

WHAT IS MULTIMEDIA?

Any means of conveying information can be called a **medium**. This word comes from Latin, and the plural form is **media**. (When we talk of *the media*, however, we are referring to avenues of mass communication, that is, radio, television, newspapers and magazines, and the Internet.) **Text**, which consists of written words, numbers, and symbols, is one kind of media. **Sound**, video, and animation are other kinds of media. Graphics are a kind of media, too, regardless of whether they are still photographs, sketches, or great works of art.

In the strictest sense, a teacher using a slide projector and playing a music tape is delivering a multimedia presentation, because the presentation includes the media of sound and images. You could even describe newspapers, newsletters, magazines, and many books as multimedia, because they also combine the media of text and images. In general, though—and throughout this book—the term **multimedia** refers to the integration of still and moving images, text, and sound by means of computer technology.

One of the places where multimedia is frequently used is on the **Internet**. The Internet is a network of computers all over the world that are connected to each other. A **Web page** is a location on the Internet. When images, text, and sounds are linked so users can switch easily from one medium to another, or change screens or position within a program or Web page, multimedia also becomes **hypermedia**. One example of hypermedia would be a listing of colleges where clicking on the name of a college takes you to a different display with photos of that college and information about it. You will read more about the Internet and Web sites in *Chapter 2: The Internet and Multimedia*.

All of the elements that contribute to multimedia are not necessarily present in every multimedia production, but the use of computer technology to create and distribute them is common to all. For example, a multimedia educational program that includes text and graphics might not include sound, but it still qualifies as multimedia if computers are used to create it and to deliver it to students.

Although it depends on computer technology, multimedia is more than just computers and **software**, the coded instructions that tell computers how to perform tasks. Its effectiveness and appeal depend on the creativity of the people who develop the visuals, sounds, and text that make up the content of a multimedia production. Publishing a multimedia product takes technical know-how, but creating and assembling the words, sights, and sounds that give the message its power requires imagination, organization, management, and originality.

Words

Virtually all multimedia productions include words. The words can be written, spoken, or sung. Multimedia productions do not always include sound, but generally do include written text. The text might be in the form

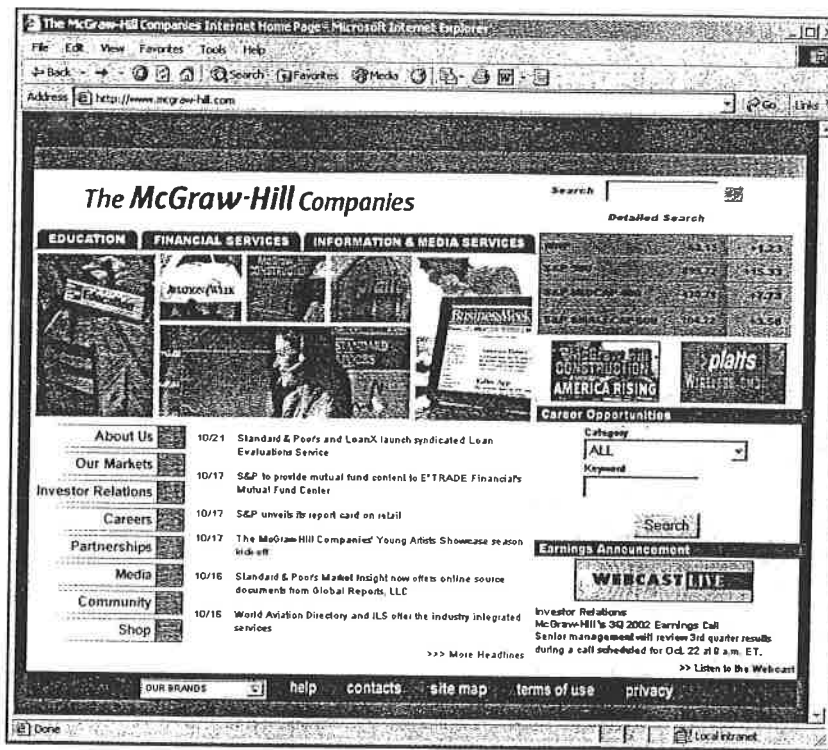


Figure 1.1
Web sites often include written text, especially commercial sites such as the homepage for the McGraw-Hill Companies. *How is text used on this page? Do you think it is used effectively?*

