the beginning of this course we defined evaluation. That definition was **“to provide information to aid in decision making”**. We have finally reached the point in the evaluation process where you actually provide information to the decision maker.

After the report is staffed and coordinated, you send the final report to the decision maker, who is usually the Assistant Commandant of your school, for final approval of the overall report and the individual recommendations. A decision briefing for the decision maker may be **necessary** at this time, especially if the report's findings are **controversial** or will have a significant impact on training.

The decision maker's decisions regarding the evaluation must be documented. You should send a memorandum to the decision maker along with the report and copies of the responses you received as a result of the staffing from Step 2. Table 13, which follows, provides a suggested format for this memorandum. The table also gives brief guidelines and explanations of each section of the memorandum.



Read through the information in Table 13.

Table 13
Format for Memorandum to Decision Maker

(Include the following information in the body of the Memorandum. Total length of the memorandum usually will not exceed two or three pages.)

1. **Purpose** - This paragraph briefly explains the purpose of the memorandum, i.e., to obtain the decision maker's approval of recommendations made as a result of the evaluation.
2. **Discussion** - This section briefly states the purpose of the evaluation and notes that the report is attached as an enclosure. The section also explains that you staffed the report and recommendations and that the responses you obtained are attached as enclosures.
3. **Recommendations** - This section includes the report's recommendations, the organizations responsible for implementing the recommendations, the results of the staffing, and space for the decision maker to sign indicating approve/disapprove each recommendation. Following is suggested format for this section.

a. Recommendation 1:

Responsible Organization:

Coordination: (Outline which organizations concurred/nonconcurred. Briefly explain any nonconcurrences that you could not resolve.)

APPROVED _____ DISAPPROVED _____ SEE ME _____

b. Recommendation 2:

Responsible Organization:

Coordination: (Outline which organizations concurred/nonconcurred. Briefly explain any nonconcurrences that you could not resolve.)

APPROVED _____ DISAPPROVED _____ SEE ME _____

c. etc.

4. This paragraph provides POC (name/telephone number) for the evaluation and any other information required.

Signed by DOES Director or Representative

TRAINING EVALUATOR COURSE

The Evaluation Process

After the decision maker has approved or disapproved the recommendations, you distribute the final report with approved recommendations for action. This is the next, and the last, step in the Reporting phase.

STEP 4 DISTRIBUTE REPORT/ RECOMMENDA TIONS FOR ACTION

- ▼.....
- √ 1. Prepare the draft report
 - √ 2. Staff draft report for review/concurrence
 - √ 3. Obtain approval of recommendations
 - 4. Distribute report/recommendations for action**

In step four of the Reporting phase, you distribute the final report with a copy of the memorandum from the decision maker, showing final approval of recommendations, to all organizations that are responsible for implementing the approved recommendations.

You must give the responsible organizations a suspense date for providing written responses. Their responses must include an overview of actions they have taken thus far and milestones for the future actions they will take. Inform all organizations that you will conduct follow-up checks to ensure that they take these actions. After a certain predetermined time, you will conduct a follow-up to determine if they have taken the actions.

This concludes the Reporting phase of the evaluation process and takes us into the next phase—the Follow-up phase. During the Follow-up phase, you determine what actually happens as a result of your evaluation.

Since we are discussing two phases of the evaluation process in this lesson, let's quickly review some of the key things you should remember about reporting evaluation results. Then, we will discuss the Follow-up phase.

