In the following scenario, Creative International follows the writing process to create effective communication with its clients.

Connie Jones (President), Mary Michelson (Project Director), and Lori Smith (Director of Sales and Marketing) have made Creative International a cutting-edge company. Creative International works with organizations to define strategic communication goals. A key to their success is following a process “from the beginning to the end of a communication project.” They prewrite, write, and rewrite.

Prewriting:

- **Initial Client Contact**—Through telephone calls, e-mail messages, networking, or a preliminary meeting, Creative gathers data to discover the client’s needs. In this phase, the Creative team interviews the end users and observes them at work.

- **Clarify Request Meeting**—Meeting face to face with an upper-level decision maker, the Creative team collects information about the end user’s needs. Connie, Mary, and Lori don’t just say, “Sure, we can do that job.” Instead, they ask probing questions, such as “Why do you need that?” “Why do you want that?” “What do you want to communicate to your audience?”
Objectives

When you complete this chapter, you will be able to

1. Understand the writing process including prewriting, writing, and rewriting.
2. Prewrite to examine purposes and goals, to determine audience, to gather data, and to choose the communication channel.
3. Write to organize your information, provide visuals, and format content.
4. Test for usability of your technical communication.
5. Rewrite by adding or deleting information, simplifying terms, moving or reformatting content, changing style of writing, and correcting.
6. Apply the checklist to your technical communication.

• **Proposal Creation**—Following the initial meeting, Creative writes a proposal, complete with schedules, project plans, the project’s scope, and a description of the deliverables.

Writing:

• **Design, Development, Production, and Pilot Testing**—Creative creates text, graphics, audio and video training modules for final beta testing. This rough draft verifies that the product works the way everyone expects it to.

Rewriting:

• **Editing**—With input from both coworkers and the end user, Creative revises text by adding details, deleting unnecessary content, and correcting errors.

• **Evaluation and Maintenance**—Through end-user analysis, usability testing, and customer measurement, Creative ensures that the performance needs are met and that training materials are current and valid.

Creative International refers to its “process map” from the beginning to the end of a project. They use process for marketing, for internal communication, and for project planning and management. The writing process that Creative follows is recursive. It includes constant sign-offs and change orders. With input from all parties, during prewriting, writing, and rewriting, Creative provides its customers “communication that provides custom solutions.”

Check out our quarterly **newsletters** TechCom E-Notes at www.prenhall.com/gerson for dot.com updates, new case studies, insights from business professionals, grammar exercises, and facts about technical communication.
THE WRITING PROCESS: AN OVERVIEW

Technical communication is a major part of your daily work experience. It takes time to construct the correspondence, and your writing has an impact on those around you. A well-written memo, letter, report, or e-mail message gets the job done and makes you look good. Poorly written correspondence wastes time and creates a negative image of you and your company.

However, recognizing the importance of technical communication does not ensure that your correspondence will be well written. How do you effectively write the memo, letter, or report? How do you successfully produce the finished product? To produce successful technical communication, you need to approach writing as a process. The process approach to writing has the following sequence.

1. **Prewrite**—Before you can write your document, you must have something to say. Prewriting allows you to spend quality time, prior to writing the correspondence, generating information, considering the needs of the audience, and deciding how best to communicate.

2. **Write**—Once you have gathered your data and determined your objectives, the next step is to state them. You need to draft your document. To do so, you should organize the draft, supply visual aids, and format the content to allow for ease of access.

3. **Rewrite**—The final step, and one that is essential to successful communication, is to rewrite your draft. This step requires that you revise the rough draft. Revision allows you to test for usability and to perfect your memo, letter, report, or any document so you can be a successful communicator.

The writing process is dynamic, with the three parts—prewriting, writing, and rewriting—often occurring simultaneously. You may revisit any of these parts of the process at various times as you draft your document. The writing process is illustrated in Figure 2.1.

---

**FIGURE 2.1 The Writing Process**

**The Writing Process**

- **Prewriting**
  - Determine whether your audience is internal or external.
  - Write to inform, instruct, persuade, and build trust.
  - Choose the correct communication channel for your audience and purpose.
  - Gather your data.

- **Writing**
  - Organize your content using modes such as problem/solution, cause/effect, comparison, argument/persuasion, analysis, chronology.
  - Use figures and tables to clarify content.
  - Format the content for ease of access.

- **Rewriting**
  - Test for usability.
  - Revise your draft by
    - adding details
    - deleting wordiness
    - simplifying words
    - enhancing the tone
    - reformatting your text
    - proofreading and correcting errors
PREWRITING

Prewriting, the first stage of the process, allows you to plan your communication. If you do not know where you are going in the correspondence, you will never get there, and your audience will not get there with you. Through prewriting, you accomplish the following objectives:

- Examining your purposes
- Determining your goals
- Considering your audience
- Gathering your data
- Determining how the content will be provided

Examine Your Purposes

Before you write the document, you need to know why you are communicating. Are you planning to write because you have chosen to do so of your own accord or because you have been asked to do so by someone else? In other words, is your motivation external or internal?

