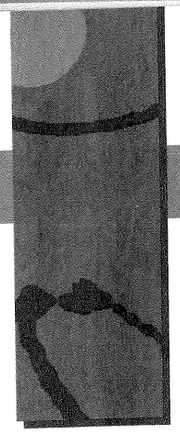


CHAPTER 2

A World of People and Purposes

People, Purposes, and Communities

All forms of technical communication are ultimately intended for an *audience:* the readers, listeners, viewers, and users who need information to make decisions or perform tasks. A good technical communicator always designs information with an audience in mind, carefully reviewing a vast array of information, selecting what is important, and crafting the information into a useful tool for a specific group of people. The technical communicator's audience, comprised of a specific group of people, can also be thought of as a *community*. In other words, technical communicators must always take into account the needs of the community for whom they design information. Additionally, technical communicators themselves are members of the community in which they work, and often, the communities of both the technical communicator and the audience(s) for whom they design information overlap.

The notion of community, and *discourse community* in particular, has recently gained attention within organizational and professional settings, as well as within academic disciplines. A discourse community is "a group of people who share certain language-using practices. . . . The key term 'discourse' suggests a community bound together primarily by its uses of language, although bound perhaps by other ties as well, geographical, socioeconomic, ethnic, professional, and so on" (Bizzell, 1992, p. 222). Discourse communities have the power to influence and shape the way that information gets communicated within and outside of a group. Different types of discourse communities use language unique to themselves; for instance, a community of medical researchers uses technical or scientific language that is different from the language used by a community of software programmers. Ultimately, technical communicators need to learn about and communicate with the audiences they are writing for, in order to better understand their needs.

A technical communicator can belong to multiple discourse communities. For example, a technical communicator might be a member of a workplace project team; however, because a good technical communicator should be an advocate of the needs of her audience or users, she might also feel a sense of connectedness to the community for which she designs information. The presence of common stylistic conventions (see Chapter 3) may help to create a sense of community and interconnectedness among technical communicators and their collaborative teams in the workplace; however, the technical communicator's external audience can also influence and shape stylistic conventions and language.

For example, the brochure in Figure 2.1 is designed by a biomedical device company to inform a specific community of physicians and other health care professionals who treat patients with heart conditions. Knowing how this audience of doctors and nurses feels about meeting individual patient needs, the writers begin with the following sentence: "The Medtronic Kappa™ Generation of Pacing Systems offers greater choice in patient management because no two patients are exactly the same." The writers then outline several