Key Actions Required When Reporting Evaluation Results

- Include reporting procedures in the **evaluation plan**.
- Use the following **four steps** when reporting evaluation results:
 - **Prepare** the draft report.
 - **Staff** draft report for review/concurrence.
 - Obtain **final approval** of recommendations.
 - Distribute report/recommendations **for action**.
- Use formats in **Tables 11 and 12** for short or long reports.
- Prepare a **Detailed Evaluation Report** if:
 - the **intended audience** extends outside your installation
 - the evaluation will have a significant **impact** on training
 - the evaluation includes **complex methodologies**.
- Write the report for the **intended reader/user**.
- If preparing a long report, include an **executive summary**.
- If preparing a short report, keep supporting **data on file**.
- Try to keep the report as **brief** and as possible.
- Use the new **Army Writing Style**.
- Begin writing the report **early** in the evaluation process.
- Consider **interim reports** of emerging results.
- Thoroughly **staff and coordinate** the report and recommendations.
- Get **concurrences** in writing on all recommendations.
- Try to **resolve** nonconcurrences before going to decision maker.
- Staff the report and coordination results to the **decision maker**.
- Use format in **Table 13** for staffing report to decision maker.
- Get decision maker's approval of each recommendation in **writing**.
- Provide report and memo with decision maker's approval to organizations for **implementation** of recommendations.
- Request written responses with milestones on **actions** they will take.
- Inform organizations that you will conduct a **follow-up**.

TRAINING EVALUATOR COURSE

The Evaluation Process

Table 2
The Evaluation Process

Phase 1 - Planning

- √ 1. Identify the evaluation problem
- √ 2. Research the evaluation problem
- √ 3. Develop the draft evaluation plan
- √ 4. Develop the final evaluation plan

Phase 2 - Collecting

- √ 5. Decide on type instruments needed
- √ 6. Develop drafts of the instruments
- √ 7. Evaluate the instruments
- √ 8. Administer the instruments

Phase 3 - Analyzing

- √ 9. Review the raw data for integrity
- √ 10. Summarize the data
- √ 11. Analyze the data
- √ 12. Interpret the results of the analysis

Phase 4 - Reporting

- 13. Prepare the draft report
- 14. Staff draft report for review/concurrence
- 15. Obtain approval of recommendations
- 16. Distribute report/recommendations for action

Phase 5 - Follow-up

- 17. Input action milestones into tracking system
- 18. Conduct the follow-up
- 19. Prepare a follow-up report
- 20. Staff the follow-up report

TRAINING EVALUATOR COURSE

The Evaluation Process

PHASE 5 FOLLOW-UP

▼.....

You are now ready for the "last" phase of the evaluation process. The Follow-up phase is sometimes considered the most important part of the evaluation process. During this phase, you determine if anything actually happens as a result of your evaluation. Although this may be the most important phase, it often is also the most overlooked.

Even though the decision maker has signed off on your evaluation and approved your recommendations, there is still no guarantee that those responsible will implement your recommendations. **You must follow-up** to ensure that something happens. Table 2 on the preceding page shows the evaluation process with the Follow-up phase highlighted.

In many, and possibly most situations, evaluators do not follow-up to ensure their recommendations are implemented. This is unfortunate, since it could mean that all the effort they expended in planning the evaluation, collecting the data, analyzing the data, and reporting the results is wasted if those responsible don't implement the recommendations. If you cannot follow-up on your recommendations, you should not do the evaluation.

As shown in Table 2, the end product of the Follow-up phase is a **follow-up report**. This report summarizes actions taken or not taken on approved recommendations. The Follow-up phase is also divided into four major steps, as shown in the table. Let's now briefly discuss each of these steps.

TRAINING EVALUATOR COURSE

Evaluation Planning

STEP 1 INPUT ACTION MILESTONES INTO A TRACKING SYSTEM

- ▼.....
- 1. Input action milestones into a tracking system**
 2. Conduct the follow-up
 3. Prepare a follow-up report
 4. Staff the follow-up report

As outlined in our discussion of the Reporting phase, you have distributed the final evaluation report, with recommendations approved by the decision maker, to the organizations responsible for implementing the recommendations. At that time, you requested a summary of actions those organizations had taken thus far and their milestones for future actions that they would take.

To initiate the Follow-up phase, you must collect the responses from these organizations and input, into a **tracking system**, the actions they have taken and the milestones for future actions. This tracking system will allow you to track the actions. The system should be automated.

Based on the responses you receive, you will make a decision on when to do a follow-up. You should enter into the system your projected date for the follow-up. This projected date will depend on the milestones established for the actions and will depend on local policies and procedures for doing follow-ups. The tracking system will inform you when you have scheduled a follow-up check and will provide an audit trail on all actions taken as a result of the evaluation.

