Chapter 4

How to Gather Information

In the first chapter, we presented a typical ID project management model and an overview of the project manager's job in implementing the model. The next two chapters provided information on Phase I of the model, Project Planning. Specifically, we presented techniques for completing Step 1: Determine Project Scope and Step 2: Organize the Project.

In this chapter, our focus will shift to Phase II: Instructional Development. (See Figure 1, on the next page.)

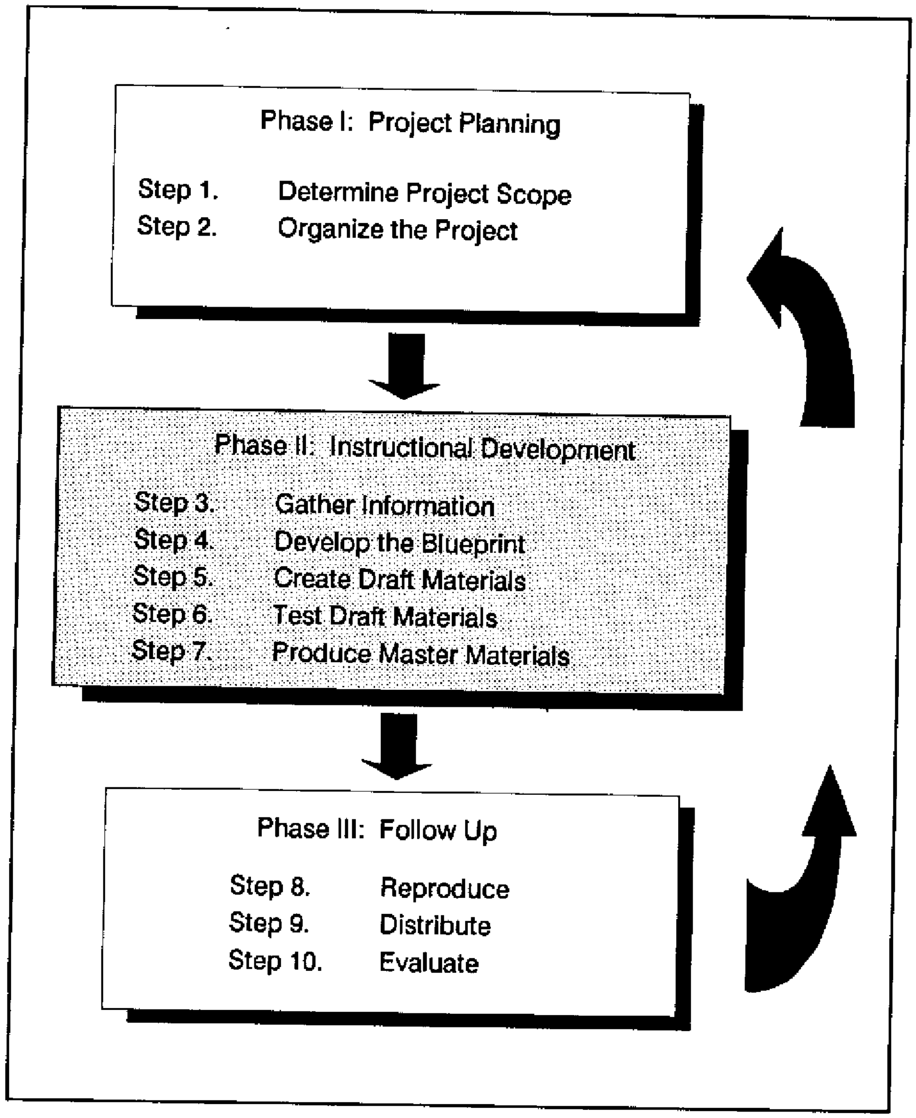

Figure 4-1: Typical Project Management Model

In this phase of the project, the manager's role changes. In Phase I: Project Planning, the manager performed most of the tasks for him- or herself. During Phase II, on the other hand, the manager will be coordinating the efforts of the members of the design team.