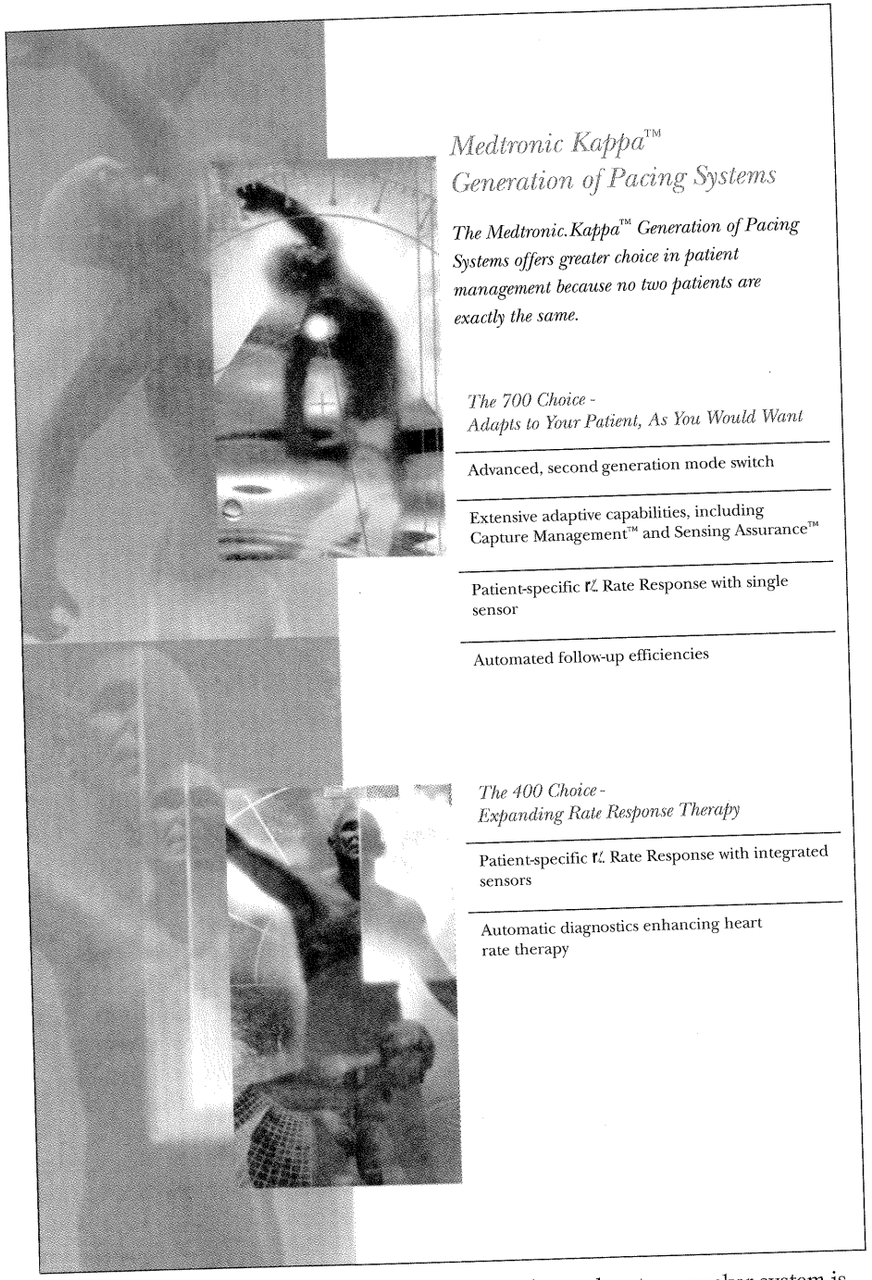


Figure 2.1 A technical brochure. This brochure about a heart pacemaker system is designed to speak to a specific audience.

Audience is an important consideration in all kinds of writing but especially in technical writing, which is far more *user-centered* than other writing. When you write a poem or an essay, for example, you often express your personal feelings and thoughts on the subject. But as a technical writer, your first concern is to provide information the audience *needs*. This is not to say that technical communication involves no thinking and feeling; rather, technical communicators must "write not as isolated individuals but as members of communities," because they are always simultaneously members of several discourse communities, including those of the group in which they work and the audiences for whom they write (Harris, 1989, pp. 12–19).

According to technical communication expert R. Johnson (1997), you can never know every member of your audience, so you always have to do some guessing about their needs. However, you should interact with and seek feedback from actual audience members of the community for which you write as much as possible.

All forms of technical communication are also intended for specific *purposes:* the workplace settings, situations, and reasons for a particular form of communication. If the purpose is to persuade, this will influence the form of communication. If the purpose is to inform, this will affect the language, format, and other features of the communication. Many documents have multiple purposes. For example, the primary purpose in most instruction manuals is to teach an audience how to use the product. But for ethical and legal reasons, companies are also concerned that people use the product safely. An instruction manual for a cordless drill (Figure 2.2), for example, begins with a page of safety instructions.

Any simple message can be conveyed in a multiplicity of ways, depending on how it is constructed for different audiences. Information about a new cancer treatment may appear in a medical journal for health care professionals, a textbook for nursing or medical students, and a newspaper article for the general public. Although health care professionals and nursing or medical students may all be part of the larger community of medical professionals, and although the general public may not be considered part of that community, it is important to understand the subtle language and social differences within these communities that set them apart from each other. Because the larger community of medical professionals can be divided into smaller subcommunities of nursing or medical students, for example, the writer would therefore need to consider the different audience and purpose features of each of these communities. Further, an audience of medical professionals understands technical terms, but the general public does not. In terms of purpose, medical students are reading so that they can apply the information, whereas general audiences who read about the same topic in a newspaper are often reading for nonspecific learning. Thus, articles for each of these audiences will differ in language, content, organization, illustrations, and overall design. The more you understand about the community membership of your audience and the purpose of your documentation, the more your communication will meet user needs.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using Electric Tools, [always follow] basic safety precautions to reduce risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
3. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
4. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Do not let visitors contact tool or extension cord.
5. **STORE IDLE TOOLS.** When not in use, tools should be stored in a dry, and high or locked-up place - out of reach of children.
6. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
7. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended. For example, don't use a circular saw for cutting tree limbs or logs.
8. **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. **USE SAFETY GLASSES.** Also use face or dustmask if operation is dusty.
10. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
11. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. **DON'T OVERREACH.** Keep proper footing and balance at all times.
13. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safe performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
14. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked. (See page 4 for more information about extension cords.)
18. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is defective should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
20. **DO NOT OPERATE** portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.

