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Chapter XI

Multimedia Design

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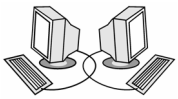

Abstract

As you consider developing a course or training program online, a major question is about what multimedia to use, multimedia that will help you accomplish your instructional objectives. What content do you as an instructor want your audience to learn? After answering this question, a course can be developed that achieves the learning objectives and, at the same time, motivates and entices the learners. Understanding how to create material for a course that integrates multimedia is essential knowledge in the planning stages of course development. This integration should be thoughtful with the understanding of how to balance the techniques and tools for optimal learning potential.

Introduction

The term "multimedia" refers to bringing together a number of diverse technologies of visual and audio media for the purpose of communicating. The different multimedia formats include text, graphics, audio, video, animations, and

simulations. The use of each technique should have a purpose within the learning objectives of the course. In this chapter, we will discuss the design, use, access, and best practices to consider when using multimedia.

Graphics

Including graphics in your course has one purpose: to deliver complex information in a way that is easier to visualize or understand than words alone. Images can provide further information; include critical information to the content on the Web page; illustrate a concept without the use of confusing numbers or text; create focal points on the Web page to notes, warnings, or important content; represent how concepts or ideas work together; and enhance the interface and help in organizing the page layout.

Designing Graphics

Key guidelines exist for creating graphics to enhance the instructional design of your course. Avoid creating or using large graphics. Depending on the type of medium, you may have to reduce the size of your graphic to 150 x 150 pixels. Your graphic will be distorted if the medium needs to resize the image. If you are designing for television production, you want to have your graphic between 640 x 480 and 800 x 600 pixels. You need to be careful with the bleed area, which is the outer 10% of the screen. This area should not contain any essential or important information as it may be lost with projection. If designing for television production, you also want to maintain a 3 x 4 ratio for image area for non-wide-angle TV screens.

File format is another main element in designing a graphic. The different formats include bitmap (BMP), graphic interchange format (GIF), joint photographic experts group (JPEG or JPG), or portable network graphic (PNG). The medium dictates which file format to choose. For example, if you want to use a graphic for television, you should use the JPG format. When designing for the Web you can use either JPG or GIF. PNG is becoming a standard format, but not all browsers, especially older browsers, support it. On the Web, the file size should be approximately 30k or less. This will allow the page to load at an acceptable rate.