

Communication *and* Technology

Technology and Interpersonal Communication

Technology and Group Communication

Technology and Public Communication

Summary

After studying this appendix, you should be able to:

1. Discuss the primary ways that such technological innovations as e-mail have affected the formation of interpersonal relationships.
2. Discuss the primary ways that technological innovations have affected the development and maintenance of interpersonal relationships.
3. Explain new ways that technology can actually form people into groups.
4. Define teleconferencing and provide the three primary forms of teleconferencing.
5. Discuss the pros and cons of teleconferencing as a form of group communication.
6. Describe the main effects of technology on group interaction.
7. Explain the caution that public speakers should exercise when using Internet sources of supporting material for a speech.
8. Describe the main concerns speakers should be aware of when they employ technological innovations in the development of audiovisual aids.
9. Discuss the ways technology can help a speaker improve delivery.

What happens when the power goes out? Probably all of us have been in a severe storm or other circumstance that caused our electric service to be disrupted. Were you prepared, meaning were there candles or flashlights nearby? Did you save whatever you were doing on your computer in time? Did you have a battery-operated radio so that you could get weather updates? Or did you just sleep through the whole thing?

At times like these, when severe storms or repair problems cause a power outage, we realize how pervasively technology (and the electricity that powers most of it) affects our lives. We realize the need for such simple things as batteries, flashlights and matches, canned food and a manual can opener, and a regular or cell phone (instead of a cordless one that has to be plugged into a socket to function). We may also wish we knew the names of our neighbors.

A good number of learned people are concerned about American culture's (and the world's) seeming obsession with technology, because it seems that we become enamored with the technology before we stop to think: Is this really the best thing for my life? for my relationships with other people? for society? for future generations?¹

No one doubts the wonders of technology and the incredible advances it has brought to everyday life. We marvel at how quickly a meal can be prepared, a document can be written and edited, and a message can travel around the world. We can be exposed to and learn about other cultures around the globe, so technology helps us embrace diversity. In this appendix we explore some positive effects of technology on our three main contexts for communication in this text: interpersonal relationships, group communication, and public speaking. But we also pause to consider the effect of “instant everything” on our relationships and communication with other people. Our main point is this: Technology is here, and it will keep on coming. But before we become completely dazzled by the next innovation, we should apply our critical thinking powers to consider whether the innovation is positive or negative, healthy or harmful for our lives, our relationships, and the culture in which we function.

Technology and Interpersonal Communication

Is technology bringing people together or pulling them apart? Does technology make communication with others easier and faster or more difficult and time-consuming?

An Impersonal Technological Innovation

When was the last time you called an agency, utility company, or bank and a real, live human being answered the phone? Most often, we hear something like this: “Welcome to _____’s automated customer service system. This call is being monitored so that we can improve our service. Please listen to the following menu of items before selecting an option. For _____, press 1; for _____, press 2,” and so forth. Then, when you make your selection from the opening menu, you’ll likely hear something like this: “Thank you for your selection. For current account information, press 1; for inquiries about _____, press 2”—another whole set of menu options. The very last option, if it’s an option at all, is usually, “To speak to a service representative, please stay on the line and your call will be answered in the order it was received.” You can grow old on that line.

If this sounds painfully familiar, then you have probably already wondered whether this particular technological advance, termed **interactive voice response**, is actually a good thing or not. On the plus side, these services reduce labor costs and many offer twenty-four-hour access to information. However, market research shows that satisfaction decreases when customers encounter this technology, particularly in proportion to the length of the menu choices.² Some of you reading this are too young to know any difference, but many of us remember a time when you dialed a company (dialed, rather than pushed buttons on a telephone) and actually got to speak to someone. Perhaps things were slower and less efficient then, but it did seem somehow more personal, even more enjoyable to have a real person attend to your concerns.