CAUTION: When drilling into walls, floors, or wherever "live" electrical wires may be encountered, DO NOT TOUCH THE CHUCK! Hold the drill only by the plastic handle to prevent electric shock if you drill into a "live" wire.

We understand that safety rules make some pretty dry reading, but they really are important. If you just skimmed them, please go back and thoroughly read them. Thank you.

SAVE THESE INSTRUCTIONS

Figure 2.2 Safety instructions for operating a cordless drill. This cordless drill manual begins with a page of safety instructions.
Source: Black & Decker Instruction Manual, © 1993. Black & Decker (U.S.) Inc.

Figures 2.3 and 2.4 show two pieces of information, both about the over-the-counter allergy medication Claritin. The Web site is designed for a general audience of patients who have questions or want more information about this medicine. The page from the *Physicians' Desk Reference* (PDR) is also designed to answer questions and provide information, but it is intended for an audience of physicians and health care professionals, not patients. Both items address the same topic, but they are designed and written for very different audiences.

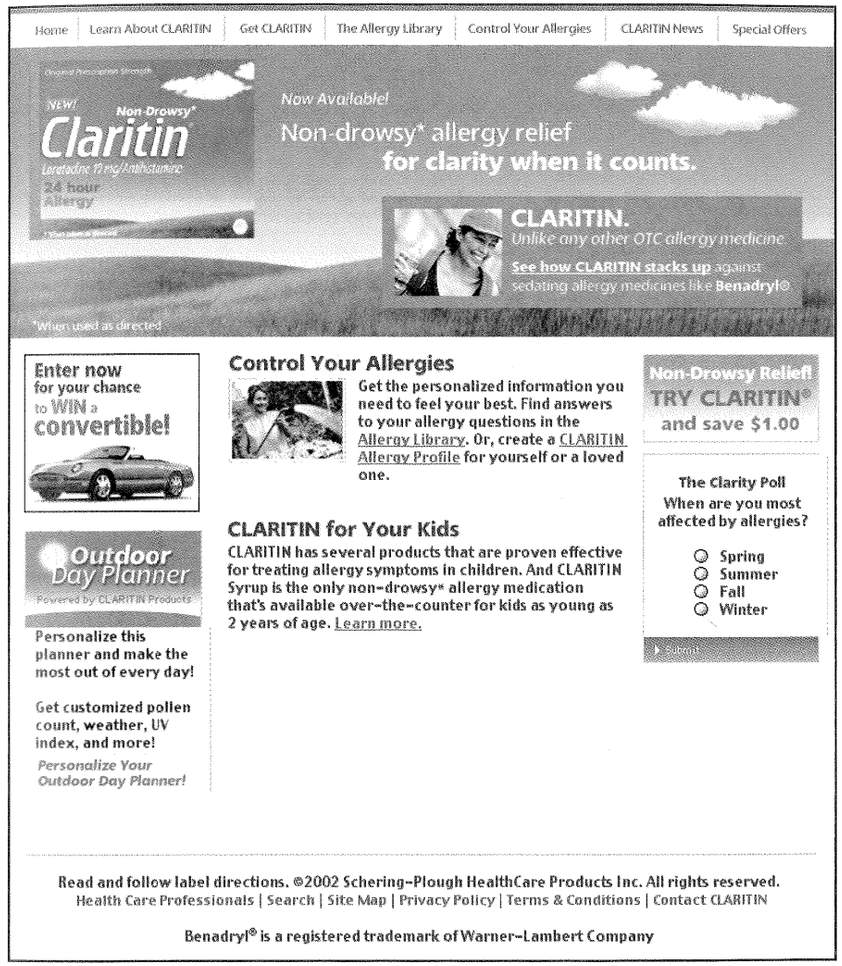


Figure 2.3 Claritin Web site. This Web site of medical information is designed for a more general audience.
Source: Claritin Web site (www.claritin.com).

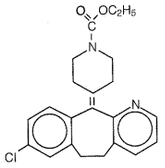
CLARITIN-D® 24 HOUR
brand of loratadine and
pseudoephedrine sulfate, USP
Extended Release Tablets

℞

DESCRIPTION

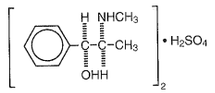
CLARITIN-D® 24 HOUR (loratadine and pseudoephedrine sulfate, USP) Extended Release Tablets contain 10 mg loratadine in the tablet coating for immediate release and 240 mg pseudoephedrine sulfate, USP in the tablet core which is released slowly allowing for once-daily administration.

