USING VISUAL AIDS

Chapter 9

Chapter Objectives

Classifying Visual Aids

Functional Levels of Visual Aids
Selecting the General Level

Representational Aids

Graphics
Practical Rules

Making Transparency Graphics
Computer-Technology

Demonstrations

Experiential Presentations

Using Electronic Assistance

Overhead Projection

As we learned earlier, visual aids can enhance feelings of self-confidence, protect your memory, increase audience interest and attention, and generally improve the content and quality of your performance—all of which lead to greater credibility.[1] The *thinking about* and *preparation* of the aid may be more valuable than the aid itself. The goal of this chapter is to aid speakers in achieving highly successful presentations and in avoiding common pitfalls when using visual aids.

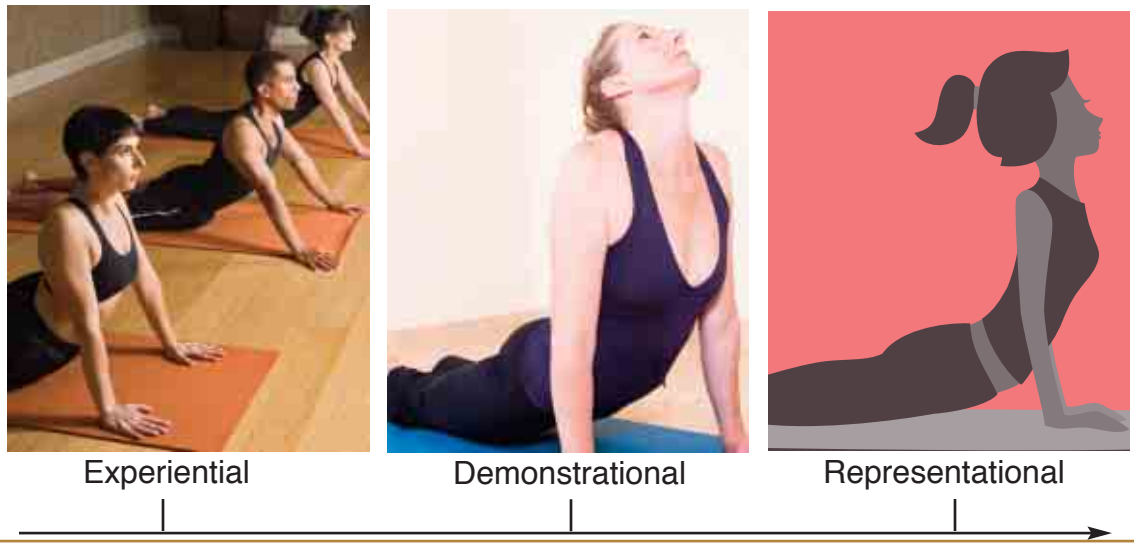
CLASSIFYING VISUAL AIDS

Functional Levels of Visual Aids

There are three functional levels of visual aids: the **experiential** level, the **demonstrational** level, and the **representational** level. The **experiential level** of visual aids provides a forum for the audience to directly experience some element of the message. A student of yoga who explains to the class how to do particular yoga poses by having each member of the audience do the poses with her is providing real-life or hands-on experience. This concrete teaching method utilizes participation to make the subject clearer and more interesting. Had the yoga student shown the class the series of poses, she would be demonstrating instead of having the class experiencing the poses. The **demonstrational level** is a show and tell level of visual aids. Had she simply used a picture that depicted the different yoga poses, while explaining them, she would be employing the **representational level** of visual aids.

Figure 9.1 describes these levels in terms of function and degree of audience involvement. The most concrete level is learning by *experience,* that is, actually participating in an activity as described above. In the first picture, the students are learning the upward dog pose experientially. The woman in the second picture is showing the upward dog pose, explaining how it is done. This functional level of *demonstration* is less concrete (more abstract) for the audience than had they participated. The third picture is a characteristic drawing that represents what upward dog looks like. Visual aids that *represent* something (like pictures, pie charts, or graphs) are the most abstract of the three levels and also the most popular for classroom speeches, usually due to time parameters. It is possible and, time permitting, often advisable to use two or more of the levels to reinforce one another.

