

Chaper 5 from ID Project Management: Tools Techniques for Instructional Designers and Developers by Michael Greer
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Chapter 5

How to Develop the Blueprint

In the first three chapters of this book we presented a typical ID project management model, an overview of the project manager's job in implementing the model, and some techniques for completing Step 1: Determine Project Scope and Step 2: Organize the Project. In the preceding chapter, we reviewed some techniques to help you plan, stimulate action, and intervene as needed during Step 3: Gather Information.

This chapter describes how to manage Step 4: Develop the Blueprint.

What's a Blueprint?

If you have been developing training for any length of time, you have probably seen a blueprint or its equivalent. Sometimes called "design document," "design plans," or "design specifications," the blueprint plays an essential role in the development process.

A blueprint consists of these parts:

- A **"big picture" description of the instructional materials and course flow**, including how the materials fit into the larger curriculum. Course goals, audience background, and other general information are often included here.
- A **listing of specific performance objectives** to be attained by students. These should be presented in sequence, with enabling or sub-objectives identified.
- A **description of the instructional strategies** to be employed to attain each objective. This is essentially the "course choreography"; that is, a description of how learners will be presented with content and what they will be asked to do to practice applying this content.

- **A detailed outline of content** to be included in support of each objective. This outline should be in the form of bulleted lists of the facts, concepts, and other details for review and confirmation by SMEs. It should not be in prose form; rather, it should simply be in the form of a list.
- **A summary of media and materials** to be created to support each objective. For example, listed here are the number of pages of text, number of job aids, minutes of video, etc.

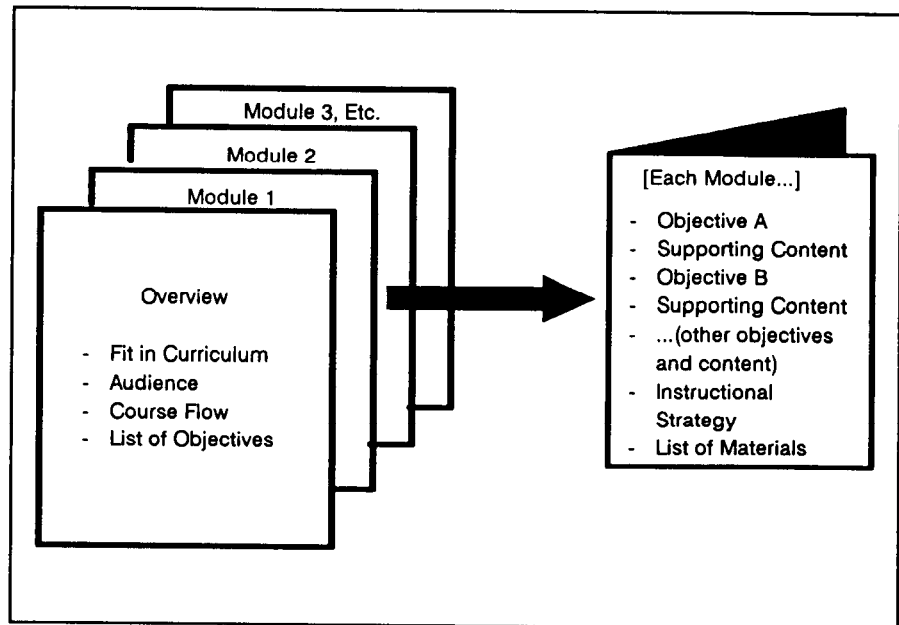


Figure 5-1: Blueprint Components

Why Bother Developing a Blueprint?

Many course sponsors and some novice project managers often ask, "Why bother with a blueprint? Why not just start writing instructional materials?"

The answer is simple: In the long run, developing a blueprint will save time and help you produce higher quality training materials. Here's why:

Viewed metaphorically, the blueprint is like a pile of bricks, not yet cemented together into a wall. The bricklayer is free to examine each brick on its own merit and throw it out or touch it up before the wall is built. After the wall is built, with mortar and trim in place, it is difficult and costly to change any of the bricks.