Loratadine is a long-acting antihistamine having the empirical formula $C_{22}H_{23}ClN_2O_2$; the chemical name ethyl 4-(8-chloro-5,6-dihydro-11*H*-benzo[5,6]cyclohepta[1,2-*b*] pyridin-11-ylidene)-1-piperidinecarboxylate; and the following chemical structure:



The molecular weight of loratadine is 382.89. It is a white to off-white powder, not soluble in water, but very soluble in acetone, alcohol, and chloroform.

Pseudoephedrine sulfate is the synthetic salt of one of the naturally occurring dextrorotatory diastereomers of ephedrine and is classified as an indirect sympathomimetic amine. The empirical formula for pseudoephedrine sulfate is $(C_{10}H_{15}NO)_2 \cdot H_2SO_4$; the chemical name is α-[1-(methylamino) ethyl]-[*S*-(*R**, *R**)]-benzenemethanol sulfate (2:1) (salt); and the chemical structure is:



The molecular weight of pseudoephedrine sulfate is 428.54. It is a white powder, freely soluble in water and methanol and sparingly soluble in chloroform.

The inactive ingredients for oval, biconvex CLARITIN-D 24 HOUR Extended Release Tablets are calcium phosphate, carnauba wax, ethylcellulose, hydroxypropyl methylcellulose, magnesium stearate, polyethylene glycol, povidone, silicon dioxide, sugar, titanium dioxide, and white wax.

CLINICAL PHARMACOLOGY

The following information is based upon studies of loratadine alone or pseudoephedrine alone, except as indicated.

Loratadine is a long-acting tricyclic antihistamine with selective peripheral histamine H_1-receptor antagonistic activity.

Human histamine skin wheal studies following single and repeated oral doses of loratadine have shown that the drug exhibits an antihistaminic effect beginning within 1 to 3 hours, reaching a maximum at 8 to 12 hours, and lasting in excess of 24 hours. There was no evidence of tolerance to this effect developing after 28 days of dosing with loratadine.

Pharmacokinetic studies following single and multiple oral doses of loratadine in 115 volunteers showed that loratadine is rapidly absorbed and extensively metabolized to an active metabolite (descarboethoxyloratadine). Approximately 80% of the total dose administered can be found equally distributed between urine and feces in the form of metabolic products after 10 days. The mean elimination half-lives found in studies in normal adult subjects (n = 54) were 8.4 hours (range = 3 to 20 hours) for loratadine and 28 hours (range = 8.8 to 92 hours) for the major active metabolite (descarbo-ethoxyloratadine). In nearly all patients, exposure (AUC) to the metabolite is greater than exposure to parent loratadine. Loratadine and descarboethoxyloratadine reached steady state in most patients by approximately the fifth dosing day. The pharmacokinetics of loratadine and descarbo-ethexyloratadine are dose independent over the dose range of 10 to 40 mg and are not significantly altered by the duration of treatment.

In vitro studies with human liver microsomes indicate that loratadine is metabolized to descarboethoxyloratadine predominantly by P450 CYP3A4 and, to a lesser extent, by P450 CYP2D6. In the presence of a CYP3A4 inhibitor ketoconazole, loratadine is metabolized to descarboethoxyloratadine predominantly by CYP2D6. Concurrent administration of loratadine with either ketoconazole, erythromycin (both CYP3A4 inhibitors), or cimetidine (CYP2D6 and CYP3A4 inhibitor) to healthy volunteers was associated with significantly increased plasma concentrations of loratadine (see Drug Interactions section).

In a study involving 12 healthy geriatric subjects (66 to 78 years old), the AUC and peak plasma levels (C_{max}) of both loratadine and descarboethoxyloratadine were significantly higher (approximately 50% increased) than in studies of younger subjects. The mean elimination half-lives for the elderly subjects were 18.2 hours (range = 6.7 to 37 hours) for loratadine and 17.5 hours (range = 11 to 36 hours) for the active metabolite.

In patients with chronic renal impairment (creatinine clearance ≤30 mL/min) both the AUC and peak plasma levels (C_{max}) increased on average by approximately 73% for loratadine; and approximately by 120% for descarboethoxylora- tadine, compared to individuals with normal renal function. The mean elimination half-lives of loratadine (7.6 hours) and descarboethoxyloratadine (23.9 hours) were not significantly different from that observed in normnl subjects. He-

Continued on next page

Information on Schering products appearing on these pages is effective as of August 15,1999.

