

PRELIMINARY LEARNING BRIEF

Needs Assessment/Problem Analysis

For the past four years I have worked for a small company, ESI, which primarily does contract work for the Federal government. Many of our projects have strong communications components that require developing different types of products, such as publications, conference materials, Web sites, videos, or marketing materials.

ESI is a small company that has grown tremendously over the past five years. We currently have about 100 employees and two main offices—one in Washington, DC and one in Maryland—in addition to many field offices. Since we are in a period of rapid growth, many of our systems are in flux and straining to accommodate the additional staff, various office locations, and varying levels of staff experience. At the same time, we are working to meet the changing needs of our clients.

To date, ESI does not have a system for training new or seasoned employees. All training occurs on the job and as the need arises. In the past, there have been efforts to create “manuals” for employees on specific topics, but they are strictly informational and, once developed, they are not maintained or distributed to employees, and therefore, are not used. ESI management did conduct training on one of the manuals a few years ago, but it was mandatory and occurred after hours (from 5pm to 9pm for three nights) and in the office, which, as you can imagine, was very unpopular.

One area where employees need training is in using and editing graphics for various media. Due to the nature of its work, many of ESI’s employees work with graphics but most have not had any training on how to do this.

This is where I come in. A large part of my work involves graphic design; therefore, many people come to me when they run into graphics-related problems. One of the most common problems I see is that clients provide Web-quality graphics and expect them to be able to work for print, or vice versa. Other times, people want to make changes to graphics but they don’t understand the type of graphic that they need in order to do that.

To address these problems, people usually send me their graphics and ask me to fix them. And while meeting planners and editors do not want to become graphic artists, much time and frustration could be saved if they knew the types of graphics to request from their clients and how to identify and edit graphics once they get them.

Needs Assessment Strategy

To determine if my perceived need matches an actual need, I took a quick survey of ESI employees who work on communications projects. I listed five topic areas that I thought might be of interest and asked them to mark those where they or their staff need additional training. I also asked for suggestions for additional topics. Below are the results of this survey.

ESI Training Survey

Possible Areas for Training	Votes from ESI Employees
1. Graphics Editing for Print and Web	6
2. Writing HTML	3
3. Using Macromedia Dreamweaver or Fireworks	3
4. Writing for Other Media	4
5. Desktop Publishing	6

These results did not surprise me. Employees encounter similar challenges with desktop publishing as they do with graphics manipulation. If this training is successful, perhaps the next version can tackle issues around desktop publishing.

Audience Description

Educational level: Almost all ESI employees have at least a bachelor's degree and many have advanced degrees.

Background knowledge: Employees taking this training will probably not have any background in editing graphics, or, if they do, their knowledge will be very minimal. Most employees come from content-specific areas, such as child welfare, early childhood education, elementary or secondary education, or human resources. In terms of computer skills, all employees taking this training will have a working knowledge of a Windows-based operating system, basic word processing skills, and feel comfortable using Web-based applications.

Age: 22 to 55 years, with most being between 22 and 40 years of age. This is relevant because the training is delivered through the Web; older learners might feel less comfortable with this media than younger learners.

Motivation: The people who take this training will want to increase their graphics skills to be able to respond to client's requests in a timelier manner. They are both curious about the information and have a need for it.

Learning context: All employees have access to a computer with high-speed Internet access. Many have higher-end graphics programs installed on their computers, such as Photoshop, Illustrator, or Fireworks. ESI employs approximately 100 people who are split between two main offices and many field offices. For this reason, getting employees together to conduct a face-to-face training is very difficult, if not impossible. In addition, most employees are extremely busy and do not have large chunks of time available to attend a training.

Objectives

Project Objective

1. To develop an asynchronous Web-based training for ESI employees that will provide a model for future internal employee training on other topic areas.

Learning Objectives

The learning objectives below use Bloom's Taxonomy of Educational Objectives for the cognitive domain.

1. Each time the learner is given a new graphic, he or she will be able to classify the graphic type, the media it is appropriate for, and its features, including size and resolution. (comprehension)
2. Each time the learner is given a graphic that is not appropriate for the desired media, he or she will be able to edit the graphic correctly so it meets the user's needs or determine if a new graphic is needed. (application)

Instructional Strategy

To meet the various needs of the ESI audience, I propose developing a 1 to 2 hour asynchronous web-based training. Because of the diversity of prior knowledge of ESI employees, the training will be designed so that users can skip through portions where they already have prior knowledge and skills. Also, employees will not have to go through the entire program at one sitting; they can stop and return at times that are convenient for them.

I will use the following strategies to facilitate learning:

- Provide appropriate amount and types of information for the audience and topic (chunking);
- Make the information meaningful and applicable to the user's work by providing real-life scenarios and examples;
- Provide a frame of reference so that learners can connect prior knowledge with new information and skills;
- Provide many opportunities for practice and application; and
- Provide periodic feedback to the learner through quizzes spaced throughout the training to let the learner know that he or she is actually learning.

Assessment Plan

I will do two things to assess the learning objectives. First, as described above, I will use periodic quizzes to provide feedback to the learner on their progress. This will also provide additional opportunities for practice to facilitate learning the material. Second, I will include an assessment at the end of the training that will "test" whether the users can apply all the skills they have learned throughout the training. This assessment will be a real-life, graphics-related problem that asks learners to do some critical thinking and problem solving using the skills acquired throughout the training.

To assess the effectiveness of the training as a whole, I will survey those who have gone through the training to determine if they found the skills presented useful and applicable to their work. I will also ask if they felt the training was of an appropriate length and went into adequate depth for the subject matter presented. Finally, I will ask how the training can be improved in the future.

Project Management Plan

Timeline

Tasks	June 1-14	June 21- July 2	July 5-16	July 19-23	July 26- Aug 13	August 16-31
1. Conduct needs assessment and analyze problem (Analysis)						
1. Finalize learning objectives (Design)						
2. Develop content (Design)						
3. Develop activities (Design)						
4. Design and develop Web site to house training (Development)						
5. Conduct pilot testing (Implementation)						
6. Conduct evaluation (Evaluation)						
7. Develop learning objectives for future trainings (if applicable)						

Future Applications

One goal for this project is to develop a prototype for ESI staff training that can be replicated and adjusted for other topic areas. There are many benefits to the kind of training I am proposing, which are outlined in the chart on the next page.

Once this prototype is completed, I hope to approach ESI management to determine if this training model is something they would like to replicate with other topic areas. Additional topics employees have expressed an interest in include proposal development, desktop publishing, creating charts and tables for use in Word, and writing for PowerPoint presentations.

Challenges to Designing and Conducting Training for ESI Employees	Strategies to Address These Challenges
Diversity of employee's experience	Modularized training that employees can navigate through at their own pace
Different locations of ESI employees	Web-based training that can be accessed from any computer with Internet access
Time away from work to attend training	The training will be asynchronous and Web-based so employees can access it at any time that is convenient for them and their clients. Content will be chunked so as not to be overwhelming. Employees will not need to go through entire training at one sitting—they can stop and return.