Chapter 10

How to Manage Follow-Up Evaluation

The first chapter of this book presented a typical ID project management model and an overview of the project manager's job in implementing the model. The next two chapters discussed Phase I of the model, Project Planning, including Step 1: Determine Project Scope and Step 2: Organize the Project. The next five chapters presented information on Phase II of the model, Instructional Development. In particular, these chapters reviewed some techniques for managing Step 3: Gather Information, Step 4: Develop the Blueprint, Step 5: Create Draft Materials, Step 6: Test Draft Materials, and Step 7: Produce Master Materials. Finally, the preceding chapter shifted our focus to Phase III: Follow Up. In particular, some techniques for managing Step 8: Reproduce and Step 9: Distribute were presented.

In this, the final chapter of the book, we will examine some methods for organizing and managing Step 10: Evaluate.

Two Assumptions

The purpose of Step 10: Evaluate is to determine the long-term effectiveness of the instructional materials that were created during earlier ID activities. At this point we make two assumptions:

- **The materials to be evaluated are performance-based.** That is, there are specified skill or knowledge objectives that serve as targets for student performance. If there are no performance objectives, the evaluation techniques discussed here will not make sense.
- **Time, money, people, and other resources will be available** to make the improvements recommended by the evaluation. If there will be no resources available to implement the recommendations, then the evaluation is a waste of effort.

Caution: Seek Expert Advice

A note of caution: It's true that nearly every instructional developer at some time or another must evaluate instructional materials. However, bear in mind that evaluation is a discrete discipline, intimately related to, but separate from, instructional development. If you are fortunate enough to have access to evaluation professionals, then you should get their advice when planning and conducting evaluations. If, like most of us, you must develop your evaluation strategy without input from such specialists, then you should proceed with caution.

In any case, this chapter will not attempt to provide detailed instructions for conducting evaluations. There are plenty of other texts that are devoted solely to this topic. Instead, we will focus on what the project manager can do to ensure that the evaluation is as effective as possible.

About Follow-Up Evaluation

In an article entitled *Levels of Evaluation*, Valorie Beer and Anne Bloomer argue that the usual distinction between formative and summative evaluation is not particularly helpful for planning evaluations. Instead, they recommend that evaluation efforts be categorized into three different levels, each of which contains elements of formative and summative evaluation. [Author's note: It is strongly suggested that project managers examine Beer and Bloomer's article. It sorts out some major issues associated with evaluation and discusses instrumentation and methods in clear terms. It helped inspire much of this chapter.]

These levels of evaluation, along with the questions asked by each, are loosely summarized below:

Level One evaluation identifies required revisions prior to implementation. It asks:

- Is the training working as it was designed to work?

Level Two evaluation describes the effectiveness of the course after implementation. It asks:

- Are students achieving the objectives?
- Are student needs being met by the program?

Level Three evaluation examines both the effectiveness and the overall relevance of the course. It asks:

- Are skills, knowledge, and attitudes being transferred to the real world?
- What are the problems in achieving transfer and what are some solutions?
- Are the course objectives really relevant?

Chapter 7, How to Test Draft Materials, dealt primarily with what Beer and Bloomer would call Level One evaluation. That is, the purpose of testing draft materials is to determine whether the training works and what revisions are needed before implementation.

On the other hand, follow-up evaluation, the topic of this chapter, occurs after the course is implemented. Such evaluations attempt to answer Level Two or Level Three questions. In order to answer such complex questions, it's necessary to gather data from many different sources. Therefore, this type of evaluation effort is a project unto itself, requiring its own project strategy and checkpoints.

Typical Tasks in Follow-Up Evaluation

Follow-up evaluation typically involves these broad tasks:

- **Define the objectives** of the evaluation and select an appropriate evaluation strategy.
- **Develop the tools** (surveys, observation guides, etc.) needed to execute the strategy.
- **Implement the strategy** and gather data as planned.
- **Synthesize,** analyze, and summarize the data.
- **Report the results** of the evaluation and make recommendations based on the results.

Figure 10-1 illustrates the flow of these tasks and shows the typical outputs of each.