Consult 2 0 0 0 PDR® supplements and future editions for revisions

Figure 2.4 Claritin information from the *Physicians' Desk Reference* (PDR). This information is designed for a specialized audience of medical professionals.
Source: Physicians' Desk Reference (1999), p. 2785.

Of course, decisions about audience are not always as straightforward as those shown in Figures 2.3 and 2.4. For instance, an engineer might write a memo to a colleague in highly technical terms that only a fellow engineer would clearly understand. This is because the two engineers may belong to the same discourse community, and would therefore possess "traditional, shared ways of understanding experience" (Bizzell, 1982, p. 369). Later, the same memo might be forwarded to a manager in another department who has less technical understanding of the topic at hand, and this manager might need to base an important decision on the information in the memo. In this case, the original writer should have attached a sheet of definitions or background information. Never assume that you know your audience with absolute certainty, and never stop questioning how to meet your audience's needs more effectively.

Analyzing Your Audience

In preparing a technical communication product, you generally begin by analyzing your audience through a series of questions like these:

- Who will be reading/listening to/using this material?
- What special characteristics do they have?
- Which discourse community or communities do they belong to?
- What is their background and attitude toward the subject?

Most people already know more than they think they do about analyzing an audience. Imagine that you are asked to give a presentation on global warming to a group of schoolchildren. Later, you are asked to speak on the same subject to a group of manufacturing executives. In preparing to speak to the children, you would probably think of ways to make the topic understandable: for instance, using simple language and comparing your ideas to things familiar to children. In preparing to speak to the manufacturing executives, you would change your approach, using more technical terms and referring to topics they care about, such as the effects of global warming on their industries.

In short, you would have performed a rudimentary *audience analysis* by assessing the characteristics and interests of the two different audiences, then reshaping the information to fit what you know about each group. Yet it is best to be more systematic about analyzing an audience, because a communicator's assumptions are sometimes wrong. For example, you might assume that the manufacturing executives know quite a bit about global warming and therefore use technical terms or refer to complex concepts. But what if your assumption is wrong? What if these executives actually know very little about the subject? Instead of relying on your assumption, learn as much as possible about the language and social dynamics of the community of manufacturing executives before the presentation. Then you can make informed judgments

about the information that this group needs communicated to them in the presentation.

Most communication situations have an immediate audience. This is your *primary audience*. For instance, a set of instructions for installing new email software for the office might be directed primarily at computer support staff. But most documents also have *secondary audiences*, people outside the circle of those who need the information urgently. A secondary audience for software instructions might be managers, who will check the instructions for company policy, or lawyers, who will make sure the instructions meet various legal standards.

Analyzing the Communication Purpose

As you analyze your audience, you also need to consider the purpose of your message by asking questions like these:

- Why is this communication important?
- Why is it needed?
- What will users do with this information?
- Do the users share common membership in a specific discourse community?

People use technical information for various purposes: to perform a task, learn more about a subject, or make a decision. If the communicator has one purpose in mind when preparing the information but the audience has a different purpose, the message will be useless.

For example, you may have encountered Web sites in which the purpose of the page seems at odds with your purpose for visiting the site. Let's say you hear about a new Web site that sells books about bird-watching in South America. As an avid bird-watcher planning a trip to Brazil, you decide to check out this site. When you first connect, you are impressed with the bright colors and cute bird sounds. And as you click on each book selection, you enjoy an array of birds that come flying across your screen. Yet you cannot locate any descriptive information explaining how one book differs from another, and you are not sure whether the prices displayed include shipping. Also, you can't find an order form. It appears that your purpose, to locate and perhaps buy a book, conflicts with the purpose of the page, which appears to be more of a fancy digital advertisement than a place where customers can find information and make a purchase.

Just as there are primary and secondary audiences, there is also more than one level of purpose. The primary purpose of a set of instructions for a new bicycle rack might be to help users assemble the rack, but a secondary purpose might be to meet the company's legal obligation to list all parts and inform users about potential hazards. Therefore, the instructions not only cater to the needs of the community of users, but they also fulfill the needs of the community of legal professionals working for the company.