So it is with instructional materials. The objectives and content elements (i.e., the bricks) are easy to change when they are in outline form in the blueprint. After the instructional materials are created, complete with written introductions, transitions, exercises, job aids, and other materials (i.e., the mortar), it is costly and time consuming to change content or objectives. The slightest changes in content invariably “ripple through” all the materials.

By developing a blueprint you allow all reviewers to look at course content and strategy at a point when it is still malleable — before a lot of time and energy is expended. This early review encourages the design team to make meaningful revisions without the risk of damaging materials in which they have made substantial professional, emotional, or time investments. So in addition to saving money and time, you create an atmosphere in which members of the project team (SMEs, sponsors, designers) are able to discuss and rethink their strategies with less risk. In this way, you take advantage of everyone’s expertise and help to create quality training.

Your Role as Manager

During the preceding step of the development process, Gather Information, your design team obtained detailed information about the training audience, the tasks which the audience must learn to perform, and the content of the training. What’s more, before the project started, you made a commitment to your sponsor that you would create a certain set of materials within a particular budget and timeframe. As project manager, it’s your job to see that the blueprint incorporates the new insights your team gained during Gather Information, yet at the same time respects your original commitments to the sponsor. This is not an easy balance to achieve. However, by completing the activities below, you ought to come close.

Here’s what to do:

- Brainstorm about instructional strategies.
- Develop the blueprint.
- Quality Assure (QA) the blueprint and revise it if needed.
- Distribute the blueprint to reviewers.
- Obtain reviewer feedback and sponsor signoff.

To complete these you will need to plan carefully, stimulate the right action at the right time, and intervene intelligently. The following chart summarizes this process.

Activity ↓	Manager Role →	Plan	Stimulate Action	Intervene
Brainstorm		Review budget and schedule Review alternatives	Discuss instructional alternatives	Reduce alternatives to a realistic few
Develop the Blueprint		Find or make examples of blueprint	Share examples with designers; Set deadlines	Examine samples of each ID's blueprint
Quality-Assure		Assemble QA criteria	Get blueprint from each ID and QA	Provide feedback
Distribute to Reviewers		Prepare sponsor and SMEs	Send blueprint and provide guidelines for review	Call and check progress
Obtain Feedback and Signoff		Set up meeting for feedback	Start meeting; Review blueprint page by page	Keep team focused; Obtain signoff

Figure 5-2: Manager Activities During Develop the Blueprint

Now let's take a closer look at each of the manager's activities.

Brainstorm Instructional Strategies

The last activity that your design team completed was to Gather Information. During this step, they talked to SMEs, members of the target audience, and others to learn more about the real training need. At this point, therefore, your designers are likely to know more about the details of the training than you or your sponsor did when you made your project plans. In order to take advantage of this new information and capitalize on your designers' expertise, you should hold a brainstorming session.

You should plan the brainstorming session by preparing yourself to manage your designers' creativity. In particular, take a few moments and review your budget and schedule. These are your boundaries. You will not be able to exceed these without justification. So before you brainstorm with designers about alternatives, make sure you have the budget and schedule firmly in mind.

Next, review some instructional alternatives. If the course is likely to change as a result of what designers learned when they gathered information, what are some instructional alternatives that might fit your budget and schedule? Most basic textbooks on instructional design provide matrices or charts which compare instructional strategies. You might want to review some of these to help you recall the strengths and weaknesses of various approaches. After you have prepared yourself, you are ready to meet with your designers.

To get things started at the brainstorming session, you might list all the major objectives of the training. Then ask designers "Given what we learned when talking to SMEs or the target audience, what needs to be changed?" Or you might ask "If we had all the money and all the time we needed, what would be the very best training we could build?"

List as many alternatives as you can. Eventually, you will need to stop brainstorming and reduce your list of alternatives to the ones that will fit your budget and schedule. The exercise will be worthwhile, however, if it results in even one or two valuable new ideas.

Develop the Blueprint

After you have thoroughly discussed your alternatives, you are ready to develop the blueprint. Before you begin, however, you should provide designers with an example of any recommended blueprint format. Designers are creative people; if you don't share your format with them before they begin, they will probably invent their own. Your example should specify method of outlining, required sections of the blueprint, page layout, and so on.