Enter technological innovation: the **chatbot**. In a newspaper article describing this device a journalist begins by explaining, "People find Alice easy to talk to. She listens more than she speaks. She says she likes dining by candlelight. She reads newspapers and news magazines, so she is up on popular culture. But Alice's favorite topic of conversation is robots. That's because she is one."³ Reading further, we discover that Alice (full name, Artificial Linguistic Computer Entity) is a computer software program that simulates conversations with humans. Chatbots are being developed to act as customer service representatives, information deliverers, and even "potential companions for human surfers in the sometimes lonely world of the Web."⁴ A person asks a question of a chatbot, which searches for word clues in the question and matches them to its vast database of English words. It then attempts to offer a helpful response, even a personalized one by inserting the name of the questioner into the response. Chatbots are but one form of artificial intelligence that attempts to make machines operate like people.

What are the pros and cons of such a device? On the pro side, we can see an advantage to having a human-like response to a question instead of a recording, words on a computer screen, or dead air. One example described in the news article involves someone entering an online music store, conversing with a chatbot about musical tastes, and receiving the chatbot's recommendations for artists the consumer may not have heard of. But just like the menu approach to customer service calls, there are some questions or concerns that can't be dealt with by menu options or programmed machines. Chatbots may also give those "lonely surfers" described in the article a false sense of a social connection—a feeling that a human-to-human conversation has occurred when it actually has not. What about the ethics involved? What if someone thinks she or he is chatting with a person (perhaps named Alice), but instead is chatting with a machine? In computer applications, many of these programs are identified as being artificial or human simulation devices, but unscrupulous uses could be made of the device to dupe the public.

One of the most obvious technological advances to affect human relationships is communication that occurs in cyberspace. Just what is cyberspace? One useful definition is as follows: **Cyberspace** includes "the diverse experiences of space associated with computing and related technologies."⁵ Most of us who communicate in cyberspace do so through that technological marvel known as the Internet. In 1995, over 25 billion electronic mail (e-mail) messages were sent; at the beginning of the new millennium, estimates indicate that 150 million people communicate via e-mail.⁶ In the next few pages, we explore e-mail and other forms of communication related to the Internet as tools for initiating relationships and connecting people; then we discuss the role of computer-mediated communication in ongoing relationships.

Interactive voice response
A technological innovation in the form of a menu or series of options that callers encounter in many phone systems.

Chatbot
A technological innovation in which a programmed voice response can answer online users' questions.

Cyberspace
Diverse experiences of space associated with computing and related technologies.



"On the Internet, nobody knows you're a dog."

The Role of Technology in Relationship Initiation

In chapter 7 we discussed interpersonal communication and the initiation of relationships. How has technology helped and hurt this process? First, our principle 1 of being aware of oneself is affected by technology. We've described how important it is to know yourself, to develop your self-concept and monitor what affects your self-esteem as you extend yourself to others and form relationships—friendships, dating or romantic relationships, and workplace connections. But what about relationships that develop only in cyberspace? Do cyber-relationships have as much potential impact on one's self-concept as other relationships?

One of the more interesting opportunities that Internet relationships afford is the ability to alter and expand one's identity.⁷ We're not advocating that you deceive people when chatting online or e-mailing, because that's unethical. It can also lead to potential abuse and disastrous consequences, evidenced in stories about young online users who pretend to be adults and form connections with highly disturbed people,

such as sexual predators. But apart from these extreme cases, the opportunity exists to experiment with your identity online and note the response you get from others. You can test untapped parts of your personality, perhaps by being more bold or more sensitive than you normally are in your face-to-face relationships. You can expand who you are and adjust who you want to become based on others' reactions.

We're all probably aware of the increase in people making connections with others via the Internet. Some persons employ their best verbal communication skills (principle 2) to converse in cyberspace. Online users can communicate in **synchronous time**, meaning that there is little to no lag time between comments. Such Internet tools as IRC (Internet Relay Chat) allow users to read and respond to others' comments on a computer screen as the remarks are being generated. It's as close to in-person chatting in real time as is possible on a computer, given the current technology. Others prefer to converse in **asynchronous time**, meaning that messages are posted at one point in time, then read at another point in time. Many of these users belong to a **newsgroup** in which postings by subscribers go out to all members, who then can respond with their own postings. Similar to the newsgroup is the **listserv**, which involves a "host" and software that facilitates discussions by linking people who share common interests.⁸ Yet another option is the **electronic bulletin board** that anyone, not just a subscriber, can access.⁹