External Motivation. If someone else has requested the correspondence, then your motivation is external. Your boss, for example, expects you to write a monthly status report, a performance appraisal of your subordinate, or a memo suggesting solutions to a current problem. Perhaps a vendor has requested that you write a letter documenting due dates, or a customer asks that you respond to a letter of complaint. In all of these instances, someone else has asked you to communicate.

Internal Motivation. If you have decided to write on your own accord, then your motivation is internal. For example, you need information to perform your job more effectively, so you write a letter of inquiry. You need to meet with colleagues to plan a job, so you write an e-mail message calling a meeting and setting an agenda. Perhaps you recognize a problem in your work environment, so you create a questionnaire and transmit it via the company intranet. Then, analyzing your findings, you call a meeting to report on them. In all of these instances, you initiate the communication.

Determine Your Goals

Once you have examined why you are planning to communicate, the next step is to determine your goals in the correspondence or presentation. You might be communicating to

- Persuade an audience to accept your point of view.
- Instruct an audience by directing actions.
- Inform an audience of facts, concerns, or questions you might have.
- Build trust and rapport by managing work relationships.

These goals can overlap, of course. You might want to inform by providing an instruction. You might want to persuade by informing. You might want to build trust by persuading. Still, it is worthwhile looking at each of these goals individually to clarify their distinctions.

Figure 2.2 depicts the interrelationship of these four communication goals.

Communicating to Persuade. If your goal in writing is to change others’ opinions or a company’s policies, you need to be persuasive. For example, you might want to write a proposal, a brochure, or a flier to sell a product or a service. Maybe you will write your annual progress report to justify a raise or a promotion. As a customer, you might want to write a letter of complaint about poor service. Your goal in each of these cases is to persuade an audience to accept your point of view.
CHAPTER 2

DATE: April 15, 2008
TO: Web Design Team
FROM: Doug Yost
SUBJECT: WEB SITE IMPLEMENTATION MEETING

Please attend our first Web site implementation meeting, scheduled for April 20, 11:00 A.M.–1:00 P.M. in Room 204.

To ensure productivity, I am asking that each of you prepare the following prior to our meeting:

1. Josh—inventory our stock product photos. Then determine if we will need to upgrade our graphics for the Web site’s online shopping cart. Your job also will be to redesign our corporate logo.
2. Tasha—research our competitors. Find out which components of their Web sites we might need to include in ours. More important, determine new screens we could add to make our site unique.
3. Ychun—contact our site administrator to determine optimum load-up time. This will help Josh and the team decide how many graphics to use.
4. Susan—mock up a storyboard for the proposed Web site. Visit with our staff in sales, accounting, human resources, and information technology to get their ideas.

This is an important meeting, as you all know. Without a Web site, our company has fallen behind the competition. Though our local market share is sound, our national and global sales are at least 56 percent below goal. The quick fix for this is a Web site, which will allow us to reach millions of potential clients at a keystroke. With an outstanding Web site, our company’s stock should increase, and that will mean bonuses for all.

I have chosen you four employees for this project not only for your expertise but also because of your proven record of excellence. You have worked well together on past projects. I am confident that again you will excel. Thank you for your talents.

P.S. Lunch is on me. I have chosen a vegetarian pasta and salad to accommodate everyone’s nutritional needs.

Communicating to Instruct. Instructions will play a large role in your technical communication activities. As a manager, for example, you often will need to direct action. Your job demands that you tell employees under your supervision what to do. You might need to write an e-mail providing instructions for correctly following procedures. These could include steps for filling out employee forms, researching documents in your company’s intranet data bank, using new software, or writing reports according to the company’s new standards.
As an employee, you also will provide instructions. As a computer information specialist, maybe you work the 1-800 hotline for customer concerns. When a customer calls about a computer crisis, your job would be to give instructions for correcting the problem. You either will provide a written instruction in a follow-up e-mail or a verbal instruction while on the phone.

**Communicating to Inform.** Often, you will write letters, reports, and e-mails merely to inform. In an e-mail message, for instance, you may invite your staff to an upcoming meeting. A trip report will inform your supervisor what conference presentations you attended or what your prospective client’s needs are. A letter of inquiry will inform a vendor about questions you might have regarding her services. Maybe you will be asked to write a newsletter informing your coworkers about the corporate picnic, personnel birthdays, or new stock options available to employees. In these situations, your goal is not to instruct or persuade. Instead, you will share information objectively.

**Communicating to Build Trust.** Building rapport (empathy, understanding, connection, and confidence) is a vital component of your communication challenge. As a manager or employee, your job is not merely to “dump data” in your written communication. You also need to realize that you are communicating with coworkers, people with whom you will work every day. To maintain a successful work environment, you want to achieve the correct, positive tone in your writing.

This might require nothing more than saying, “Thanks for the information,” or “You’ve done a great job reporting your findings.” A positive tone shows approval for work accomplished and recognition of the audience’s time. For more detail on audience recognition and involvement, read Chapter 4. Recognizing the goals for your correspondence makes a difference. Determining your goals allows you to provide the appropriate tone and scope of detail in your communication. In contrast, failure to assess your goals can cause communication breakdowns.