Since the different systems used to track actions and schedule follow-ups are developed locally and vary considerably from school to school, we will not discuss tracking systems in detail. The main thing to remember is that you must have a tracking system of some sort, preferably an automated one, to track actions that result from your evaluations.

TRAINING EVALUATOR COURSE

The Evaluation Process

STEP 2 CONDUCT THE FOLLOW-UP

- √ 1. Input action milestones into a tracking system
- 2. **Conduct the follow-up**
- 3. Prepare a follow-up report
- 4. Staff the follow-up report

During Step 2, you conduct the follow-up. When the tracking system informs you that a follow-up is due, you initiate the follow-up checks. The purpose of the follow-up is to ensure that those responsible have implemented the approved recommendations. How the follow-up is done will depend on the actions themselves, the resources available to do the follow-up, your local policy for follow-ups, etc.

One approach to conducting follow-ups is, first to ask the organizations for written summaries of actions they have taken. Then, based on their written responses, you can take other follow-up measures as required. These other follow-up measures may include meeting with personnel from the organizations, observing training, reviewing training documentation, examining training records, etc. You should do whatever it takes to ensure that the organizations involved have implemented the actions. Attempt to reconcile any differences of opinion, between yourself and the responsible organization, on actions that they have taken or not taken. If they have not implemented actions as projected, you may need to establish new milestones.

If you establish new milestones, enter them into the tracking system. Another follow-up may be necessary in the future. When you are satisfied with the actions taken on the recommendations, you will record the actions as completed in the tracking system.

The Evaluation Process

**STEP 3
PREPARE A
FOLLOW-UP
REPORT**

- ▼.....
- √ 1. Input action milestones into a tracking system
 - √ 2. Conduct the follow-up
 - 3. Prepare a follow-up report**
 - 4. Staff the follow-up report

In step three, you write up the results of the follow-up in the form of a **follow-up report**. You should summarize actions taken for each approved recommendation in the report. The report should be as brief as possible. It will list, by recommendation, a brief summary of what has happened. The report may include new milestones if more work is required. A short two- to three-page memorandum is probably sufficient for a follow up report. The suggested format for a follow-up report is provided in Table 14 which follows.

Table 14
Format for Follow-up Report

(Include the following information in the body of a Memorandum. Total length of memorandum will usually not exceed two or three pages.)

1. **Purpose** - This paragraph briefly explains the purpose of the memorandum, i.e., to provide a summary of actions taken as a result of the evaluation recommendations.
2. **Background** - This section includes a couple of paragraphs that summarize what has happened; i.e., the evaluation was conducted and results staffed, recommendations were approved by the decision maker, milestones were established for actions to be taken, a follow-up was conducted, etc.
3. **Findings** - This section includes the approved recommendations, the organizations responsible for implementing the recommendations, and the follow-up findings. Following is a suggested format for this section.
 - a. **Recommendation 1:**

Responsible Organization:

Follow-up Findings: (Briefly outline what has or has not happened in regards to this recommendation. If you establish new milestones, include these milestones.)
 - b. **Recommendation 2:**

Responsible Organization:

Follow up Findings: (Briefly outline what has or has not happened in regards to this recommendation. If you establish new milestones, include these milestones.)
 - c. etc.
4. This paragraph provides POC (name and telephone number) for the evaluation and any other information required.

Signed by DOES Director or Representative

TRAINING EVALUATOR COURSE

The Evaluation Process

STEP 4 STAFF THE FOLLOW-UP REPORT

▼.....

- √ 1. Input action milestones into a tracking system
- √ 2. Conduct the follow-up
- √ 3. Prepare a follow-up report
- 4. Staff the follow-up report**

In the last step of the Follow-up phase, you staff the follow-up report to inform everyone of the follow-up results and to document the follow-up. Local policy may dictate how you staff the report and to whom. You should staff the report, as a minimum, to the organizations responsible for implementing the recommendations. Some decision makers may want to see all the follow up reports written by DOES, while others may only want to see reports that identify deficiencies in meeting milestones.