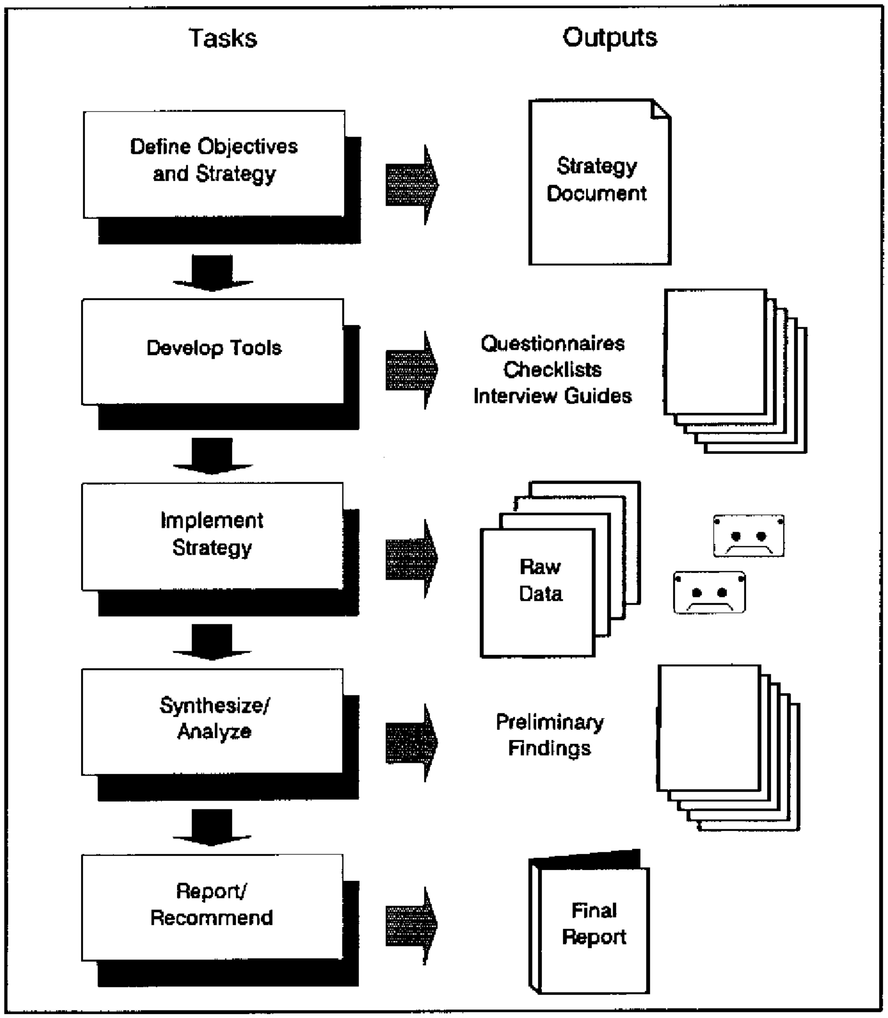

Figure 10-1: Tasks and Outputs During Follow-Up Evaluation

As you can see, each task in the evaluation effort results in a specific output that, in turn, helps to build a foundation for the next output.

As project manager, it's your job to help plan each of these tasks, stimulate action by the evaluation team to get the job done, and intervene as needed to keep things moving.

Figure 10-2 summarizes these manager activities.

Activity ⬇ / Manager Role ➡	Plan	Stimulate Action	Intervene
Define Objectives & Strategy	Discuss with sponsor, consumers of training	Meet with team; Determine objectives & strategy	Keep team focused on key issues
Develop Tools	Set deadlines; Provide samples	Review and approve tools; Involve sponsor	Note deviations from strategy; Specify changes
Implement Strategy	Schedule observations, interviews, etc.	Observe evaluation team in action	Note deviations from strategy; Get back on track
Synthesize & Analyze	Set deadlines; Remind team of key objectives	Meet with team; Review patterns, supporting data	Keep team focused on evaluation objectives
Report & Recommend	Provide team with report outline; Confirm deadlines	Review and approve draft report; Present to sponsor	Discuss sponsor concerns; Clarify and revise

Figure 10-2: Manager Activities During Follow-Up Evaluation

Now let's examine each of these more closely.

Define Objectives and Select a Strategy

Shortly after your evaluation team is assembled, you will need to define the objectives of the evaluation and determine an appropriate strategy. As project manager, you can help to plan for this activity. In particular, you can talk with the sponsor and other important consumers of the training (managers of the trainees or customers who interact with trainees, for example) and determine what questions they would like the evaluation to answer. If you know their objectives and concerns, you can help shape the evaluation strategy accordingly.

Next, you should meet with the evaluation team and outline some clear, specific objectives for the evaluation. Based on these objectives, you can create a sensible strategy for executing the evaluation. The strategy should describe:

- The specific questions your evaluation should answer.
- The people your team must meet or observe in order to obtain data.
- Logistical support requirements (equipment for trainees or observers, classroom space, transportation, etc.)
- Specifications for questionnaires, interview guidelines, observer checklists, and so on.

Because your evaluation team will likely consist of instructional designers or evaluation specialists, there might be a tendency for them to overemphasize academic or theoretical issues in developing the evaluation strategy. Your job is to intervene when the balance shifts too far in the direction of the academic, making sure that the team focuses on key concerns of the sponsor and other training consumers.

When your evaluation strategy is completed, you should review it with your sponsor and obtain his or her approval. This approval is important, since in most cases sponsor personnel or resources will be affected by the evaluation activity and the recommendations which follow.