**Consider Your Audience**

What you say and how you say it is greatly determined by your audience. Are you writing up to management, down to subordinates, or laterally to coworkers? Are you speaking to a high-tech audience (experts in your field), a low-tech audience (people with some knowledge about your field), or a lay audience (customers or people outside your work environment)? Face it—you will not write the same way to your boss as you would to your subordinates. You will not speak the same way to a customer as you would to a team member. You must provide different information to a multicultural audience than you would to individuals with the same language and cultural expectations. You must consider issues of diversity when you communicate.

**Gather Your Data**

Once you know why you are writing and who is your audience, the next step is deciding what to say. You have to gather data. The page or screen remains blank until you fill it with content. Your communication, therefore, will consider personnel, dates, actions required, locations, costs, methods for implementing suggestions, and so forth. As the writer, it is your obligation to flesh out the detail. After all, until you tell your readers what you want to tell them, they do not know.
There are many ways to gather data. In this chapter, and throughout the textbook, we provide options for gathering information. These planning techniques include the following:

- Answering the reporter’s questions
- Mind mapping
- Brainstorming or listing
- Outlining
- Storyboarding
- Creating organization charts
- Flowcharting
- Researching (online or at the library)

Each is discussed in greater detail in Table 2.1 (except for research techniques which we discuss in Chapter 5). Table 2.2 lists some good Web sites for online research.

**Determine How the Content Will Be Provided—The Communication Channel**

After you have determined your audience, your goals, and your content, the last stage in prewriting is to decide which communication channel will best convey your message. Will you write a letter, memo, report, e-mail, instant message, Web site, proposal, instructional procedure, flier, or brochure or will you make an oral presentation?

In Table 2.3 you can review the many channels or methods you may use for communicating your content.

**Single Sourcing.** Maybe you will create content that will be used in a variety of communication channels simultaneously. Single sourcing is the act of “producing documents designed to be recombined and reused across projects and various media” (Carter 2003, 317). In a constantly changing marketplace, you will need to communicate your content to many different audiences using a variety of communication channels. For instance, you might need to market your product or service using the Internet, a flier, brochure, newsletters, and sales letter. You might need to write hard-copy user manuals and develop online help screens. To ensure that content is reusable, the best approach would be to write a “single source of text” that will “generate multiple documents for different media” (Albers 2003, 337).
### TABLE 2.1 Prewriting Techniques

#### Sample Reporter’s Questions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who</strong></td>
<td>Joe Kingsberry, Sales Rep</td>
</tr>
<tr>
<td><strong>What</strong></td>
<td>Need to know</td>
</tr>
<tr>
<td></td>
<td>• what our discount is if we buy in quantities</td>
</tr>
<tr>
<td></td>
<td>• what the guarantees are</td>
</tr>
<tr>
<td></td>
<td>• if service is provided on-site</td>
</tr>
<tr>
<td></td>
<td>• if the installers are certified and bonded</td>
</tr>
<tr>
<td></td>
<td>• if Acme provides 24-hour shipping</td>
</tr>
<tr>
<td><strong>When</strong></td>
<td>Need the information by July 9 to meet our proposal deadline</td>
</tr>
<tr>
<td><strong>Where</strong></td>
<td>Acme Radiators</td>
</tr>
<tr>
<td></td>
<td>11245 Armour Blvd.</td>
</tr>
<tr>
<td></td>
<td>Oklahoma City, Oklahoma 45233</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:jkings@acmerad.com">jkings@acmerad.com</a></td>
</tr>
<tr>
<td><strong>Why</strong></td>
<td>As requested by my boss, John, to help us provide more information to prospective customers</td>
</tr>
<tr>
<td><strong>How</strong></td>
<td>Either communicate with a letter or an e-mail. I can write an e-mail inquiry to save time, but I must tell Joe to respond in a letter with his signature to verify the information he provides.</td>
</tr>
</tbody>
</table>

#### Mind Mapping

**Picnic MindMap**

- Envision a wheel. At the center is your topic. Radiating from this center, like spokes of the wheel, are different ideas about the topic. Mind mapping allows you to look at your topic from multiple perspectives and then cluster the similar ideas.

#### Brainstorming or Listing

**Improving Employee Morale**

- Before meetings, ask employees for agenda items (that way, they can feel empowered)
- Consider flextime
- Review employee benefits packages
- Hold yearly awards ceremony for best attendance, highest performance, most cold calls, lowest customer complaints, etc.
- Offer employee sharing for unused personal days/sick leave days
- Roll over personal days to next calendar year
- Include employees in decision-making process
- Add more personal days (as a tradeoff for anticipated lower employee raises)

(Continued)
Outlining

This traditional method of gathering and organizing information allows you to break a topic into major and minor components. This is a wonderful all-purpose planning tool.

Topic Outline

1.0 The Writing Process
   1.1 Prewriting
      • Planning Techniques
   1.2 Writing
      • All-Purpose Organizational Template
      • Organizational Techniques
   1.3 Rewriting

2.0 Criteria for Effective Technical Communication
   2.1 Clarity
   2.2 Conciseness
   2.3 Document Design
   2.4 Audience Recognition
   2.5 Accuracy

Storyboarding

Storyboarding is a visual planning technique that lets you graphically sketch each page or screen of your text. This allows you to see what your document might look like.