Analyzing the Communication Context

Along with audience and purpose, it is also important to understand the context in which the document will be used. Context is related to purpose, but it suggests a slightly different set of questions, such as:

- What are the organizational settings in which the document will be used? For example, will the document be used in training sessions? As part of overall policy documents? As a Web-based customer support site?
- Are there legal issues to consider? For example, are you using material from another source, and if so, do you need to request permission? Are you discussing company projects that may be confidential?
- How much time do people at this company or with this job title have available to perform a task? For example, a service technician out in the field may have very little time to locate an answer, but a researcher working on a long-term experiment may have more time to mull over the theoretical points about a topic.
- Are the readers of this document associated with a larger community of professionals (nurses, scientists, teachers), and if so, what professional values might they bring to the situation? For example, medical professionals value the health and life of the patient above all else.
- Are audience members from one culture only, or is this information directed at a cross-cultural audience? Remember that even the United States contains many diverse cultures: Not everyone in the United States speaks English as their first language, for example.

These and other issues affect every choice you make when writing and designing technical communication.

The following chart summarizes important questions about audience, purpose, and context and provides a template worksheet for your own analysis. Modify this chart to suit your specific situations.

AUDIENCE ANALYSIS WORKSHEET

Audience	Specific Features
Demographic information	Age, gender ratio, education level, ethnicity
Primary audience	Names, job titles
Secondary audiences	Names, job titles
Audience attitudes toward information	Fearful, receptive, interested, other

(continued)

Audience	Specific Features
Technical understanding of topic	Very knowledgeable, some knowledge, complete novice
Other experience with topic	
Purpose	
Primary purpose	
to learn	List what they want to learn
to obtain background information	List why they need this
to make a decision	List the decisions they will make
to perform a task	List tasks: to build, to design, to install, etc.
Secondary purpose(s)	Legal, marketing, other
Context	
Role within the organization	Managers, engineers, etc.
Political or social situation	Power, decision making
Community membership	Specific vocabulary, discourse, social dynamics
Legal issues	Copyright, patents
Cultural considerations	Cross-cultural audiences
Professional values or affiliations	Engineers, teachers, nurses
Other contextual issues	Due dates, other constraints

Conducting an Audience/Purpose Interview

Some documents have wide audiences: Manuals for household appliances, for example, are sent out to countless users worldwide. You may be able to interview only a few people, but if they represent the average reader or listener, you will have a good sense of how to proceed.

The first step, then, in analyzing your audience is to identify the people available for an interview. Try to interview people from various segments of your audience. Depending on your situation, you may interview people individually or in focus groups (small groups of people brought together for this purpose).

Before the interview, explain what you are doing and ask individuals for an appropriate time to meet or call. Email is a good way to make this initial contact, allowing recipients to respond at their convenience. If you can't set up a face-to-face or phone interview, consider using email to conduct your audience analysis. But don't send out your analysis questions until your respondent has agreed to participate. (See Chapter 4 for more information on con-

During the interview, cover all the items on your audience analysis worksheet. Pay particularly close attention to the following items:

- **Levels of technical understanding.** How much technical knowledge does the reader have? Is the reader part of a discourse community that uses a specific technical vocabulary? Will technical terms be familiar or confusing? How much background will be needed to help explain concepts?
- **International issues.** Are audience members from one culture or country or from several countries and cultures? How can the document be written and designed so it is accessible to everyone?
- **Workplace culture or hierarchy.** In what workplace setting will the document be used? Is there a certain style or tone appropriate to this company? Will all levels of employees be using this material, or is it designed for just one or two groups? Does the company have its own style manual?
- **Gender.** How can the document be written and designed so it is fair to both men and women? For example, if a document needs to refer to a job title, use gender-neutral language ("mail carrier" rather than "mailman").
- **Mixed audiences.** In preparing a set of procedures, you write one way for experienced users (people who've performed this or similar procedures before) and a different way for inexperienced users. But if your audience consists of both groups, you need to include different levels of information within one document: some background and explanation of technical terms for the inexperienced users and some technical terms and concepts for those with experience. You can also use an approach called "context-sensitive communication," discussed in Chapter 3.

More Tools for Understanding Audience

2.2

Enhance your audience analysis by seeking out other information, such as the following:

- **Corporate style guides.** Stylistic conventions are one of the major factors that regulate a discourse community, and companies often publish style guides with their own rules and guidelines for corporate communication. These guides offer specific information on everything from grammar and punctuation to tone and style. A company style guide often describes the audiences for its products.
- **User-preference documents.** Many manufacturing and software organizations create documents that assess user preference. These documents are often created after detailed interviews with real customers.
- **Marketing surveys and focus groups.** Marketing departments spend a great deal of time with customers and have a wealth of information to share with you on customer attitudes, preferences, educational levels, and so on.