Figure 9.1 **Functional Levels of Visual Aids**



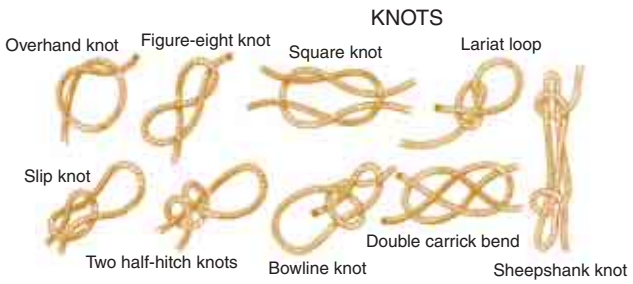
Most visual aids are used to clarify, build interest, reinforce, and sometimes help sell your message. On all counts they are valuable to the speaker although they are not without some hazards and problems. Knowledge of the types of aid available—and the function for which each kind of aid is best suited—helps one determine what to use in a given situation.

Effective visual aids at any level are simple, relevant, and reinforce the content of the speech. The mere presence of visual aids in a speech does not make a speech better, however. Deliberate consideration and planning are required to effectively incorporate visual aids into a speech. The best visual aids are only as good as the presenter is at transitioning between and within the visual aids while delivering the speech.

Selecting the General Level

When making a speech, you are not restricted to just one classification level of visual aids. For instance, the yoga student had the class practicing a pose on an *experiential* level, while her showing the pose was on the *demonstrational* level. A simple graphic of the pose on an overhead would suffice as clear at the *representational* level (see Figure 9.2).

Figure 9.2 **Knots**



If your speech topic lends itself to audience participation of even a limited kind, you might choose some part of the experiential approach. It often uses too much time in a short classroom speech; but it can work, for example, in a knot-tying demonstration (pass out a length of rope for everyone). We will talk later about the pitfalls of passing visual aids around the classroom during your speech.

Your topic will direct your decision making if you're considering a demonstration speech. Some topics lend themselves to "show and tell" better than others, such as "Basic Tennis Shots," "Dance Steps," "Folding a Flag," and so on. Others are awkward or impossible because of space, ventilation, or rules. The flag-burning speech in a Pennsylvania classroom survived the legal system, but not the fire marshal.

The *representational* type of visual aids—graphs, charts, flat pictures—fit most topical areas but not all. Eulogies, if conducted with great ritual, may call for representational decoration, music, or perhaps a picture, but rarely a diagram on a flip chart.

It is important to consider the occasion as well as the size of your audience and its expectations in planning your visual aids. Physical arrangements play a large part in your decision to use visual aids. A large audience may not be the best for the *experiential* choice. An audience distanced from the podium may not always be conducive to a demonstration. The lighting, wiring, or ceiling height may not permit some electronic visual aids.

Select your general function and level of visual aids in terms of your topic, your specific purpose, the occasion, physical arrangements, and your audience analysis. In the following sections, we will discuss the types and practicalities

Figure 9.3 **Graphs and Charts**

of each functional level. Since most classroom speeches use representational aids, we will start there at the most abstract level, move through demonstrational level, end at the most concrete level–experiential.

Representational Aids

These visual aids represent something—a process, some information, an object—in graphic form, occasionally as a three-dimensional model. Standard graphics include charts, tables, maps, drawings, and photographs that are displayed on posters, flip charts, slides, or within computer presentation software.

Graphics

Samples of graphics that a speaker might use are shown in Figures 9.4 to 9.10.

Practical Rules

Your instructor may prefer that you not use the chalkboard as a primary aid. Information on the board may be erased or smudged; preparing and protecting