Brochure Storyboard

Creating Organization Charts

This graphic allows you to see the overall organization of a document as well as the subdivisions to be discussed.

Organization Chart for Web Site

Home Page

Linked Page

Product Info

Linked Page

Prices

Linked Page

Job Opportunities

Warranties

Discounts

Technical Specs

Computer Technicians

Sales Reps

Administrative Assts.
Flowcharting is another visual technique for gathering data. Because flowcharting organizes content chronologically, it is especially useful for instructions. For example:

Stop/Start = 
Step = 
Decision =

TABLE 2.2 Internet Search Engines

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular online search engines</td>
<td>Yahoo.com, Excite.com, Google.com, AltaVista.com, Lycos.com, alltheweb.com, Ask Jeeves, and HotBot.com</td>
</tr>
<tr>
<td>Meta-search engines</td>
<td>MetaCrawler.com, Dogpile.com, and Vivisimo.com</td>
</tr>
<tr>
<td>(multithreaded engines that search</td>
<td></td>
</tr>
<tr>
<td>several major engines at once)</td>
<td></td>
</tr>
<tr>
<td>Specialty search engines</td>
<td>Findlaw.com focuses on legal resources. Achoo.com lets you access</td>
</tr>
<tr>
<td></td>
<td>health and medical sites.</td>
</tr>
<tr>
<td>Broad academic searches</td>
<td>Librarians’ Index to the Internet (<a href="http://lii.org">http://lii.org</a>) and</td>
</tr>
<tr>
<td></td>
<td>Infomine.ucr.edu</td>
</tr>
<tr>
<td>Business search engines</td>
<td>ZDNet.com, EarthLink.net, Business Week Online (<a href="http://www.businessweek.com">http://www.businessweek.com</a>), and AbusinessResource.com. For information about business news in Great Britain, look at All Search Engines.com (<a href="http://www.allsearchengines.co.uk/business_list.htm">http://www.allsearchengines.co.uk/business_list.htm</a>).</td>
</tr>
<tr>
<td>Government search sites</td>
<td>First Gov (<a href="http://firstgov.gov/">http://firstgov.gov/</a>) and Google’s Uncle Sam</td>
</tr>
<tr>
<td></td>
<td>(<a href="http://www.google.com/unclesam">http://www.google.com/unclesam</a>)</td>
</tr>
<tr>
<td>International search sites</td>
<td>Search Engine Colossus, Abyz News Links (international newspapers</td>
</tr>
<tr>
<td></td>
<td>and magazines), and World Press Review (international perspectives on</td>
</tr>
<tr>
<td></td>
<td>the United States)</td>
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<tr>
<td>Multipurpose search engines</td>
<td>All Search Engines.com gives you a one-stop search site for exactly</td>
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<tr>
<td></td>
<td>what it says: all search engines</td>
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<tr>
<td></td>
<td>(<a href="http://www.allsearchengines.com/">http://www.allsearchengines.com/</a>).</td>
</tr>
<tr>
<td>Communication Channels</td>
<td>Good News/Bad News</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>E-mail messages and instant messages</strong></td>
<td><strong>Benefits:</strong> These types of electronic communication are quick and can almost be synchronous. You can have a real-time, electronic chat with one or more readers. Though e-mail messages should be very short (20 or so lines of text), you can attach documents, Web links, graphics, and sound and movie files for review. <strong>Challenges:</strong> E-mail and instant messages tend to be less formal than other types of communication. E-mail might not be private (a company’s network administrators can access your electronic communication).</td>
</tr>
<tr>
<td><strong>Letters</strong></td>
<td><strong>Benefits:</strong> Typed on official corporate letterhead stationery, letters are formal correspondence to readers outside your company.                                                                                 <strong>Challenges:</strong> Letters are time consuming because they must be mailed physically. Although you can enclose documents, this might demand costly or bulky envelopes.</td>
</tr>
<tr>
<td><strong>Memos</strong></td>
<td><strong>Benefits:</strong> Memos—internal correspondence to one or several coworkers—allow for greater privacy than e-mail (e-mail can be kept in corporate computer banks and observed by administrators within a company). Even though most memos are limited in length (one or two pages), you can attach or enclose documents. <strong>Challenges:</strong> Memos are both more time consuming than e-mail and less formal than letters.</td>
</tr>
<tr>
<td><strong>Reports and proposals</strong></td>
<td><strong>Benefits:</strong> Reports, internal and external, are usually very formal. They can range in length, from one page to hundreds of pages (proposals and annual corporate reports to stakeholders, for example). Because of their length, reports are appropriate for extremely detailed information. <strong>Challenges:</strong> They can be time consuming to write.</td>
</tr>
<tr>
<td><strong>Brochures</strong></td>
<td><strong>Benefits:</strong> Brochures are appropriate for informal informational and promotional communication to large audiences.                                                                                                  <strong>Challenges:</strong> Most brochures are limited to six or so panels, the equivalent of a back and front hard copy. Thus, in-depth coverage of a topic will not occur.</td>
</tr>
<tr>
<td><strong>Web sites, intranets, extranets, and blogs</strong></td>
<td><strong>Benefits:</strong> An Internet Web site or blog can provide informal and public communication to the entire world—anytime, anywhere (with the appropriate technological connections). A company can have a firewall-protected intranet or extranet to allow more private communication for a large, selected audience. Web sites essentially have unlimited size, so you can provide lots of information, and the content can be updated instantaneously by Web designers. A Web site can include links to other sites, animation, graphics, and color. <strong>Challenges:</strong> Audiences need access to the Internet. Blogs could divulge sensitive corporate communication.</td>
</tr>
<tr>
<td><strong>Microsoft PowerPoint for oral presentations</strong></td>
<td><strong>Benefits:</strong> PowerPoint slides enhance written and oral communication, not only making correspondence look more professional but also aiding clarity. A pie chart, bar chart, line graph, or map within a PowerPoint presentation can make complex information more clear. <strong>Challenges:</strong> PowerPoint slides usually convey only key points or a synopsis, rather than very lengthy details.</td>
</tr>
</tbody>
</table>
WRITING