Perhaps you've made friendships with people you've never met in person, and these virtual friendships have become just as valuable as friends you see face-to-face. You may even be one of those brave souls who has made a "love connection" over the Internet.¹⁰ A recent study found that relationships established online were just as satisfying to the partners participating in the study as those that were established "the old-fashioned way"—meaning through non-mediated channels.¹¹

What makes virtual relationships attractive? Many users enjoy the freedom of getting to know other people without some of the nonverbal dimensions that give us pause in face-to-face interaction, primarily concerns about physical attractiveness. As Annette Markham explains in her fascinating book, *Life Online: Researching Real Experience in*



Verbal

Synchronous time

Online communication in which there is little to no lag time between comments; sometimes referred to as "real time."

Asynchronous time

An online communication system in which messages are posted at one point in time, then read at another point in time.

Virtual Space, some people feel trapped by their offline selves, their bodies and the roles they play. Their online selves allow them to transcend the trappings of physicality. One user Markham interviewed in her research felt that her appearance was a hindrance when she met people face-to-face. She was much more confident of her ability to connect with people through her use of language because, as the user put it, “eloquence makes me beautiful online.”¹²

A second reason people are drawn to electronic communication as a means of establishing relationships relates to the ability to edit one’s message—a form of adaptation (principle 5) not easily managed in face-to-face communication. In chapter 3 on verbal communication, we discussed something most of us have experienced—saying the wrong thing to someone and then trying to take it back or undo the damage we’ve caused. In an instance like this, we wish we could have a chance to change our inane or hurtful comment. Electronic communication provides this editing opportunity, unless you hit the “send” key too quickly.

For people in committed, monogamous relationships, another aspect of cyber-relating that is attractive, but also disturbing to many people is the potential to stray beyond one’s committed partner by making virtual connections. This trend has called into question the concept of fidelity; it’s hard to determine if developing online emotionally intimate relationships with persons other than one’s partner is a form of cheating. Many believe that a clear difference exists between establishing emotionally supportive relationships online and developing sexual relationships online. But might both be considered a breach of faith by one’s partner?

Robert Weiss, Director of the Sexual Recovery Institute of Los Angeles, remarked, “This [Internet usage] totally reinvents adultery. If you have a totally cyber-sexual intimacy with someone you’ve never met, have you had an affair?”¹³ While some believe online flirtations are harmless, the same way they might view office flirtations that don’t escalate into romantic relationships or affairs, others see them as outgrowths of a problem within the primary relationship. Energy that once might have been directed toward the primary relationship now becomes directed to virtual relationships.

The Role of Technology in Relationship Maintenance

One of the most obvious positive uses of electronic communication is the ability to keep up with people who live long distances apart from one another. E-mail and online chatting are more economical ways to maintain relationships than long-distance telephone service or traveling to locations to be together. For many, online communication doesn’t replace the good old personal letter delivered via “snail mail,” but it is much faster and more immediate, in that you can transmit what you’re thinking and get a rapid response. Some online users develop virtual communities, like **MUDs** (Multi-User Dimensions or Dungeons) or **MOOs** (MUD Object Oriented), for such purposes as generating political activism, exploring common interests, collaborating on projects, and socializing.¹⁴ According to MUD users, these virtual communities can be just as supportive and sustaining as any community established on campus or in a neighborhood.¹⁵ So, in a sense, this form of technology has brought us closer together as a nation and a world, because we can communicate quickly, regularly, and economically across great distances.

However, some argue that electronic communication, among other forms of technological innovation, actually pulls people apart more than it brings them together.



Nonverbal



Adapt

Newsgroup

A group of online users interested in a common topic or who belong to an organization; postings go out to all members, who then can respond with their own postings.

Listserv

A computer service that involves a “host” and software that facilitates discussions by linking people who share common interests.

Electronic bulletin board

An online group service in which anyone, not just a subscriber, can access and read postings.

MUD

Multi-User Dimensions or Dungeons; virtual communities that form for such purposes as generating political activism, exploring common interests, collaborating on projects, and socializing.