That concludes the Follow-up phase and concludes our discussion of the entire evaluation process.

■ LESSON REVIEW AND SUMMARY

In this module, we have provided a step-by-step approach to the evaluation process to assist you in conducting training evaluations. The procedures we have discussed apply to any training program, product, or process evaluation you may be required to conduct.

As we stated earlier in this course, no two training evaluations are exactly alike. Use the information we have provided as a guide. Some of your evaluations will not require all the steps and some may require more steps. For routine evaluation duties, you may only need to perform some of the steps. For major training evaluations you will probably need to perform all the steps and possibly others. In some cases, you may not be able to perform every step in the process because of resource constraints. We understand that this is reality.

TRAINING EVALUATOR COURSE

The Evaluation Process

In the remaining modules of this course, we will discuss different types of training program, product, and process evaluations you may have to perform. The evaluation process we discussed in this module will apply to all these evaluations. What we have discussed in this module will be pertinent to all the remaining modules of the course. So, in a way, this module has provided you with your "basic training" in evaluation. You are now ready for advanced training in the specific types of evaluations you will conduct.

Let's now briefly summarize some of the key points we've discussed regarding the Follow-up phase of the evaluation process, then complete a short end-of-lesson exercise.

Follow up phase

When following-up on actions taken as a result your evaluations, you should:

- Include follow-up procedures in the **evaluation plan**.
- Use the following **four steps** when reporting evaluation results:
 - Input action milestones into a tracking system
 - Conduct the follow-up
 - Prepare a follow-up report
 - Staff the follow-up report
- Use a **tracking system** for tracking actions taken.
- Request a **written summary** of actions taken, then conduct other follow-up efforts.
- Record follow-up results in a **follow-up report**.
- Keep the report as **brief** as possible.
- Use the format in **Table 14** for preparing follow-up reports.
- Provide report to **action organizations** and to decision maker, if required.

TRAINING EVALUATOR COURSE

The Evaluation Process

■ **END-OF-LESSON EXERCISE**

Answer each question below in the spaces provided. You can use the workbook, or any other references you need to answer the questions. When you are finished, see your course manager for feedback on the exercise.

Briefly comment on what you would do if you were placed in each of the following situations?

1. You have conducted an evaluation and have just written up a draft evaluation report. You have staffed the report with recommendations for review and concurrence. You have just received a call from one of the organizations responsible for implementing some of the recommendations. Their representative informs you that his supervisor, a division chief responsible for the training evaluated, is very upset about the report, disagrees with the reports findings, and questions the validity of the data collection and analysis methods used. His supervisor wants to meet with you immediately.

What do you do? _____

2. Taking the situation above a few steps further, let's say you received final approval of your recommendations by the decision maker, staffed the recommendations for action, received milestones for actions to be taken by the organizations responsible, and entered the actions and milestones into your tracking system. Based on these milestones, you scheduled a follow-up to ensure that the

TRAINING EVALUATOR COURSE

The Evaluation Process

actions have been implemented. While conducting the follow up, you discover that the same organization that originally questioned the evaluation and recommendations, has not implemented the necessary actions. Additionally, it seems that little effort has been expended by the organization to implement the actions.

What do you do? _____



When you are finished, see your course manager.

■ **END-OF-MODULE EXERCISE**

Congratulations, you've completed Module #2 of the Training Evaluators Course. You are now ready to take an End-of-Module Exercise.

As we discussed in the Course Introduction, after you complete the End-of-Module Exercise, your course manager will grade it and you will receive either a GO or NO GO for the module. You may want to quickly review the materials in the lessons of this module and the job aid provided with the module before taking the End-of-Module exercise. You may also have some questions you would like to ask the course manager.

When you are ready, take your course map to the course manager. The course manager will give you further directions for taking the End-of-Module Exercise.

Good Luck!

■ **REFERENCES AND SUGGESTED READINGS**