Writing lets you package your data. Once you have gathered your data, determined your objectives, recognized your audience, and chosen the channel of communication, the next step is writing the document. You need to package it (the draft) in such a way that your readers can follow your train of thought readily and can easily access your data. Writing the draft lets you organize your thoughts in some logical, easy-to-follow sequence. Writers usually know where they are going, but readers do not have this same insight. When readers pick up your document, they can read only one line at a time. They know what you are saying at the moment, but they don’t know what your goals are. They can only hope that in your writing, you will lead them along logically and not get them lost with unnecessary data or illogical arguments.

Organization

To avoid confusing or misleading your audience, you need to organize your thoughts. As with prewriting, you have many organizational options. In Chapter 3, we discuss organizing according to the following traditional methods of organization.

- Space (spatial organization)
- Chronology
- Importance
- Comparison/contrast
- Problem/solution

These organizational methods are not exclusive. Many of them can be used simultaneously within a memo, letter, report, proposal, or any communication to help your reader follow your train of thought.

Formatting

You also must format your text to allow for ease of access. In addition to organizing your ideas, you need to consider how the text looks on the page. If you give your readers a massive wall of words, they will file your document for future reading and look for the nearest exit. An unbroken page of text is not reader friendly. To invite your readers into the document, to make them want to read the memo, letter, or report, you need to highlight key points and break up monotonous-looking text. You need to ensure that your information is accessible.

FAQs

Q: Do writers actually follow a process when they compose correspondence?

A: Most good writers follow a process. It’s like plotting your route before a trip. Sure, someone can get in a car without a map, head west (or east or north or south) and find their destination without getting lost, but mapping the route before a trip assures that you won’t get lost and waste time.

There’s no one way to plot your destination. Prewriting might entail only a quick outline, a few brief notes that list the topics you plan to cover and the order in which you’ll cover them. This way, you will know where you’re going before you get there.

In addition to creating both brief and sometimes much more detailed outlines, an important part of prewriting is considering your audience. By considering the readers, writers can decide how much detail, definition, or explanation is needed. In fact, thinking about the audience can even help writers determine how many examples or illustrations to include and what details need to be removed from the document.

After prewriting, good writers always perceive of their text as a draft that can be improved. All writing can be improved. Improving text requires rewriting. Word processing programs make this essential step in the process easier. Word processing programs let you add, delete, and reformat text. Today, it’s impossible to type a document on a word processor without considering the terms highlighted in color (spelling and grammar errors). Thus, editing is an integral part of writing.
Rewriting
Rewriting lets you perfect your writing. After you have prewritten (to gather data, organize your thoughts, and understand your audience) and written your draft, your final step is to rewrite. Revision requires that you look over your draft to determine its usability and correctness.

Usability Testing
A memo, letter, report, instruction, or Web site is only good if your audience can understand the content and use the information. Usability testing helps you determine the success of your draft. Through usability testing, you decide what works in the draft and what needs to be rewritten. Thus, usability focuses on the following key factors.

- **Retrievability**—Can the user find specific information quickly and easily?
- **Readability**—Can the user read and comprehend information quickly and easily?
- **Accuracy**—Is the information complete and correct?
- **User satisfaction**—Does the document present information in a way that is easy to learn and remember? (Dorazio 2000)

See the usability checklist on page 35.

Revision Techniques
After testing your document for usability, revise your text by using the following revision techniques.

- **Add** any missing detail for clarity.
- **Delete** dead words and phrases for conciseness.
- **Simplify** unnecessarily complex words and phrases to allow for easier understanding.
- **Move** around information (cut and paste) to ensure that your most important ideas are emphasized.
- **Reformat** (using highlighting techniques) to ensure reader-friendly ease of access.
- **Enhance** the tone and style of the text.
- **Correct** any errors to ensure accurate grammar and content.

We discuss each of these points in greater detail throughout the text.
How Important Is Proofreading?