Using Information from Your Analysis

A thorough audience and purpose analysis will help you make the following decisions as you prepare your document or presentation.

- **Word choice.** Understanding your audience's technical level and the linguistic and social conventions of the discourse community to which they belong will govern the kind of language you use. A group of software engineers understand technical language about computing ("remote analog loopback"), but a mixed audience of managers and supervisors may require less technical language and clear definitions of any technical terms you do use. Novices may need nontechnical, reassuring language.
- **Examples.** Good examples can make a technical concept clear and easy to visualize. A document describing how a pacemaker works might compare the pacemaker's action to a more familiar concept, such as a ticking clock.
- **Document format.** An audience often expects a document to conform to a familiar format. Most companies have stylistic conventions that regulate the standard format for communicating new product information, such as a special type of company memo, a prepared form, or an email message with an attachment.
- **Length.** Some audiences, such as busy executives, have no time to read an entire report. In these cases, the report is preceded by an informational abstract that summarizes key information and conclusions. Length is also important in presentations. Some meetings with a busy agenda often limit individual presentations to 10 or 15 minutes.
- **Document genre.** Is your document meant to persuade or inform? Although all documents are implicitly persuasive (in that you want readers to appreciate the quality of your message), some are expected to be explicitly persuasive as well. A sales proposal, for example, explicitly attempts to persuade its audience to purchase the product or service; on the other hand, a research report is usually intended merely to describe the project and interpret the findings. It is important to remember that the purpose of your document is not only influenced by the genre you use, but the genre you use is also influenced by the conventions of the community for which you write.
- **Information you will include.** Make sure the information you include in the document is interesting and useful to your audience. Consider carefully what to leave in and what to leave out, based on what you know about audience and purpose. As one expert noted, a product "might have a powerful new help system, but information about [it] is of little interest to the person who is reading about the installation" (Hargis, 1997, p. 13).

Audiences Are Not Passive

Audiences are not merely passive recipients of information, and technical communicators are not merely passive designers of information. Rather, the

should overlap and interact with each other. When people read a manual, listen to a presentation, or interact on a Web site, they constantly form opinions of the material, learn new information, and consider new points of view. If they find the information difficult to use, not credible, or insulting, they reject it. Therefore, as you analyze your audience and learn about their community, remember that the communication process works both ways. People will react to your ideas in ways that you may not anticipate. Keep an open mind, and be ready to modify your original ideas based on how your audience reacts.

Typical Audiences and Purposes for Technical Communication

The following categories of audiences and purposes are presented to give you an overview of how to think about different groups of people in different communication contexts and different discourse communities. Obviously, these categories are not exclusive. We are all members of multiple, overlapping discourse communities, and we all shift in and out of various audience roles: for example, at work you may be a nurse or an engineer, but when you go home, you may function more as a member of the general public. Also, in creating categories, we run the risk of stereotyping. It's impossible to speak about *all* engineers or *all* musicians. Yet it is helpful to consider audience types, because a specific type of audience generally shares a specific type of concern. Take these concerns into consideration as you plan and design your document or presentation.

Scientists search for knowledge to "understand the world as it is" (Petroski, 1996, p. 2). Scientists look for at least 95 percent probability that chance played no role in a particular outcome. They want to know how well a study was designed and conducted and whether the findings can be replicated. Scientists know that their answers are never "final." Their research is open-ended and ongoing: What seems probable today might be rendered improbable by tomorrow's research.

Engineers rearrange "the materials and forces of nature" to improve the way things work (Petroski, 1996, p. 1). Engineers solve problems like these: how to erect a suspension bridge that withstands high winds, how to design a lighter airplane or a smaller pacemaker, how to boost rocket thrust on a space shuttle. The engineer's concern is usually with practical applications, with structures and materials that are tested for safety and dependability.

Executives focus on decision making. In a global business climate of overnight developments (world markets, political strife, military conflicts, natural disasters), executives must often react on the spur of the moment. In such cases they rely on the best information immediately available—even when this information is incomplete or unverified (Seglin, 1998, p. 54).

Managers oversee the day-to-day operations of their organizations, focus-

productivity, how to save money, how to avoid workplace accidents. They collaborate with colleagues and supervise various projects. To keep things running smoothly, managers rely on memos, reports, and other forms of information sharing.

Lawyers focus on protecting the organization from liability or corporate sabotage by answering questions like these: Do these instructions contain adequate warnings and cautions? Is there anything about this product that could generate a lawsuit? Have any of our trade secrets been revealed? Lawyers carefully review documents before approving their distribution outside the company.