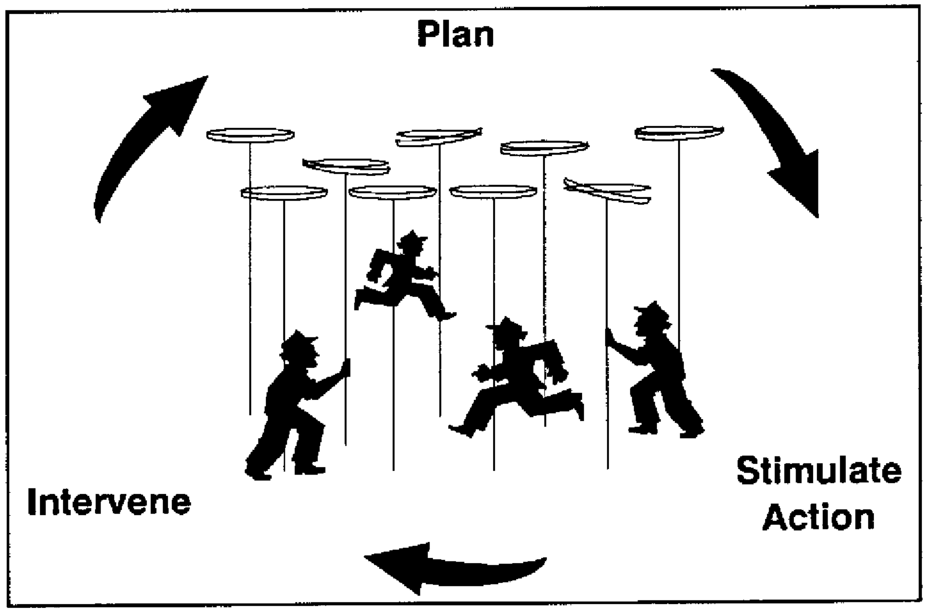

Figure 4-2: Main Activities of a Project Manager

As the first chapter pointed out, to be a successful project manager you don't need to be directly involved in all the events that take place during a project. You must, however, carefully plan each event, provide the stimulus to get the event started, and then intervene when needed to keep things running smoothly. (Remember the plate-spinning analogy?) Figure 2 illustrates this process.

In this chapter we will review some techniques which will help you plan, stimulate action, and intervene as needed during Step 3: Gather Information.

Overview of Step 3: Gather Information

In this book we have drawn a distinction between front-end analysis and instructional development. To be specific, we assume that you must complete your front-end analysis (needs assessment, job analysis, performance analysis, or other preliminary analysis) before you try to plan an instructional development project. In other words, when you enter the model at Phase I, you are certain you have a need for training and that you have defined the nature of that need.

The purpose of Step 3: Gather Information is to get more details about the needed training so that designers can begin the instructional design process. Typically, your team will need to **gather detailed information about:**

- The **audience** to be trained
- The **tasks** the audience must learn to perform
- The **content**, or details, concerning the product or process on which the training will be based

Your first source of information on each of these topics should be the reports which resulted from your front-end analyses. These reports should be carefully reviewed to make sure your designers don't waste their time (or the sponsor's time) trying to gather information that is already available. After you have reviewed these reports, you will be ready to plan your information gathering to fill in the gaps.

While it is possible to make finer distinctions, there are basically **three broad sources of information** that training developers use:

- Observations
- Interviews
- Reviews of documentation

The table on the next page shows just a few examples of the ways these sources can be used to obtain different kinds of information.

Type of Information	Source of Information		
	Observations	Interviews	Documentation
Audience	Observe in work environment	Interview audience or supervisors	Employee files or personnel records
Tasks	Observe audience or expert performing	Interview expert or other performers	Job descriptions Policy statements Trouble reports
Content	Observe expert or creators of product/process	Interview SMEs, policymakers, marketers, or managers	Product plans Specifications Marketing guidelines

Figure 4-3: Examples of Information Gathering Techniques

It is not our intent here to discuss all possible information gathering techniques. There are plenty of good references (indeed, entire courses) devoted to these techniques. Consult these for details.

Planning to Gather Information

Usually the first task that your design team tries to perform together is Step 3: Gather Information. At this early stage, designers are just getting acquainted with each other and with the project; SMEs are rushing around trying to find documentation and prepare for interviews; and you are trying to make sure everyone is in the right place at the right time. Things can get pretty hectic.

Careful planning, however, can keep things running smoothly. While it can be valuable to involve your designers, it is still your responsibility as project manager to take the lead in this planning. Your planning should include these activities:

- Figure out, in broad terms, what information is missing.
- Pick one or more information gathering strategies that fit your schedule and budget.
- Tighten and polish your strategy.

The following worksheets and checklists can help.

Worksheet: What Information Is Missing?

To figure out, in broad terms, what kinds of information you need to gather, complete these steps.