Do employees in the workplace really care about grammar and mechanics? Is proofreading only important to teachers? Proofreading is absolutely important. Incorrect documentation costs companies money. “A misplaced decimal point resulted in one company paying . . . $120,000 in taxes on a piece of industrial equipment, instead of the $1,200 the firm rightfully owed.”

A Chicago-based company purchased an industrial sander for $54,589.62. Unfortunately, when listing the purchase on their year-end taxes, the company reported the purchase price as $5,458,962. This misplaced decimal point equaled a difference of over $5 million. The issue is now in court, of course costing even more money. A single mark of punctuation can be important (Rizzo 2005, A1, A6).
Table 2.4 shows the importance of proofreading. The National Commission on Writing highlights what employers and employees consider to be essential skills in technical communication (“Writing: A Powerful Message from State Government” 2005, 19).

Revision is possibly the most important stage in the writing process. If you prewrite effectively (gathering your data, determining your objectives, and recognizing your audience) and write an effective draft, then you are off to a great start. However, if you then fail to rewrite your text, you run the risk of having wasted the time you spent prewriting and writing. Rewriting is the stage in which you make sure that everything is just right. Failure to do so not only can cause confusion for your readers but also can destroy your credibility.

**TECHNOLOGY TIPS**

**Using Microsoft Word 2007 for Rewriting**

Word-processing programs help you rewrite your document in many ways.

- **Spell check**—when you misspell a word, often spell check will underline the error in red (as shown in the following example with “grammer” incorrectly spelled). Spell check, unfortunately, will not catch all errors. If you use a word like to instead of too, spell check will not no the difference (of course, that should be “know” but spell check did not mark the error). Microsoft Word 2007’s “Review” tab also provides you access to proofreading help, and allows you to make comments and track changes.

![Spell check example](image)

- **Grammar check**—word processors also can help you catch grammar errors. Grammar check underlines errors in green. When you right-click on the underlined text, the word-processing package will provide an optional correction.

![Grammar check example](image)

- **Add/Delete**—word processing makes adding new content and deleting unneeded text very easy. All you need to do is place your cursor where you want to add/delete. Then, to add, you type. To delete, you hit the Backspace key or the Delete key.

- **Move**—the Copy, Cut, and Paste features of word processing allow you to move text with ease.

- **Enhance/Reformat**—in addition to changing the tone of your text, you also can enhance the visual appeal of your document at a keystroke. From the Home tab on your toolbar, you can choose from the Word 2007 Ribbon and include bullets, italics, boldface, font changes, numbered lists, etc.
TABLE 2.4 Essential Skills in Technical Communication

<table>
<thead>
<tr>
<th>Skills</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>87.8%</td>
</tr>
<tr>
<td>Spelling, Grammar, Punctuation</td>
<td>71.4%</td>
</tr>
<tr>
<td>Clarity</td>
<td>69.4%</td>
</tr>
<tr>
<td>Documentation/Support</td>
<td>61.2%</td>
</tr>
<tr>
<td>Logical</td>
<td>55.1%</td>
</tr>
<tr>
<td>Concise</td>
<td>42.9%</td>
</tr>
<tr>
<td>Visual Appeal</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

The process approach to writing—including prewriting, writing, and rewriting (usability testing)—can help you communicate successfully in any work environment or writing situation. In fact, the greatest benefit of process is that it is generic. Process is not designed for any one profession or type of correspondence. No author of a technical communication book can anticipate exactly where you will work, what type of documents you will be required to write, or what your supervisors will expect in your writing. However, we can give you a methodology for tackling any communication activity. Writing as a process will help you write any kind of oral or written communication, for any boss, in any work situation.

SPOTLIGHT

An Editor’s Use of the Writing Process

Candice Millard, an editor at Wireless World and National Geographic magazines, and author of The River of Doubt sees herself as “the reader’s advocate.” As an editor, her job is to make sure that readers understand the text she is editing. Candice states, “Because authors invest enormous time and effort in their writing, they often become so attached to their work that they get lost in the details.” Ms. Millard’s job is to be the detached eye, the objective reader’s point of view.

In the writing process, Candice’s authors are in charge of the prewriting and writing. Ms. Millard’s job focuses on the final stage of the writing process—rewriting. To accomplish this goal, she offers these editorial hints.

• **Start big and get small.** To achieve editorial objectivity, Candice says that she must “step back, get the big picture, and then work toward the details.” She asks herself, “What’s superfluous, what’s confusing, what questions do I have that haven’t been answered, and where is clarity needed?”

• **Flesh out the details.** Candice’s next job is to “fill in the holes.” Sometimes, Candice’s biggest challenge is defining her authors’ highly technical terminology. When authors depend on jargon, Candice “translates the terms.”

• **Slice and dice.** The opposite goal to adding detail for clarity is deleting text. Candice also must “edit out contradictions, weed the irrelevancies, remove the distractions, and excise whatever might ring false.”