MOO

A MUD that is Object Oriented; users connect because of interest in a common subject or focal point.

While we may converse regularly across the world with people we're not likely to meet, we may not know or socialize with our neighbors down the hall or across the street. Some people rely too heavily on e-mail because it lets them avoid nerve-inducing or uncomfortable in-person conversation.¹⁶

Which community is more *real*—the in-person one or the virtual one? Electronic communication can create a false sense of community, because computer users who interact across the globe most often do so alone, in the small spaces of their private existences. The rising popularity of the home office connected to a virtual world has the potential to diminish the social or communal impact of the workplace.¹⁷

Many people actually prefer computer-mediated intimacy to in-person intimacy. Some prefer it to the point of becoming **cyber-addicts**, meaning that they spend all of their free time surfing the Net and making online connections. Some cyber-addicts jeopardize their jobs or school performance in order to interact online. The Sexual Recovery Institute recently published a checklist to help people determine if they or someone they know has reached a cyber-addictive stage. Some warning signs include the following: (1) spending increasing amounts of online time focused on sexual or romantic intrigue or involvement; (2) not considering online sexual or romantic affairs to be a possible violation of spousal/partnership commitments; (3) online use interfering with work, in that the user is tired or late to work because of the previous night's use; and (4) online use interfering with primary relationships, such that users minimize or lie to partners about online activities and spend less time with family or partners.¹⁸

As a communication channel, e-mail is better for some relationships than others. It's a great way to communicate information, check perceptions, and simply stay in touch with busy colleagues and friends, both near and far. But close or intimate relationships—family relationships, friendships, and romantic relationships—typically require more than just e-mail to maintain closeness. E-mail is also better for some topics than others. In close relationships, e-mail tends to work best for quick updates, brief expressions of affection, and to make plans or share ideas. The reply function in e-mail serves our principle 4 well, that of listening and responding. Once you've read an e-mail message, the most expedient thing to do is to use the reply function and generate an immediate response. But what about self-disclosure, communication we described in chapter 8 as being critical to the development of trust and intimacy in relationships? Self-disclosing in an electronic format has pros and cons. On the pro side, in some circumstances and for certain reasons, you might decide to electronically share information that you deem safe, meaning that it isn't too personal but is still considered self-disclosure. Perhaps the best aspect of electronic self-disclosure is its potential effect on reciprocity. While the recipient of your disclosure might not choose to reply quickly and in kind, the technology makes it easy to reciprocate.

On the con side, remember that e-mail messages generated at work or school aren't your private property. Be careful what you disclose online, because people other than the person you intend to receive the message could learn this information about you. Only recently have programs been devised that will keep e-mail generated from one's personal computer completely private, meaning that once a message has been sent and read, it can be completely erased from a computer's memory and hard drive. Most of us don't own such a program, so even a deleted message can be retrieved by an expert or hacker.

Self-disclosure may also work better when communicated in person because of the tendency for the discloser to feel vulnerable. Although some avid online users disagree, face-



to-face communication involves more channels of information than e-mail, meaning that we call on all our verbal and nonverbal communication skills to self-disclose to another person in an appropriate manner.¹⁹ We also need to be able to see and hear the other person's reactions—verbal and nonverbal—to our disclosure to determine the effects on our relationship. Most of us cannot yet afford or don't have access to the high-tech computer devices that are becoming available to help “humanize” computer-mediated interaction, such as an Internet phone that allows you to see others and talk through your computer as though it were a telephone. Without such devices, how do you convey tone of voice through a computer? How do you make eye contact, offer a hug, or form a facial expression that corresponds with the self-disclosure? In chapter 4 we provided a list of “emoticons,” symbols people often use to convey emotions or to add a more human expression to their e-mail messages. But these can only go so far; they are generally ineffective when personal information and serious emotions are involved.