You should then share this example blueprint with the designers, making sure they understand how it works. If someone suggests an improvement, and you agree, you should then update the example and distribute the update to everyone on the team. This will make sure you are all "dancing to the same tune."

A couple of days or so after designers begin writing the blueprint, you should ask them to provide a few sample pages for your review. This will give you an opportunity to correct any problems before much time is invested.

Quality-Assure (QA) the Blueprint

After designers complete a first draft of the blueprint, you should review it and recommend revisions before it is distributed to SME and sponsor reviewers. Your quality assurance (QA) should be according to a set of predetermined criteria that designers are familiar with. (See Criteria for Internal QA of Blueprint.) This QA not only improves the quality of the blueprint, but helps you, as project manager, keep in touch with the details of the course. In this way, you can make more intelligent decisions and retain your credibility with SMEs and the sponsor.

At about the same time as you are performing QA, you should phone the SME and sponsor reviewers and remind them that they will be receiving the blueprint soon. You might also confirm the time and place where you will be meeting with them to receive their feedback.

Distribute to Reviewers

After the blueprint is completed, it is ready to distribute to reviewers. You might want to include a brief cover letter to help them focus on important issues and to clarify your deadline for receiving their feedback. (See the sample letter to reviewers.) It's also a good idea to phone reviewers to confirm that they have received the blueprint and to ask if they have any initial reactions. Since reviewers are usually among the busiest people in the organization, an extra phone call or two to check their progress can help them give your project a high priority. (Remember: the squeaky wheel gets the grease!)

The following tools can help you perform your internal QA of the blueprint and focus reviewers' attention on your requirements.

Criteria for Internal QA of Blueprint

Below are some typical criteria that you might want to apply when you perform your internal Quality Assurance (QA) review of the blueprint. By applying these criteria you can identify revisions for designers to make before submitting the blueprint for sponsor review.

- Evaluate objectives and their flow to see if: (1) flow and sequencing are sensible (2) there are no holes or gaps.
- Evaluate objectives one more time to assure that there is an appropriate mix of low level and high level objectives. (Are students asked to apply what they know, or are they simply asked to state facts and principles?)
- Evaluate the match between objectives and planned activities. Are students given opportunity to practice the objectives?
- Examine the summary of materials. Is it clear how many pieces of each media type will be created? Is it clear how these pieces will fit together?
- Examine the rationale for the design based on the results of task analysis and information gathering.
- Evaluate the content outline to assure it is accurate and contains the required level of detail.
- Review the descriptions of modules, chapters, etc. Make sure:
 - Each content statement matches (directly supports) its objective. There should be only necessary content; eliminate "nice-to-know" information.
 - Each statement of instructional strategy describes (1) how students will be presented with the content (2) what students will **do** to acquire or practice the skill described in the objective, and (3) what form of feedback students will get on their behavior
- Evaluate the summary of deliverables to determine conformity to budget and schedule. Identify places where deliverables might be cut, if necessary.
- Consider the implementation requirements. Will the course meet the needs of those people who will be delivering it? Will the course be physically constructed so as to work well in the training environment?

Sample Cover Letter to Reviewers of the Blueprint

Below is a sample cover letter which is designed to be sent to reviewers along with their copy of the blueprint. Note how it focuses attention on key issues and helps direct his or her efforts.

Dear Reviewer:

Enclosed is the blueprint (design plans) for the _____ course. Information gathered from you earlier by our design team has been incorporated into this document. To help us create the best possible training, please do the following:

Write your questions and comments directly in the document as they occur to you. This will help speed up debriefing.

Answer these questions, in general:

- Is the instructional strategy sensible? Do you think it will work? If not, specifically why not?
- Does the course appear to be fun? If not, why not?
- Is the content accurate? Is anything out of date?

Your help is critical. If you don't have time to review the whole document, then please examine _____ (*whichever sections, pages, etc., depend on this reviewer's accuracy*).

Please don't give us vague or general feedback. We need to know exactly what is wrong and/or how to fix it.

If we don't hear from you by _____ (*deadline*) then we will assume that the document has been approved by you based on your area of responsibility. (*Needless to say, copies of the letter to each reviewer should be filed for later proof of their default approval, if necessary.*)

SMEs only: Provide your feedback directly to the sponsor. This way the sponsor can weigh it against other information from other reviewers and decide what to recommend to the design team.