• **Practice diplomacy.** Candice’s authors are all experts in their fields. When these authors write about what they love, every word they use is precious to them; every detail is crucial. Candice, on the other hand, must cut their text to fit space limitations and to meet a reader’s limited attention span. Cutting makes “people bristle.” Therefore, when editing, she considers how her comments will affect the writer. She “engages in conversation, points out what’s good, tempers the bad with the positive, and then weaves in required changes.”

As an editor, Candice knows that she isn’t just dealing with words; she is working with people.
THE WRITING PROCESS AT WORK

Following is a letter produced using the process approach to writing. The document was produced in the workplace by a senior transportation analyst for an international cosmetics firm. He had to write a problem/solution follow-up letter to a sales representative.

Prewriting
A senior transportation analyst received a phone call from an unhappy sales representative. The sales rep had not received a shipment of goods on time, and the shipment was incomplete when it did arrive. While talking to the sales rep, the analyst jotted down notes, as shown in Figure 2.3 (using the listing method of prewriting).

In addition to listing, the transportation analyst used another prewriting technique—reporter’s questions. The note tells us who the sales rep is (Beth); what her Social Security number, phone number, and sales area are; what her problem is (late and missing goods); where the shipment originated (Denver); how much was ordered ($700); and when the shipment was due (2 weeks ago). By jotting down this list, the analyst is gathering data. After concluding his discussion with Beth, the analyst contacted his manager to decide

FIGURE 2.3 Listing

365-6532

Beth Fox
449-87-7247
Milwaukee

1. two weeks ago
2. June $300 short
3. Troy $700 ordered
4. Denver
5. split order
what to do next. This time, the analyst wrote down a list of objectives, as determined by his manager, as shown in Figure 2.4.

The list again answers the reporter’s questions: *what* to do (write a letter), *who* gets a copy (manager), *what* to focus on in the letter (we understand your problem; here is an alternative), and *why* to pursue the alternative (better control of shipment).

With data gathered and objectives determined, the analyst was ready to write.

**Writing**

First, the analyst wrote a rough draft (revising it as he wrote), as shown in Figure 2.5. In this draft, the analyst made subtle changes by adding new detail and deleting unnecessary words. However, he was unsatisfied with this draft, so he tried again (see Figure 2.6).

As is evident from the first two drafts (Figures 2.5 and 2.6), the analyst took the word *rough* seriously. When you draft, do not worry about errors or how the correspondence looks. It is meant to be rough, to free you from worry about making errors. You can correct errors when you revise.
CHAPTER 2

Thank you for your letter regarding the split deliveries.

Thank you for letting me know about the split deliveries of your campaign 19 orders. Our talk gives me an opportunity not only to explain the situation but also to offer help. Here’s the way the situation works. Allied sorts packages individually rather than as a group. That is, even though we send your orders to Allied as a unit, they all under your name, it loads its trucks not according to order but just as individual boxes. Thus, because some, occasionally one carton ends up on one truck while the other is shipped separately. You then received such a split order.

FIGURE 2.6 Second Rough Draft

Once the analyst drafted the letter, he typed a clean copy for his manager’s approval (Figure 2.7). At this point, the manager added a dateline and added content to the second paragraph. He deleted wordiness in the second and third paragraphs. By deleting the entire fourth paragraph, the manager enhanced the tone of the document (see Figure 2.8).

Rewriting

No writing is ever perfect. Every memo, letter, or report can be improved. Note how the manager improved the analyst’s typed draft. When the senior transportation analyst received the revised letter from his manager, he typed and mailed the final version (Figure 2.9).

Once the manager received his copy, he wrote the note you see in the letter’s top right corner. When you approach writing as a step-by-step process (prewriting, writing, and rewriting), your results usually are positive—and you will receive positive feedback from your supervisors.

Each company you work for over the course of your career will have its own unique approach to writing memos, letters, and reports. Your employers will want you to do it their way. Company requirements vary. Different jobs and fields of employment require different types of correspondence. However, you will succeed in tackling any writing task if you have a consistent approach to writing. A process approach to writing will allow you to write any correspondence effectively.
Mrs. Beth Fox  
6078 Browntree  
Milwaukee, WI 53131

Dear Mrs. Fox:

Thanks for letting me know about the split delivery of your Campaign 19 order. Our talk last week gives me an opportunity not only to explain the situation but also to offer help.

Here's the way Allied Shipping works. Allied will deliver to your home; however, Allied sorts packages individually rather than as a group. That is, even though we send your packages as a unit (all under your name), Allied loads its trucks not by complete order, but just as individual cartons. Because of this, occasionally, one carton ends up on one truck with another carton shipped separately. You received such a split order. This is an inherent flaw in Allied's system.

Because we understand this problem, we have an alternative delivery service for you. Here is our option. Free of charge, you can have your order delivered by our delivery agent, who does not split orders. Our agent, however, will deliver only within a designated area. All we need from you is an alternative address of a friend or relative in the designated delivery area.

I realize that neither of these options is perfect. Still, I wanted to share them with you. Your district manager now can help you decide which option is best for you.

Sincerely,

David L. Porter  
Senior Transportation Analyst
Mrs. Beth Fox  
6078 Browntree  
Milwaukee, WI 53131  

Dear Mrs. Fox:

Thanks for letting me know about the split delivery of your Campaign 19 order. Our talk last week gives me an opportunity not only to explain the situation but also to offer help.