Figure 9.4 **Map** Predictions on the earth's shifting crust

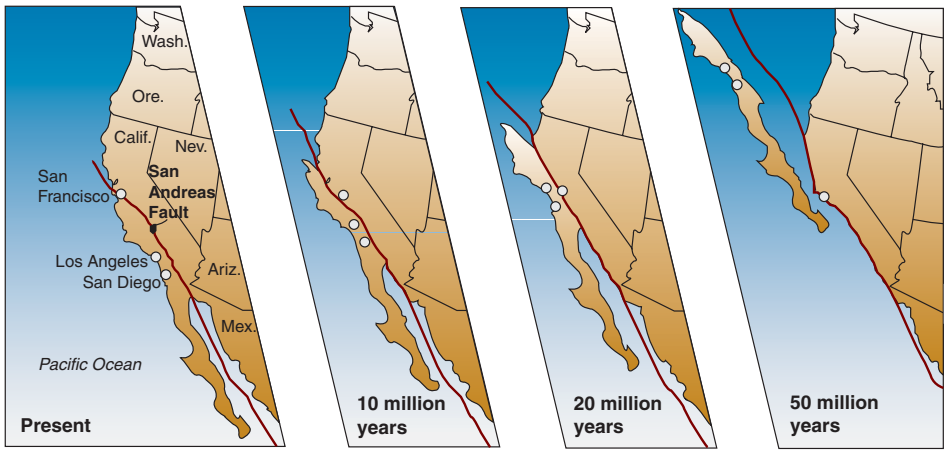


Figure 9.5 **Pictogram** Great Lakes ore carriers: the new and the old

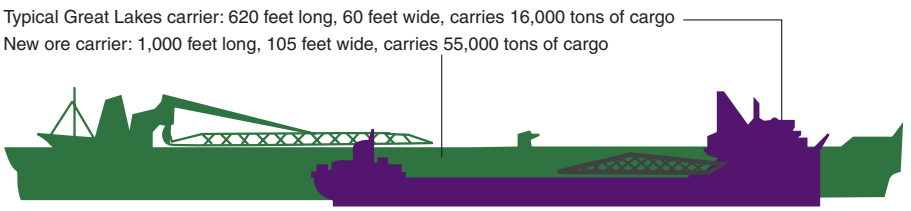


Figure 9.6 **Bar Graph** U.S. cesarean delivey rates by gestational age

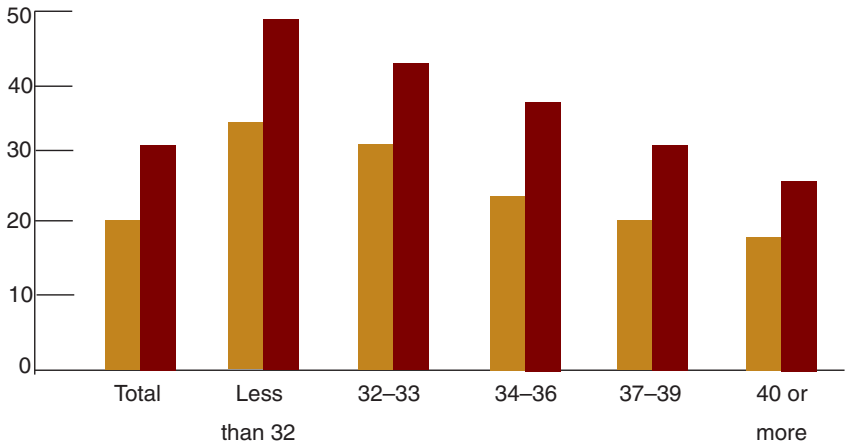


Figure 9.7 **Line Graph** *From* Audio-Visual Products Catalog

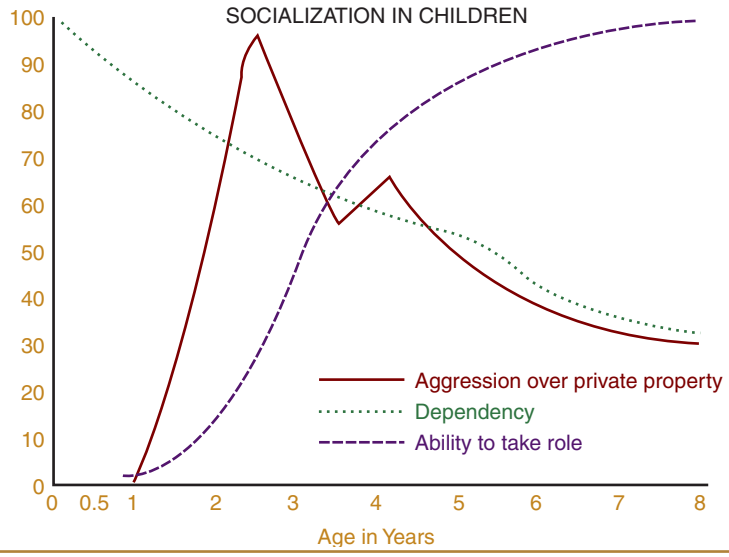


Figure 9.8 **Organization Chart of a Typical City Government**

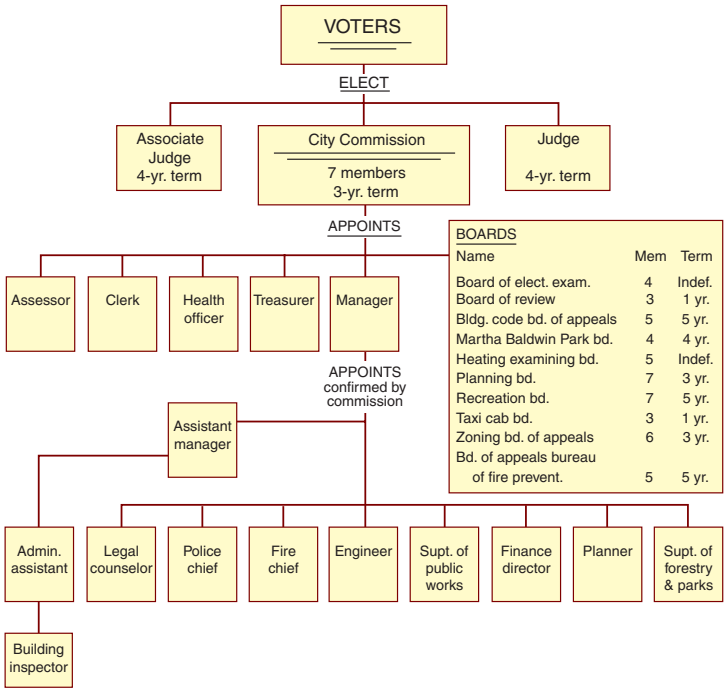