This information relates to our principle 5, that of adaptation, because it's important to learn to adapt your message to your receivers, but also to adapt by selecting the most appropriate channel for communication. One suggestion particularly relevant to our discussion is this: Never communicate anything electronically that you would not say in person. If you would have trouble conveying something in person, don't fall prey to the false sense of anonymity or face-saving attributes of e-mail to bail you out of a difficult conversation.²⁰

So, if there's a bottom line to this discussion of “to e-mail or not to e-mail,” it's this: Think long and hard about which channel of communication you should use for certain kinds of information and in certain relationships. First consider what the relationship means to you; then put yourself in your relational partner's shoes and think about the way you'd prefer to receive the information.

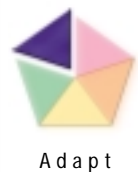
Technology and Group Communication

Technology has a pervasive effect on our lives, especially in the way people interact one-on-one. But communication technology has had an impact on the way groups form and function, as we explain in this section of the appendix.

The Technological Formation of Small Groups

How has technology affected group communication? First, it has affected the way we even conceptualize a group. As we discussed in chapter 9, a small group consists of three to fifteen people who share a common purpose, feel a sense of belonging to the group, and exert influence on each other. After reading this definition, most of us picture a cluster of people in a room, sitting around a table, discussing some task at hand. But do group members necessarily have to be in the same location to be considered a group?

Think about study groups that form at your institution; perhaps you're a member of one. These kinds of groups typically meet in person to work on class projects and study for exams. But with the level of activity of today's average college student—full class loads, work responsibilities, family commitments—many students find that they just don't have the time to meet in person with classmates. Do they abandon this important activity? No; they meet in cyberspace. Through the use of such computer packages



Cyber-addict

An individual who spends all of his or her free time surfing the Net and making online connections, possibly jeopardizing job or school performance.

as Web Course in a Box, colleagues of ours create newsgroups so that students and instructors can discuss course topics and assignments. Study groups, collaborative work groups, and people who come together because of common majors or areas of interest use technology to accomplish their goals. It is likely that the frequency and amount of information exchange that circulates among members of a virtual group is much greater than that of groups who meet face-to-face once a month or every so often.

However, one aspect that veterans of virtual groups report as a frustration is that, in essence, there are no group meetings. Recent research has determined that identification, meaning a sense of connectedness and similarity with group members, is weaker among groups who conduct electronic meetings than among those who meet face-to-face.²¹

Teleconferencing

Widgit Incorporated is having a problem with its newest product and it's causing sales and stock values to dip. The idea people think it's a production problem, the production people think it's a design flaw, and the marketing people don't know what to think—except that somebody better do something, and fast. In a past age, corporate executives would gather in various locations to address the problem and create a workable solution. Nowadays these executives put their corporate heads together and do the same thing—just not in person. **Teleconferencing**, another fairly recent innovation, allows people who are geographically separated to meet through the wonders of technology for various purposes, saving a great deal of time and money.²²

Three primary forms of teleconferencing currently exist. **Audio conferencing** occurs when groups of people or individuals at different locations gather around a telephone and hold a joint discussion. On the plus side, audio conferencing saves a great deal of time and money. Like other forms of electronic communication, it is an efficient way to accomplish tasks.²³ It also brings into action the “two heads are better than one” rule; in fact, organizations that conduct regular teleconferences report much greater attendance compared to face-to-face meetings.²⁴ However, it may not be the best for building solidarity, if that is one goal of the company or entity setting up the conference. Its very nature segments groups into sub groups, which can create divisiveness and competition. Participants also experience a negative side effect similar to the use of e-mail and other forms of electronic communication—a loss of nonverbal information. While you retain properties of the voice, you lose the ability to detect such things as eye contact, facial expressions, gestures, and body positions of group members.²⁵

A second, increasingly popular form of teleconferencing is **video conferencing**. In these situations, video cameras, through the use of satellite technology, broadcast visual images of colleagues or conference participants to one another's sites. Video conferences may involve small groups of people who gather to focus on a specific task, or they may be a means of broadcasting large conferences to a variety of sites. At present, video conferencing is more expensive than audio conferencing and is cost-prohibitive for many organizations. But with rising costs of travel and accommodations, eventually video conferencing will become more economical than sending a team of participants to a conference or to meet with long-distance clients.