Thanks for your help.

Obtain Feedback and Sign-off

After the sponsor and SMEs are finished reviewing your blueprint, you will need to carefully orchestrate their feedback. This isn't as simple as it sounds, especially if there are several reviewers. Here's why.

On most projects there is the possibility of disagreement among reviewers. Typically, SMEs have a greater knowledge of the content than does the sponsor. Sponsors are usually higher level managers who cannot stay on top of all the details. Yet sponsors are usually responsible for seeing that corporate philosophy and values are reflected in the training. So there may be disagreement between what an SME says is "true" and what your sponsor says is "true." Even worse, there may be disagreement between two SMEs about technical details.

Your design team should not try to sort out the disagreements among SMEs and the sponsor. To do so is to assume the responsibilities of the sponsor. Before you meet to obtain his or her feedback, the sponsor should have received the input from each SME and weighed conflicting opinions. Your design team can then be presented with a unified "party line" about specific changes in the training or the content.

In addition to the possibility of conflicting opinion on the sponsor's team, there is a chance that your design team will have some disagreements. For example, a designer may want to use a media treatment to which a production person objects. It is your responsibility, as project manager, to resolve these differences before you meet with the client to approve the blueprint.

The point is, you need a "chain of command" to help make these decisions efficiently. As we recommended in Chapter 3, major project decisions should be made jointly by the project manager and the sponsor. Figure 5-3 reiterates this recommended flow.

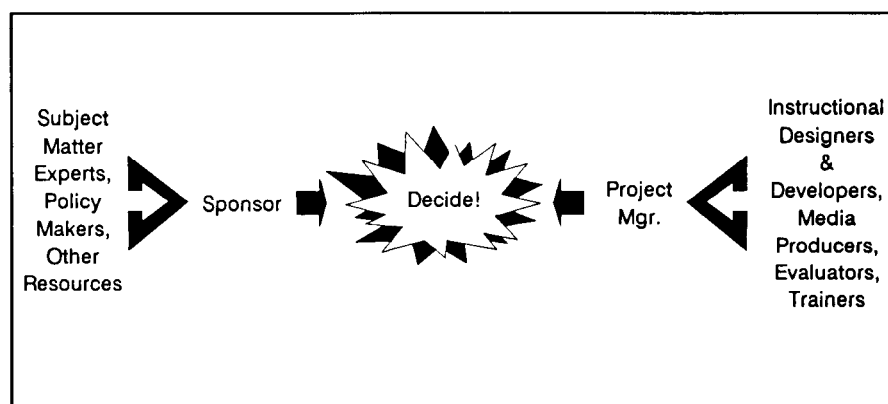


Figure 5-3: Project Decision Making

When the project manager and the sponsor have each obtained a unified set of recommendations from the people who report to them, you are ready to hold the sponsor feedback meeting. At the feedback meeting, you should “walk through” the blueprint one page at a time. Point to a page, then ask the sponsor what, specifically, must be changed on that page. Then move on to the next page, until the entire document is completely reviewed.

Finally, while it’s important to plan and orchestrate this feedback, it is equally important to obtain closure on this step of the project so that you can go on to develop drafts. That’s where a “sign-off” comes in. A secondary goal of the feedback meeting is to obtain your sponsor’s approval of the blueprint in the form of a signed statement; that is, you need to get his or her “sign-off.” This signed statement should acknowledge 1) that the sponsor approves the blueprint and, 2) that the sponsor understands that subsequent changes in structure or content could lead to a schedule delay and/or increased costs. (For a sample sign-off form, see Chapter 3, How to Organize the Project).

After you have obtained this approval, you are ready to begin creating draft instructional materials.

Conclusion

This chapter has described how to manage Step 4 of the project management model: Develop the Blueprint. First, it defined a blueprint and reviewed its importance in creating effective instructional materials. Next, it described the role of the project manager in developing the blueprint, conducting internal quality assurance, distributing to reviewers, and obtaining sponsor feedback and sign-off.

In the next chapter we will examine Step 5 of the ID project management process, Create Draft Materials.