Figure 9.9 **Area Diagram Showing the Four Zones of Earth's Interior**

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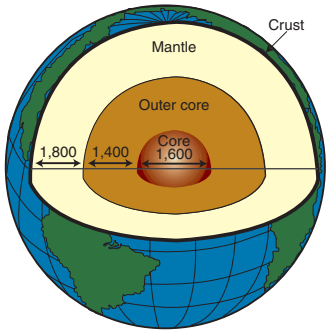
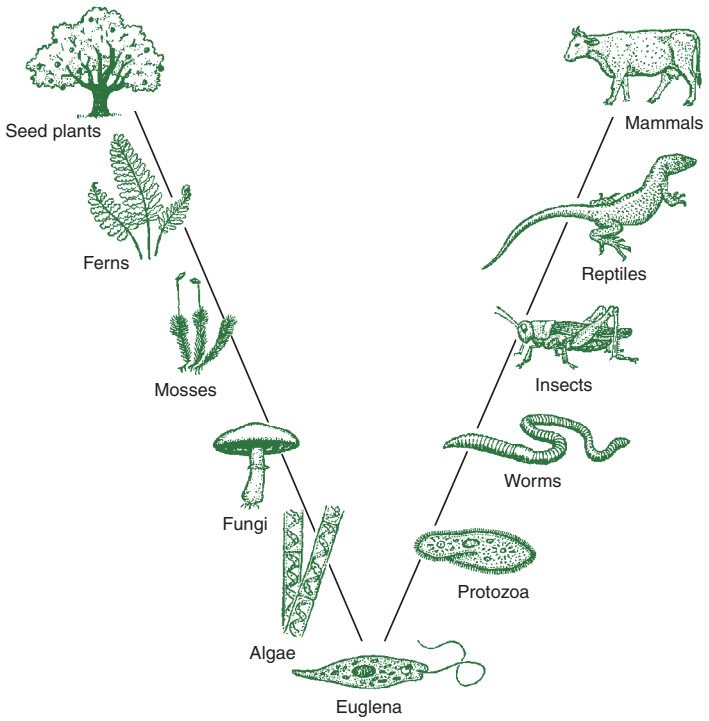


Figure 9.10 **Stream or Tree Chart Representing Plant Life on the Left Side and Animal Life on the Right**

From Trumon J. Moon, Paul B. Mann, and James H. Otto, Modern Biology *(New York: Henry Holt and Company). Reproduced by special permission of Holt, Rinehart & Winston.*



your chalk graphics in advance is difficult. There is also the tendency for you to turn your back to the audience.