One advantage of video conferencing over audio conferencing is that it includes more channels of nonverbal communication, transmitting a more complete and understandable message. More interaction is generated because participants can both hear and see one another, which leads to better organized and more productive meetings.²⁶ One drawback is the ever-present concern about equipment failures, either at the local site or

Teleconferencing

Technology that allows people who are geographically separated to communicate for various purposes in a cyber-meeting.

Audio conferencing

Groups of people or individuals at different locations gather around a telephone and hold a joint discussion.

Video conferencing

Video cameras, through the use of satellite technology, broadcast visual images of colleagues or conference participants to one another's sites.

the conference site. And often, if attendance is large at the conference, on-site attendees' questions are more likely to receive responses than participants who call in from off-site.

A third form of teleconferencing is **computer conferencing**, which allows multiple participants to exchange a sequence of e-mail messages. Individuals at their own computer terminals can participate in brainstorming sessions by viewing responses of all other participants simultaneously. Authors of comments are not revealed, which encourages participants to be more engaged, to overcome status concerns (like openly disagreeing with the boss's idea), and to focus on the quality of ideas, not on who produced the ideas.²⁷ Less advanced programs require participants to complete and author a message before they can interact with other conferees. Other advantages of this *window method* are its similarity to face-to-face interaction, the potential for producing higher quality decisions, and cost factors.²⁸

The Effects of Technology on Group Interaction

Research has found that in groups we tend to speak to specific members rather than the group as a whole. We also direct more of our communication toward the leaders or higher status persons in the group, as well as to people we like. In some group dynamics, everyone talks to everyone else. In other groups, cliques or sub groups form, which can either be beneficial or detrimental to group interaction and functioning. What happens to these interaction patterns when technology facilitates the meeting, as in the case of teleconferencing?

For one, it is much more detrimental to the group's purpose if cliques or sub groups form and communicate privately, meaning out of earshot or the view of other groups in the conference. Not only can it be distracting because it makes it harder to hear interaction from other sites and concentrate on the focus of attention, but it can lead to distrust. If several individuals or small groups of colleagues teleconference in an effort to solve problems, generate creativity, or discuss critical issues, then interaction that pulls people away from the primary discussion will likely be perceived negatively and deter success.

What can enhance the success of teleconferences? It is important to set, announce, and enforce time limitations for participation. If certain members dominate the interaction or deliver prepared remarks without concern for how much time they're taking, group cohesiveness and progress will be impeded. A facilitator—ideally, the group's most effective communicator (not necessarily the person who is the most adept with technology)—should attempt to do the following: orient participants as to the purpose of the conference, provide guidelines for participation, keep the group on task through the use of an agenda, moderate interaction so as to avoid over-talking or lack of participation by individual members, mediate any conflicts that arise, and bring the session to closure by summarizing key ideas or recapping progress.²⁹

Technology and Public Communication

At various points throughout the five chapters on public communication in this text, we have explored applications of technology to this context of communication. We don't wish to repeat that information here, but there are a few technologically-related reminders or cautions we want to provide.



Verbal

Computer conferencing
Computer programs that allow multiple participants to exchange a sequence of e-mail messages.

Source Material for Speeches

We realize that times have changed. Instead of combing through dusty volumes in smelly library stacks, most students who seek information simply type on a fancy keyboard and click on a mouse and—magically—the information they seek appears on a screen. We also realize that, as college students, you're encouraged to employ your powers of critical thinking to assess the validity and usefulness of information before you use it in a speech or paper. But we have also come to detect, through many semesters of teaching public speaking and conducting our own research, what can only be described as a “mystical” quality that computers embody. Just as people decades ago believed that everything that appeared in print in the town newspaper just had to be true, many people believe that if it's on the computer screen, it counts as legitimate information. What we want to make sure you realize is that anyone with access to a computer and half a brain can learn to create a Web site. Just because something appears on a Web site doesn't mean it is necessarily reliable, legitimate, truthful, or useful.

Many Web sites are advocacy-based, meaning that they present only one side or a slanted view of an issue—the side they want to persuade you to agree with. Others are more even-handed, presenting multiple perspectives and allowing the reader to decide for her- or himself. It's acceptable to incorporate some of this kind of material into a speech, but, at present, this information does not carry the same level of legitimacy that published research carries.