Step 1: Assemble and review your project plans (proposal, budget, schedule, assumptions, etc.) and any documentation you have acquired concerning audience, tasks, or content.

Step 2: Try to "picture," or imagine in detail, the finished training materials you will be developing.

Step 3: Ask yourself "Which elements of the training will require more information before we can begin development?"

Step 4: In the spaces below, list the kinds of information you need to gather about the audience, the tasks they will be learning to perform, and the content (details) of the product or process they will be learning. **(List broad categories only.)**

Missing Information About the Audience

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____

____

Missing Information About the Tasks to Be Performed

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____

____

____

Missing Information About the Content (details about the product/process)

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Checklist: Potential Information Gathering Strategies

After you have completed the "Missing Information" worksheet, you are ready to identify some information gathering strategies. Review your list of missing information, then place a check mark beside the possible strategies you might use. (This is not an exhaustive list of strategies, by any means. Add your own strategies as required.)

Observations

Information on the Target Audience

- ☐ Observe them performing their job in the work environment
- ☐ Observe them interacting with people who provide inputs or people to whom they provide outputs
- ☐ Other: ____________________

Information on the Task

- ☐ Observe expert performing task (may be a narrated demonstration, with steps, substeps, and assumptions detailed)
- ☐ (If appropriate) Arrange for designer to perform the task, under supervision of an expert
- ☐ Other: ____________________

Information on the Product or Process

Observe inventor, designer, or initiator demonstrating how it works

Observe members of target audience using (or trying to use) the new product or process

Other: ____________________

Interviews

Information on the Target Audience

- ☐ Hold face-to-face or telephone interviews with members of the audience, their supervisors, their support people, etc.
- ☐ Ask inventors, designers, or initiators of the product or process their assumptions about the audience
- ☐ Other:______________________________

Information on the Task

- ☐ Interview inventors, designers, or initiators and ask about tasks, subtasks, assumptions regarding required skills
- ☐ Interview managers of training audience about criteria for successful performance (evaluative criteria or standards)
- ☐ Other:______________________________

Information on the Product or Process

- ☐ Interview inventors, designers, or initiators
- ☐ Interview promoters or marketing people "pushing" the product or process
- ☐ Interview managers or implementors of the product or process
- ☐ Other:______________________________

Review of Documentation

Information on the Target Audience

- [ ] Job descriptions
- [ ] Performance evaluation criteria, standards
- [ ] Requests for new staff member(s)
- [ ] Internal memos about meeting quotas, achieving expectations, etc.
- [ ] Other: ______________________________

Information on the Task

- [ ] Detailed descriptions of steps of product or process to be performed
- [ ] Other: ______________________________

Information on the Product or Process

- [ ] Technical specifications
- [ ] Position papers or memos advocating adoption of product or process
- [ ] Information on similar products or processes used by competitors
- [ ] User manuals, guidelines
- [ ] Marketing brochures
- [ ] Existing courseware for this or similar products or processes
- [ ] Other: ______________________________

Worksheet: Tightening Your Information Gathering Strategy

After you have completed the "Potential Information Gathering Strategies" checklist you will have identified several strategies you want to use. There's a good chance, however, that you won't be able to do everything you would like to do. To narrow your strategies to a manageable number, complete these steps.

Step 1: Check your budget and schedule. Answer this: How much time and money are available for information gathering?

Time available: ______________________________

Money available: ______________________________

Step 2: Review your completed "Potential Information Gathering Strategies" checklist. Answer these questions:

How long will it take to prepare the interview questions, observation guidelines, and other tools that are needed to use the strategies you have identified?

____

How long will it take to conduct the information gathering sessions?

____

Will there be any outside costs (travel, consultants, equipment rental, etc.) that are not budgeted for? If so, how much extra costs are required?

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Step 3: Return to your "Potential Information Gathering Strategies" checklist and eliminate the strategies that fall outside your budget and schedule parameters.

Step 4: Review the remaining strategies and make a list of tools that are needed to implement them. (Observation guidelines, interview questionnaires, etc.)

When you have completed these worksheets, you will be ready to start gathering information.

Stimulating Action

After you have tightened your information gathering strategy, you are ready to put your designers to work implementing the strategy. (If time allows, you may want to have your designers review your strategy and then modify it based on their feedback.)