PREPARING GRAPHICS

1. Start early, rough draft your artwork, and coordinate it with your outline.
2. Label only the significant parts. Restrict details.
    a. One point or relationship per visual
    b. Maximum of six words per line
    c. Maximum of six lines per visual[2]
3. Make a visual aid readily visible. Is it big enough? Are the lines heavy and dark enough (one-eighth to one-half inch thick)?
4. Practice with your final version.

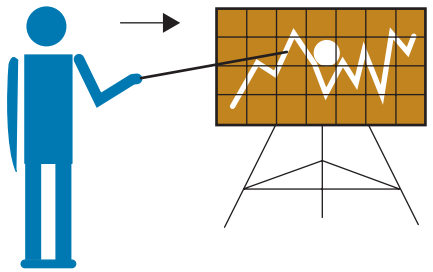
USING PREPARED GRAPHICS

1. Display them where all members of your audience can see them.
2. Display them only when they are relevant.
3. Face and talk to the audience. Make sure to stand to the side of your visual aid and turn your head toward your visual only to signal the audience to look at it.
4. Orient your audience. For example, "This is a top view."
5. Arrive early and check the display area.

Today, many exciting and effective graphics are possible thanks to electronic copiers and computer-generated graphics packages.

COMPUTER-GENERATED GRAPHICS If you do not have a personal computer with graphics capability, most libraries, student computer labs, and campus bookstores do. Graphics created on a computer are far more professional than ones designed by hand before class and can be printed at home and enlarged at a printing lab, usually for a nominal fee. Many classrooms are now equipped

Figure 9.11 **Face and Talk to Audience**



with large screen projectors which allow your graphics to go directly from your laptop to a screen or a TV monitor. If you do have such technology available, take care that the medium doesn't become more important than your message. We'll have more to say about computers in the "Computer Technology" section.

DEMONSTRATIONS

Demonstrations don't always work as planned. A student once demonstrated a tear-gas pencil in an overheated, poorly ventilated classroom with the temperature outside about zero. Talk about audience involvement! Another student, demonstrating the toughness of unbreakable, bulletproof glass, dropped it on a concrete floor. It did not break—it exploded—producing one badly shaken speaker! (A glass company spokesman informed us later that the chances of the angle of impact, the temperature, the force, and other factors being perfectly coordinated—which caused the shattering—were about one in ten thousand.)

The obvious questions are "What can I do to reduce the probability of things going wrong?" and "If something does go wrong in spite of careful planning, what do I do at that moment of truth?"

The answer to the first question is careful *planning.* Plan exactly *how* you will perform the demonstration. Make sure you have all your equipment and have it in the right sequence. Be sure the demonstration *works* in your practice sessions. Emphasize safety precautions. Check for conditions that may vary from the practice session (for example, electric current). Finally, be sure you can do the demonstration. A flight instructor was teaching cadets the principles of air-

foil and how an airplane develops lift. To demonstrate, he put a piece of paper between his lower lip and his chin. He then blew over it, creating a partial vacuum on top of the paper, which caused the paper to lift.

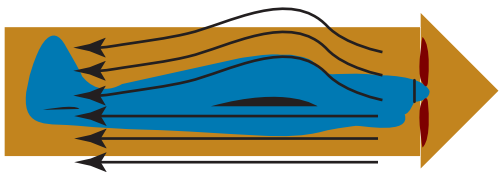
A new instructor who had observed this demonstration rushed to the next class with no time for practice. Confident that he could do it, he proceeded to blow—with no movement from the paper and with an audience of well-disciplined cadets trying not to explode with laughter. There are some moments when defeat is very evident.