The public focuses on the big picture—on what pertains to them directly: What does this mean to me? How can I use this product safely and effectively? Why should I even read this? They rely on information for some immediate practical purpose: to complete a task (What do I do next?), to learn more about something (What are the facts and what do they mean?), to make a judgment (Is this good enough?).

Because audiences' basic concerns vary, every audience expects a message tailored to its own specific interests, social conventions, ways of understanding problems, and information needs.

Review Checklist

Category	*Questions*
Analyzing audience	Who are they and what do they want to know? What communities do they belong to?
Analyzing purpose	Why is this information needed? What tasks will be performed with it?
Analyzing context	What organizational, social, legal, or professional issues apply?
Other Sources	
Corporate style guides	Is there a style guide available for reference?
User-preference documents	Do any user-preference documents exist?
Marketing surveys	Is any audience information available from the marketing department?

Exercises

1. Select a topic with which you are familiar; choose from hobbies, your job, or your academic major. Assume that you will be writing a brochure on this topic and that your audience is your classmates. Using the Audience Analysis Worksheet presented in this chapter, interview two or three classmates. From your notes, write an audience and purpose statement. It should begin: The audience for my brochure is [describe them]. The purpose of my brochure is [describe in terms of verbs: to inform, to train, to convince, etc.]. Trade your statement with a classmate and exchange feedback.
2. Focus on ➠Writing. Based on your experience with Exercise 1, modify the Audience Analysis Worksheet to include other questions, categories, or topics that you will need to learn about in order to understand your audience more fully. Write a memo to your instructor about your findings.
3. Focus on ➠Writing. Locate a short article related to your major (or part of a long article or a selection from your textbook for an advanced course). Choose a piece written at the highest level of technicality you can understand. Using the Audience Analysis Worksheet, write down the assumptions about the audience made by the author of this piece. What kind of audience did the author have in mind? What audience characteristics did she or he assume? What is/are the purpose(s) of this document? Now, working with a partner in class, discuss a different audience (laypeople, mixed audience, novices) for this topic. Write about the changes you might make to turn this article into something accessible to a new audience.
4. Locate an example of technical communication (brochure, Web page, report) that you feel has both primary and secondary audiences, *or* locate an example that you feel has several purposes. Explain these audiences and purposes to your class. Is the material designed primarily for one audience or one purpose? How are the secondary audiences or purposes addressed?

The Collaboration Window

Form teams of 3–6 people. If possible, teammates should be of the same or similar majors (electrical engineering, biology, graphics design, etc.). Address the following situation: An increasing number of first-year students are dropping out of the major because of low grades, stress, or inability to keep up with the work. Your task is to prepare an online "Survival Guide" for incoming

students. The Web site should focus on the challenges and pitfalls of the first year in this major. But before you can prepare the guide, you need to do a thorough analysis of its audience and purpose.

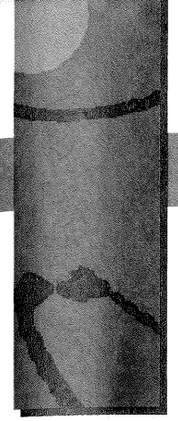
Assuming that some of you are in this major, perform an audience analysis using the Audience Analysis Worksheet on page 23 or a modified version of this worksheet. One team member should take notes, but all team members should participate, alternately, both as interviewers and interviewees. Take turns interviewing each student one at a time. Once you have a reasonable amount of information, draft an audience and purpose statement for your online Survival Guide (see Exercise 1).

The Global Window

Locate a document in hard copy or electronic form that appears to be designed primarily for U.S. audiences (it is written in English only, for example). Make a list of any features in this document that might reflect the writer's or designer's cultural bias. For example, items that U.S. readers may take for granted, such as the way dates are written, units of measurement, idioms, or slang, may be important issues if the document is read by someone who speaks American English as their second language. Discuss how you could edit these features so they would be more accessible to an international audience.

Click on This

Every day, people from all walks of life and backgrounds rely on weather reports. Meteorology is a scientific subject, yet most people seem to understand such technical concepts as "high pressure system," "jet stream," and "cold front." Examine three or four weather-related Web sites and determine how the writers and designers assessed their audience and what devices they used to make this information understandable to nontechnical audiences. You can start with the Franklin Institute Science Museum (www.fi.edu/weather). Make a list of features that appeal to a mixed audience, and present your findings in class.



CHAPTER 3

Designing Usable Information