While the detailed activities will differ from project to project, you should **assign these general responsibilities to designers.**

- Develop guidelines, questionnaires, and other tools to be used during interviews and observations.
- Schedule and conduct observation sessions, meetings with interviewees, and meetings with SMEs for obtaining and reviewing documentation. (These might require an introductory phone call or letter from your sponsor, depending on the rank of the person with whom you are trying to meet.)
- Compare information gathered to information that is required, taking care to fill in all missing gaps.
- Verify that performance objectives, as specified in the original project plans, are still valid.
- Notify you immediately if it appears objectives or design strategy must be modified in any fundamental way.

Each of these general responsibilities should be assigned to a designer. As in any management situation, at the time you assign the responsibility you should provide as much detail as possible about your expectations, the resources available, and the deadline.

Once you make the assignment, however, all you can do is get out of the designer's way and keep an eye out for problems requiring your intervention.

Intervening

If you are lucky, and you have experienced designers working for you, you may have little need to intervene during information gathering. However, there are a few things you should watch out for no matter how smoothly the project seems to be going.

The following guidelines can help.

Intervention Guidelines: Gathering Information

This set of guidelines describes some typical interventions and inspections you might want to make during information gathering.

Daily Checks

Every day or so, check with each designer who is gathering information to **find answers to these questions:**

1. **Are people keeping their appointments** as scheduled? (SMEs, members of the target audience, other interviewees)

   If not, you should contact your sponsor and get him or her to "pull rank" or use some form of leverage to assure their involvement.

2. **Are you getting enough information** about the audience, the tasks they must perform, and the product or process to be trained?

   If not, figure out what the roadblocks are and take necessary steps to clear them. Get the sponsor involved in helping you, if necessary. Remember, time is money — so act quickly!

   If you are really stuck, you may want to quickly work through the planning worksheets again and revise your strategy.

3. **Are interviewees, SMEs, or others** with whom designers are meeting becoming **frustrated** or feeling their time is wasted?

   If so, you may need to spend some "public relations" time listening to them and selling them on the value of the project. In particular, point out how their contributions will provide long-term benefits in improving performance of the work force. To SMEs, you might want to point out that when the training program is installed, there will likely be fewer interruptions in their work to answer questions from novices.

   You should also check to see that designers are showing enthusiasm for the project. By showing their excitement about the project, they may stimulate SMEs or others to "get on board."

   Finally, check to see that designers are executing the information gathering strategy in an efficient manner. There is always the chance that they really are wasting time by using inefficient techniques.

4. **Are designers becoming overwhelmed** or bogged down in details? (Is panic setting in?)

   If you detect signs of a designer becoming overloaded, meet with him or her and do the following:

   - ☐ Ask the designer to review with you the performance objectives and the overall flow of the intended training.
   - ☐ Ask the designer to describe how the information he or she is gathering fits in with the objectives and overall flow.
   - ☐ Ask the designer to draw you a diagram of how all the details "fit together." Try to get him or her to stand back and look at the big picture, seeing the relationship of parts to the whole.
   - ☐ If appropriate, remind the designer that the project will include lots of review by SMEs and opportunities for revision, so it isn't essential that he or she fully comprehend every minute detail at this point.
   - ☐ Above all, show your confidence in the designer's abilities and demonstrate a sense of adventure in the discovery of the new information. Try to get the fun back in the process!

   If information gathering is scheduled to run for a long time, you might want to check that the overloaded designer is getting enough time away from the project. If appropriate, suggest that he or she take a break or get involved in some kind of non-intellectual activity for a while.

About Two-Thirds of the Way Through...

About **two thirds of the way through** the information gathering cycle, **perform these activities:**

1. Review your original plans, proposals, and training descriptions.
2. Ask the designers to examine the original training objectives and course description and compare them with what they are learning during information gathering. Discuss their findings.
3. Note ways in which your original plans have become inappropriate.
4. Document the impact on the budget, schedule, or training implementation strategy.
5. Discuss these issues with the sponsor. Decide how to modify your plans.

Conclusion

This chapter has described some techniques for completing Step 3 of our ID project management model, Gather Information. First, we provided an overview of the instructional development information gathering process, distinguishing it from separate front-end analyses. Next, we reviewed some specific procedures for planning to gather information. In addition, we discussed how you might stimulate action by assigning particular activities to designers. Finally, we provided some guidelines for intervening during information gathering in order to make certain the project stays on track.

The next chapter will describe how to complete Step 4 of the ID project management process, Develop the Blueprint. It will answer the question "How can we create the best possible design specifications and organize them into a Blueprint for the training?"