of paragraphs, just as in books and other printed media, or it might glide across a display screen. Text can also be used to label pictures in a multimedia production, describe the buttons for navigation, and provide links to other screen displays.

What the text says, of course, depends on the purpose of the multimedia production. Sometimes the team creating the production is responsible for what the text says; sometimes the client may provide the text or the team may hire outside writers to create the text. Always, though, the team is responsible for how the text looks in the finished presentation: its color, the way it is arranged with the other elements in a screen display, and the size and shape of the characters. These attributes must be chosen carefully to capture and hold the attention of the readers and get the message of the text across to the viewer. *Chapter 7: Text* discusses ways of adding visual appeal to text and integrating it with other elements of a multimedia production.

Images

Multimedia productions nearly always include images. These are called **graphics**, which include drawings, charts, diagrams, paintings, and photographs. Even the buttons, arrows, and other visual elements that help users navigate their way through a multimedia production are considered graphics.

Graphics in multimedia productions are often animated. **Animation** is the representation of motion in graphics or text. For example, text can be animated so that it seems to roll or bounce onto a screen. A drawing of a bird might be animated so that the bird's wings flap. An elaborate simulation

Figure 1.2

Photos are graphics, and so are images such as navigation buttons. Most multimedia productions use one or more kinds of graphics. *What are the different types of graphics used in this Web page?*

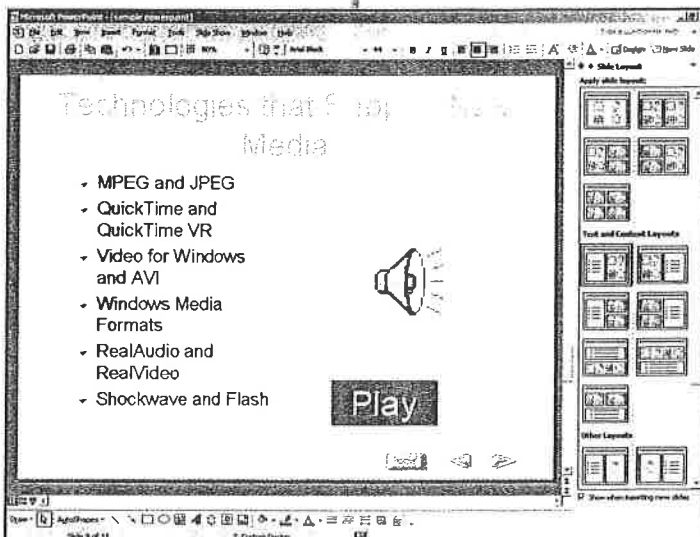


might create a **virtual** environment, which is an invented setting that closely resembles a real one. In *Chapter 8: Graphics and Animation*, you will read about different kinds of still and animated images in multimedia and the tools and methods used to create them.

Sound

Figure 1.3

Audio adds interesting effects that help to make a multimedia project more dynamic. *How do you think the audio is being used in this application?*



Sound adds interest and appeal to a multimedia presentation. In multimedia development, live or recorded sound is referred to as **audio**. Audio in multimedia can take the form of speech, such as a **voice-over** or narration. The speech could be pre-recorded and played along with the presentation, or a presenter may talk during the presentation. Another form of audio is sound effects—sounds that are added to a presentation to emphasize information. Multimedia may also include music, another form of audio. Music can play in the background during the presentation or be a central element of the production. Music can establish moods, add weight to words and images, and make simulations more realistic.