A related caution pertains to your ethical responsibility as a public speaker. You are expected to present the best information you can find—not the best information you can find the most quickly. Take time to hunt for the best information. Also realize that commonly used search engines, such as *Yahoo!*, *Excite*, and *Lycos*, only catalog about 16 percent of the estimated 800 million Web pages that currently exist.³⁰ The research process is tedious and time-consuming, and computers have helped a tremendous amount in this regard. However, the computer is but one tool to help you locate pertinent information. Other tools may take more time, but you may find that they provide more information of varying types than you could access via the computer. You may also find yourself in the situation of researching a topic that pre-dates computerized information. In a case like this, you don't want to discover that you've lost your library research skills because you constantly turn to a computer.

Technological Innovations and Audiovisual Aids

In chapter 13 we provided information about a range of audiovisual aids, including computer-generated visual aids, that can be used to enhance a public speech. We also discussed some guidelines for using these aids, including this one: “Use technology thoughtfully.” This suggestion cautioned you about deciding to use technology in a speech just because it could be glitzy and “wow” an audience. Keep in mind that there is nothing inherently dazzling with technology itself; it's all in how you *use* the technology.

In a public speaking context, computer-generated images and text, such as Microsoft's PowerPoint® can produce, may or may not help you get your message across to the audience. We've seen presentations in which the technology outshined the speaker and overwhelmed the audience. And if your room and lighting isn't conducive to the technology, you may have to speak in a darkened room so that the visual aids can be

seen. This can also be a problem for speakers who rely on overhead projectors. A darkened room is not the best condition for a public speaker, because you run the risk of losing some of your audience's attention. Also, some people (especially those who are quite nervous in speaking situations) let the darkness shield them and the visual aids supplant their speech content. Remember that for almost all public speaking situations, audiovisual aids should *aid* the speaker; they should not *replace* the speaker.

Technology and Enhanced Speech Delivery

When we listen to ourselves on audiotape, most of us respond with “That’s not my voice; I don’t sound like that.” The truth is, the technology today is so well-developed that, indeed, you actually *do* sound like that. The way you hear your voice in your head is distorted, compared to the way others hear it when you speak. So if you want to know how you will sound when delivering a speech, audiotape yourself and force yourself to listen to the playback, just as we advised in chapter 13. This is one of the best ways to improve a speech—both in its content, organization, and delivery. But try not to be overly critical of yourself when you listen, as many of us tend to be. You want to note if you use too many filler sounds or words, such as “uh,” “er,” “okay,” “you know,” and “like” (our personal favorite). You want to attempt to slow down if you hear yourself rushing on the tape; you want to develop vocal variety so you don’t speak in a monotone. But realize that you’re developing a delivery style that is unique to you; don’t try to change too much or you’ll likely make yourself unduly nervous when you actually perform the speech.

If you’re really daring, need an extra dose of reality, or are a narcissist, videotape yourself performing your speech. We’re kidding when we say that, but we know that most people aren’t thrilled with the thought of being videotaped. Most of us are thrilled even less with the thought of having to watch ourselves on tape. But, as we indicated in chapter 13, it is the absolute best form of pre- or post-speech feedback you can use as a tool to improve your speaking abilities. Even if you don’t own a video camera, most colleges and universities have media centers where students can get access to video equipment.

When you watch the tape (and yes, you have to watch the tape because that’s the whole point of taping), imagine yourself as an audience member, sitting in the room listening to you speak. Are you bored by yourself as a speaker? Do you make yourself laugh? Are you understood? Are you persuaded by you, if that’s the goal? You might want to assess your performance using the same critique your instructor will use when you give the speech in class. As you watch, first note things you did well; then note those things you want to change. Try not to be overly harsh or distracted by such unchangeable things as your physical characteristics and appearance. Concentrate on the speech—how well it was organized; if you cited your supporting materials adequately; if your note cards or speech pages worked smoothly for you; if you need to alter delivery elements like voice, eye contact, and movement; and if the speech fit the required time parameters. It may be a humbling experience to watch your speech performance on tape, but it will teach you a great deal.