The answer to the second question, "What if it goes wrong anyway?" is again to be found in planning. More specifically, calculate the extent and nature of the risk and then plan emergency alternative procedures for every disaster you can think of. This is a must. You have no time to change your plans when something does go wrong, and the shock and confusion may cause you to react emotionally rather than rationally.

The student with the "unbreakable" glass had a calculated risk of one in ten thousand. You can hardly blame him for not being thorough in planning alternate procedures. Those are probably better odds than a pedestrian has on the Los Angeles Freeway. Nevertheless, this student could have had two pieces of glass, just as you should always have two bulbs for your slide or movie projector.

Extra equipment or spare parts are only part of the answer. The real problem is what you will say. Plan your communication strategy very carefully. *When and if the glass breaks I will say, "The odds on that happening were one in ten thousand. Let me prove it by beating the next piece of glass with this hammer."* If the next piece breaks, you may have to resort to an alternate plan using prayer. You can't win them all!

Figure 9.12 **Principles of Airfoil**



The value of demonstration is that the audience can see and hear your explanation. It appeals to several senses, reinforces your message, saves time, has dramatic appeal, and is more concrete than just telling. Demonstration also helps speakers remember their material.

Experiential Presentations

At this level your audience actually participates, whether it is handling an object, working through a process, or acting out a dramatic presentation in role-playing. These presentations are a must for professional trainers and teachers. They are the most concrete but also the most difficult. You probably will not often use the experiential level in your speech class because of the time, cost, difficulty, surprise, and confusion inherent in most audience participation. Your advanced courses may be smaller in size and therefore more amenable to this level of presentation. Any time the audience is asked to physically participate, their focus turns from your message to their personal involvement and all of the judgments that accompany their involvement. Therefore, more time is needed to bring the audience back to the message at hand, connecting the experience and the message.

At the Experiential level, your audience actually participates. The audience may work through a process, such as a client would with a personal trainer.

Using Electronic Assistance

The title of this section refers to the use of overhead projectors, computers, computer presentation software including PowerPoint® and Key Note®, and Internet presentations. Certainly, one can also use an excerpt from a video or a DVD to exemplify a particular point. Some beginning speechmaking classes may limit the use of electronic equipment because it involves a complex overload of learning objectives. A speech with simple graphics is challenge enough for most of us. The problems of darkened rooms, visuals that

replace the speaker, and the inevitable equipment problems abound. Of all of the electronic options, the overhead projector is by far the least complex and most amenable to public speaking.

Overhead Projection

One advantage of using an overhead projector is that it is positioned at the front of a lighted room, allowing the speaker to face the audience and still *see* the visual aid by simply looking down at the transparency. If the physical arrangement is set up properly, every audience member has an unobstructed view of the screen. You will notice in figure 9.13 that the best setup for the screen is the corner of the room. Although this is not what you will find in all classrooms, it is what you should strive for when projecting your visual aid.

If you are considering putting your graphics on overhead transparencies (slides), be sure to check with your instructor first. Although there are a growing number of schools that require an "overhead-projector" speech, many are still restricted by time, cost, equipment, and policy.

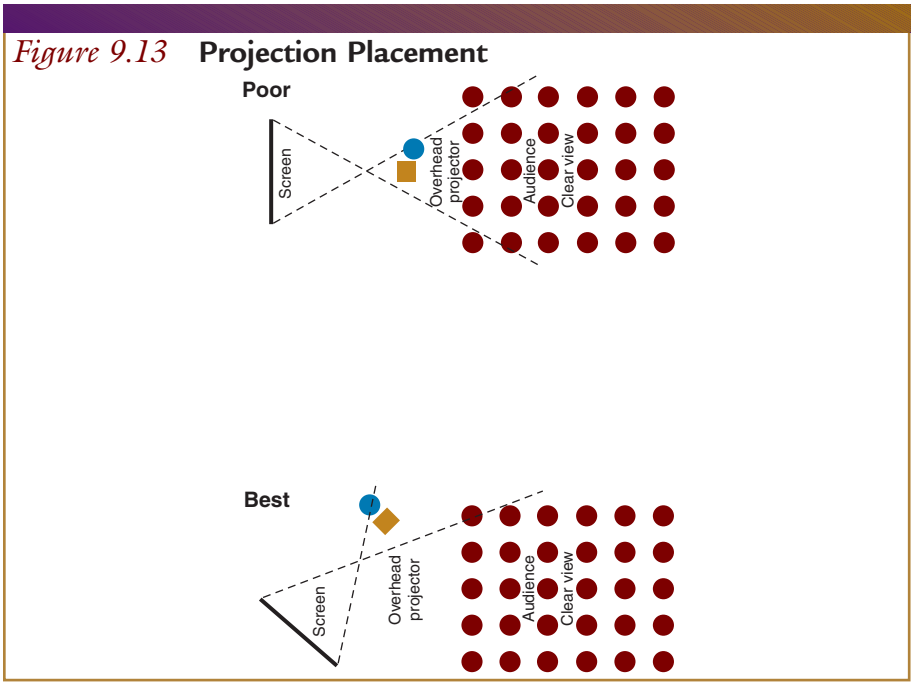
Some other advantages you should know about for the world beyond this course include the following:

1. Whatever you can do with charts, you can also do with transparencies and an overhead projector.
2. An overhead projector poses little likelihood of a mechanical failure. There is a much greater possibility of mechanical failure or operator problems with other, more complicated equipment.
3. The overhead projector can be easily turned on and off, directing the attention of the audience from the screen back to the speaker.
4. Material can be revealed point by point (a technique known as "revelation"), so that attention is fixed and participants cannot read ahead.

Audiovisuals are not intended to be your presentation. They're intended to support it.

Lani Arrendondo,
Corporate trainer

Figure 9.13 **Projection Placement**



5. The overhead projector does not require expensive and time-consuming technical processing or knowledge.

Making Transparency Graphics

The single factor maintaining the popularity of overhead projectors is that transparencies can be made easily, quickly, and inexpensively. Transparencies are celluloid sheets onto which you can directly print using your home printer or onto which you can copy using a copier. It is imperative that you use the correct transparency slide for the printer or copier you have, or you run the risk of damaging your equipment.

If you have access to a personal computer and the right software, you can generate graphics and then convert them into transparencies for an overhead projector. Computer-generated graphics can also be made poster size if you have a photocopy machine with this capability. A PosterPrinter is now available which will create in seconds a presentation poster or flip chart page up to eight times the original size, in your choice of seven color combinations. Printing labs can also assist you in creating presentational materials.

Using computer presentation programs (such as PowerPoint®), DVD or film clips, and using overhead projectors, can greatly enhance the delivery of your speech. However, there are some drawbacks that may deter students from relying on technology to present their visual aids.

Computer-Technology

Technology now provides the flexibility of preparing visual aids on a computer, at home or in the library, and downloading the work to a CD or a USB jump-drive. The CD or jump-drive can then be used on laptops or classroom computers, which are connected to projection devices that project images to a screen. One can then "mouse" excerpts for dramatic illustrations, incorporating everything from pictures to sound bites and music. In many colleges and universities, standard classroom equipment now includes a computer, a projection unit for digital-visual presentation equipment, video players, DVD players, and an Internet connection with display and sound. A student can now access real-time Internet examples for his or her speech. In some classrooms, the ever reliable overhead projector is no longer available, and digital-visual presentation equipment has taken its place. Make sure to know what equipment is available in your classroom and practice using it *before* giving your speech.

Over the last twenty years personal computers have become powerful communication tools. The bar has been raised in terms of expectations for professional presentations and visual aids. A speaker's credibility can be enhanced or diminished based on the quality of his or her visual aids. Software tools give anyone the ability to create professionally looking visual aids, but ability does not necessarily translate into results. When designing your visual

aid, some suggestions to enhance the professional appearance include choosing the right art and avoiding the overuse of animation.

STOCK-PHOTOGRAPHY VS. CLIP-ART Early software programs for creating visual aids had limited graphic capacity—and thus the "rise of bullet points." With the introduction of clip-art for desktop publishing and presentation software, individuals were able to insert images, yet these images were mostly cartoon-like in nature. They were often unprofessional and overused. Over the years, the quality of the clip art has improved; however, the tendency to overuse images, in general, has not changed. If you choose to use images, there are several free and commercial websites for obtaining quality professional images to use in a presentation (see Additional Resources at the end of this chapter). The use of such images increases the professional appearance and visual impact of the presentation.