Not all multimedia productions include audio, but in many it is an essential ingredient. A catchy tune, for example, can capture an audience for a multimedia advertisement that might otherwise be ignored. A voice-over recorded with a video can explain the significance of the action you are watching. A multimedia program for

medical students about heart disease might include sound effects like the heartbeats of a healthy patient and patients with various heart conditions—a far more effective training tool than written descriptions of the sounds.

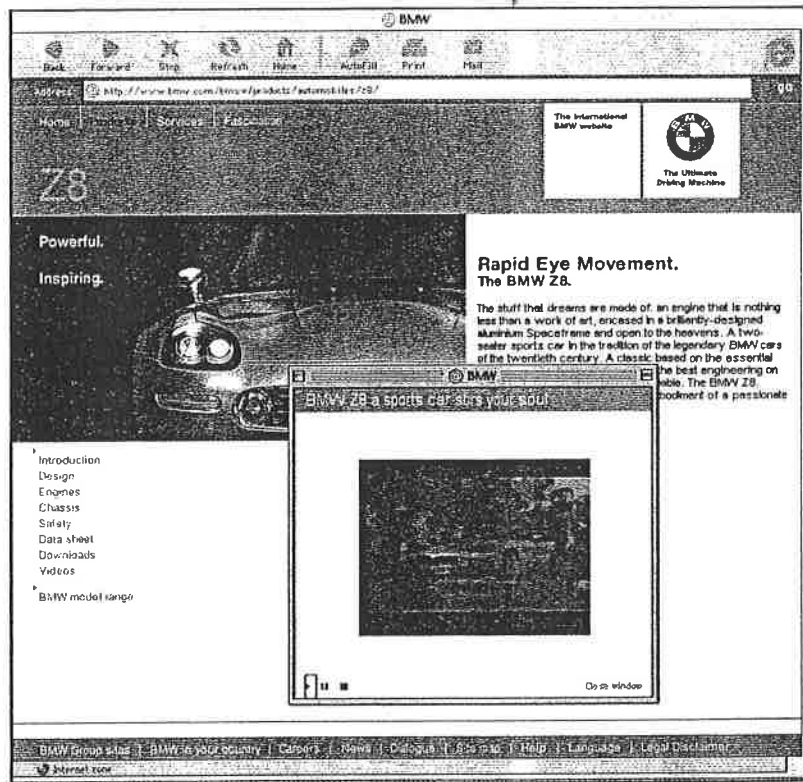
Most audio in multimedia productions is recorded, but it can also be live. For example, a multimedia conference might include people in far-flung locations who use Internet connections to carry on a live conversation while one of them draws a diagram as the others watch. You can also listen to live radio broadcasts over the Internet. You will read about technology and methods for capturing sound and integrating it into multimedia productions in *Chapter 9: Audio*.

Video

Video consists of live or recorded moving images and is found in many multimedia productions. On the Internet you can find many examples of recorded video: you can play the latest music video from your favorite band, you can see video clips of recent stories on news sites like CNN, and you can even watch original movies made just for the Internet. With the appropriate hardware accessories, the Internet can also provide access to live action all over the world. For example, an Internet user in Los Angeles can see live video of a volcano erupting on Hawaii or current traffic conditions on a local freeway. Video is not used only on the Internet, however. Multimedia training programs often include videos to illustrate procedures, and sales presentations may include videos that demonstrate a product. In *Chapter 10: Video*, you will read about capturing video and integrating it into multimedia productions.

Figure 1.4

Video is often included in a multimedia product to demonstrate a point or concept. **How effective is the use of video in this presentation?**



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Answer the following questions on a separate sheet of paper in full sentence form.

1. Define Multimedia.
2. What does the term “graphics” include?
3. Why is sound important to a Multimedia production?
4. What are some examples of real world uses of Multimedia? (i.e. TV Commercials) List at least 7 examples.
5. What skills do you believe are valuable for someone preparing for a career in Multimedia? List at least 5.