Aware



Verbal



Nonverbal



Adapt

Summary

In this appendix we have explored the effects of technology on human communication. We focused on three primary contexts for communication: interpersonal, group, and public. We first discussed a technological innovation called the chatterbot. Interpersonal relationships that form in cyberspace have particular challenges. While you can experiment with your online identity and explore parts of your personality, there is the potential for unethical behavior in misrepresenting yourself to another online user. Relationships can form and be maintained via technology such as e-mail; however, there are some forms of interpersonal communication and some relationships for which cyber-channels are inappropriate. E-mail and other computer services, such as electronic bulletin boards, listservs, and newsgroups, provide quick access, but some scholars worry that these forms of technology are pulling us apart as a culture, rather than uniting us.

Our second context, group communication, is affected by technology in interesting ways. Again, there are pros and cons in conducting online meetings and group discussions. A popular form of cyber-group communication is the teleconference. Three primary forms of teleconferencing currently exist: audio conferencing, video conferencing, and computer conferencing. Of these three forms, video conferencing provides the most information and aids receivers in interpreting messages because both verbal and nonverbal channels of communication can be transmitted.

Finally, we explored the effects of technology on public speaking. Public speakers need to use caution when accessing source material for speeches from the Internet; some sources are more reliable than others. Computer searching should supplement, but not replace traditional library methods of research. Technology is improving our methods of producing audiovisual aids for speeches, but we warned about overusing or relying too heavily on technology. Aids simply help the speaker; they do not replace the speaker. Current technology can help public speakers improve their delivery, especially through the use of audiotaped and videotaped speech rehearsals.

Principles of Communication and Technology



Aware

Principle 1: Be aware of your communication with yourself and others.

- Technological innovations, such as Internet chat rooms, allow you the opportunity to explore your identity and note the responses you get from other online users.
- Audiotaping or videotaping yourself presenting a speech, and then listening to or viewing the playback, are excellent ways to become more aware of how you communicate in a public speaking situation.



Verbal

Principle 2: Effectively use and interpret verbal messages.

- Some people have better verbal communication skills online than in face-to-face interaction.
- Edit electronic messages; don't say something in an e-mail message or as a comment in a chat-room that you would not say to someone in person.

- Be careful making a decision to self-disclose via an electronic channel; e-mail isn't necessarily private, and self-disclosure may be more effectively communicated in person.
- A facilitator is recommended for teleconferencing, to orient participants to the group's purpose, agenda, and interaction rules and to moderate interaction.
- Audiotaping or videotaping speeches and watching the playback is an excellent strategy to help speakers improve their use of language.



Nonverbal

Principle 3: Effectively use and interpret nonverbal messages.

- Some people enjoy the freedom of getting to know people online, without the constraints of nonverbal dimensions, such as appearance and physical attractiveness.
- Be careful making a decision to self-disclose over an electronic channel, because personal self-disclosure is more effectively accomplished when nonverbal cues accompany verbal ones.
- "Emoticons" are keyboard symbols that help convey nonverbal elements of an electronic message, such as tone of voice and emphasis.
- Participants in audio conferencing can use vocal cues to help interpret messages, but do not have the benefit of visual cues, such as eye contact and facial expressions.
- Video conferencing is preferable to audio conferencing because more nonverbal channels of information are available.
- Audiotaping or videotaping speeches and watching the playback is an excellent strategy to help speakers improve their nonverbal delivery.



Listen

Principle 4: Listen and respond thoughtfully to others.

- One advantage of e-mail and other forms of electronic communication is the potential for an immediate response; learn to use the reply function.



Adapt

Principle 5: Appropriately adapt messages to others.

- One advantage of electronic communication is the ability to edit your message and adapt it to receivers *before* you communicate it.
- Learn to adapt your message as well as the channel for your message. If you have bad news or negative information to relate to someone, in-person communication is preferable to electronic communication.
- When viewing a videotape of your speech, imagine yourself as an audience member; then adapt the speech to make the best impression possible on listeners.