Develop Tools

After your strategy is completed and has been "blessed" by your sponsor, you can begin to develop the required tools to execute the strategy. Typical tools that might be built include:

- Course critique sheets for students, instructors, and other participants
- Observers' guidelines and checklists
- Questions for use in interviews and focus groups
- Criterion or performance tests (if they don't already exist) based on course objectives

Depending on your particular evaluation strategy, the tools you build will vary. But no matter what tools you build, it is essential that they be clear and easy for the members of the evaluation team to use. If the tools are confusing or subject to multiple interpretations, then you will likely get conflicting data and end up comparing apples to oranges.

As project manager you can help plan for the development of tools by providing samples for your team to examine. In addition, you will need to set specific deadlines for the completion of the draft tools.

Next, you should review and approve the tools and, if appropriate, obtain the sponsor's approval. (Sponsor approval is typically required when the evaluation project is politically sensitive. This is because your evaluation team may need to ask controversial questions that require careful positioning or that could lead to disputes in your sponsor's organization.) When you and the sponsor have specified all necessary changes to the tools, then you are ready to implement your evaluation strategy.

Implement the Strategy

Often the most difficult part of the evaluation effort is its implementation. Here are some typical things the evaluation team will need to do to implement the evaluation:

- Examine student performance on criterion tests (sometimes paper and pencil, sometimes observation of "live" performances such as role plays or hands-on exercises).
- Administer course critiques to students, instructors, and other participants.
- Conduct focus group sessions.
- Conduct face-to-face or telephone interviews.
- Administer questionnaires to students, instructors, managers of students, and others.

Most of these tasks involve interaction with many people. As project manager, it's your job to see that all these interactions are carefully orchestrated and scheduled. You may need to ask for your sponsor's support in setting meetings and temporarily rearranging the priorities of busy interview subjects.

Once the implementation of the evaluation is underway, it's your role to "spot check" the process and make sure everything is going according to plan. You might sit in on important focus group sessions and see how well your evaluation team is conforming to the plan. Naturally, in politically sensitive situations, you should keep your eyes and ears open for signs of trouble. Be prepared to intervene as needed to get things back on track.

Synthesize and Analyze

After the dust settles and all the data is gathered, it's time to synthesize and analyze the findings. This is often the most exciting part of the evaluation, the time when you begin to see patterns emerge from the mounds of data gathered. It's also the time when you find out how well your evaluation strategy worked. That is, did you answer the questions you set out to answer?

From a management perspective, however, this is a time when the project is vulnerable to schedule delays. This often happens when the evaluation team finds provocative new questions that can be answered by the data. They may need more time than planned to crunch numbers, compare variables, and pursue the answers.

On the one hand, you must try to live within your budget and schedule, so you can't allow the team to suffer "analysis paralysis." On the other hand, you should allow enough time to take advantage of the team's creativity and explore unanticipated questions that the evaluation might be able to answer. So you should be prepared to strike a balance between these two forces when you set your deadline for completing the analysis.

In any event, it's up to you to help the team plan the synthesis and analysis activities by setting a reasonable deadline and reminding them of the key issues and concerns the evaluation is meant to address. Then you must wait; give them time to work through the data and find the patterns.

Eventually, you should meet with the team and discuss their preliminary findings. Depending on the situation, you might want to involve your sponsor in this discussion. This is particularly important if your sponsor will be trying to "sell" your recommendations to higher-level management. By reviewing the team's preliminary findings before the final report is written, the sponsor may be able to help the team position the recommendations so that they can be implemented more smoothly.

Whether you involve the sponsor or not, your role as manager is to keep the team focused on the objectives of the evaluation by observing and intervening as needed.

Report and Recommend

The final task to be performed in the evaluation is to report the findings and make recommendations for improvement.

As project manager, you might want to help the team plan the report by providing them with a sample report outline. This will clarify your expectations. In addition, you should confirm the deadline for the report's completion.

Like any complex document, the evaluation report should include only summaries of key issues in the main body; detailed supporting data should be relegated to attachments or appendices. Charts, graphics, and tables summarizing trends in the data should be used whenever possible. Authors of the report should keep in mind the kinds of decisions that the readers of the report will be trying to make. In most cases, these readers will welcome brief summaries and clear recommendations; details and supporting data, while essential to the eventual defense of the recommendations, will be of less immediate interest to them.

Often the most effective way to present the report is with an accompanying oral presentation. Such a presentation, when supported with appropriate media and graphics, can stimulate a discussion of complex and subtle issues that can't be easily addressed in the written report.

Following the presentation of the report to the sponsor, you may need to clarify sponsor concerns and revise the report.

Conclusion

This chapter has described how to manage Step 10: Evaluate. In particular, it has provided some tips on working with the evaluation team to define objectives and strategies, develop tools, and implement the strategies. In addition, it provided some broad suggestions for managing the analysis of the evaluation data and for making the final evaluation report.