MOTION AND ANIMATION EFFECTS Computer-presentation software also provides the ability for transition effects and animations. Purposeful animation and transitions can be quite effective if used in moderation. Yet, of all the tools in these software programs, animation is probably the most misused. In 2000, General Sheldon, chairman of the Joint Chiefs of Staff, issued an unusual order to U.S. military to avoid "Venetian-blind effects or fancy backdrops."[3] The general was concerned that Pentagon presenters were focusing too much on style rather than on substance. His concern is still relevant, as many presentations contain useless transition effects and animations.

In the words of one high-tech corporate trainer:

> *The success of your presentation doesn't lie solely in projecting whiz-bang graphics. It still lies primarily in your relational skills—in how well you relate, and relate your message to people.*[4]
>
> **Lani Arrendondo**

CHAPTER REVIEW

Wrapping it up

Summary

Check out our website
www.bvtlab.com
for free flashcards, summaries, self-quizzes and speeches.

Visual aids are used to help make a subject clearer, to build interest, and to reinforce a message. These aids can be classified in terms of functional level as *representational, demonstrational,* and *experiential.* Representational is the most abstract and uses visual symbolization in the form of graphics and pictures. Demonstrational can be described as "show and tell"; experiential as audience participation or "doing." Select the functional level of your aids in terms of topic, purpose, occasion, physical arrangement, and audience analysis.

Representational aids *represent* something typically in graphic form or occasionally as a model. Standard graphics include the following: pictures, drawings, charts, maps, diagrams, and bar graphs that are displayed on a poster or flip-chart or computer screen.

The following are rules for using prepared graphics include: 1) Don't obstruct. 2) Let them reinforce not distract. 3) Talk to the audience not the chart. 4) Orient your audience to the chart. Rules for preparing charts include 1) relate them to the topic, 2) make sure they are visible, 3) keep them simple and uncluttered, and 4) organize the aid so it helps your memory.

A demonstration speech combines showing with telling. Its purpose is to show how a skill, procedure, process, or device is used. Demonstration appeals to several senses. It reinforces, saves time, and has dramatic appeal. Plan carefully, make sure you can do it, calculate the risks of things going wrong, and plan alternate procedures.

You are least likely to use visual aids at the *experiential* level because of time, cost, surprise, and confusion inherent in audience participation.

Graphics can be computer-generated. Some classrooms are equipped to project your graphics directly from your laptop computer or are designed for CDs, DVDs, and USB jump-drives.

Overhead projectors are advantageous because they allow for fully lit classrooms, speaker visibility, and are less complicated than other aids. Digital-visual presentation equipment, however, is making stand-alone overhead projectors obsolete in some schools.

Thanks to photocopy machines, transparencies for overhead projectors or digital-visual presentation equipment are simple to make and can replace the larger charts and graphs. They allow a speaker to face the audience and still see the visual aid. They also allow material to be revealed point by point, and are relatively inexpensive.

Presentational software, including PowerPoint® and Key Note®, can be a wonderful tool if used judiciously. Cartoon-like clip-art, an abundance of images, and overused animation can hinder a presentation by reducing its professionalism and losing the message.

Notes

1. See Kent E. Menzel and Lori J. Carrell, "The Relationship between Preparation and Performance in Public Speaking," *Communication Education,* 43, no. 2 (January 1994), 17–26.
2. The 3M Meeting Management Team, *Mastering Meetings* (New York: McGraw-Hill Inc., 1994), p. 142.
3. Greg Jaffe, "What's Your Point Lieutenant? Please Cut to the Pie Charts," *Wall Street Journal,* (April 26, 2000). P. 1.
4. Lani Arrendondo, *How to Present Like a Pro* (New York: McGraw-Hill, Inc., 1991), p. 101.

Additional Resources

1. iStockPhoto (www.istockphoto.com)
2. Microsoft Office Clipart (office.microsoft.com/clipart/)
3. slideshare (www.slideshare.com)