Here’s the way Allied Shipping works. Allied will deliver to your home; however, Allied sorts packages individually rather than as a group. That is, even though we send your packages as a unit (all under your name), Allied loads its trucks not by complete order but just as individual cartons. Because of this, occasionally, one carton ends up on one truck with another carton shipped separately. You received such a split order. This is an inherent flaw in Allied’s system.

Because we understand this problem, we have an alternative delivery service for you. Here is our option. Free of charge, you can have your order delivered by our delivery agent, who does not split orders. Our agent, however, will deliver only within a designated area. All we need from you is an alternative address of a friend or relative in the designated delivery area. Should you be unable to establish a different delivery address, we will still work with Allied to ensure that you receive home delivery of your complete orders.

I realize that neither of these options is perfect. Still, I wanted to share them with you. Your district manager now can help you decide which option is best for you.

Sincerely,

David L. Porter  
Senior Transportation Analyst

FIGURE 2.8 Revised Draft

However, Allied constantly works with us to eliminate these service failures.  
whose system has better control of orders  

Dateline?
Carefree Cosmetics  
83rd and Preen  
Kansas City, MO 64141  

September 21, 2005  

Mrs. Beth Fox  
6078 Browntree  
Milwaukee, WI 53131  

Dear Mrs. Fox:

Thanks for letting me know about the split delivery of your Campaign 19 order. Our talk last week gives me an opportunity not only to explain the situation but also to offer help.

Allied will deliver to your home; however, Allied sorts packages individually rather than as a group. Even though we send your packages as a unit (all under your name), Allied loads its trucks not by complete order but by individual cartons. Because of this, occasionally one carton ends up on one truck with another carton shipped separately. You received such a split order. This is an inherent flaw in Allied's system; however, Allied constantly works with us to eliminate these service failures.

Because we understand this problem, we have an alternative delivery service for you. Free of charge, you can have your order delivered by our delivery agent, whose system has better control of orders. Our agent, however, delivers only within a designated area. If you would like this service, we will need an alternate delivery address in Milwaukee.

Should you be unable to establish a different delivery address, we will still work with Allied to ensure that you receive home delivery of your complete orders.

Sincerely,

David L. Porter

Senior Transportation Analyst

pc: R. H. Handley
CHAPTER HIGHLIGHTS

1. Writing effectively is a challenge for many people. Following the process approach to writing will help you meet this challenge.
2. Prewriting helps you determine your goals, consider your audience, gather your data, examine your purposes, and determine the communication channel.
3. Prewriting techniques will help you get started. Try answering reporter’s questions, mind mapping, brainstorming or listing, outlining, storyboarding, creating organization charts, flowcharting, or researching.
4. When you prewrite, you decide whether you are communicating to persuade, instruct, inform, or build trust.
5. To begin writing a rough draft, organize your material, consider the layout and design of the communication, and add visual aids such as tables and figures.
6. You can communicate content through e-mail messages, instant messages, blogging, letters, memos, reports, brochures, proposals, Web sites, and PowerPoint presentations.
7. Perfect your text by testing for usability.
8. Rewrite your document by adding, deleting, simplifying, moving, reformatting, enhancing, and correcting.
9. Proofreading is an essential part of the rewriting step in the writing process. Lack of proofreading causes businesses to lose money.
10. Accuracy is an essential skill in business according to The National Commission on Writing.

APPLY YOUR KNOWLEDGE

CASE STUDIES

1. You are the co-chair of the “Mother’s Weekend” at your sorority, fraternity, or other school organization. Using mindmapping and listing, brainstorm the activities, menus, locations, decorations, dates, and fees for this weekend’s festivities. Brainstorm the pros and cons of hosting the weekend at your sorority or fraternity house or at a hotel or restaurant.

Assignment

Write an outline showing the decisions you’ve made regarding the topics above. Then, write a short memo or e-mail to your organization’s executive board sharing your findings.

2. You work for the Oneg, Oregon, City Planning Department. Your boss, Carol Haley, has received complaints recently from citizens concerned about a wastewater facility being built in their neighborhood. The homeowners are worried about odors, chemical runoff in nearby Tomahawk Creek, decreases in home values, and a generally diminished quality of life in the neighborhood. The wastewater facility will be built. Despite the citizens’ concerns, City Planning has decided that the city needs and will profit from the plant. Nonetheless, you must respond to these complaints, acting upon the citizens’ issues.

For odor abatement, the wastewater management company plans to control fumes and particulate matter through the use of cross flow and wet scrubbers, thermal oxidizers, absorption materials, and bio-filters. Many of the concerns regarding runoff and home
values can be solved through improved land management and ecological restoration. By planting more reeds, bushes, and trees in the green space between the homes and the proposed plant, runoff can be absorbed more efficiently and green barriers will improve home values. Finally, you have learned that the wastewater company wants to be a good neighbor. To do so, it plans to become actively involved in the community by building more parks, playgrounds, hike/bike trails, and by stocking the nearby pond.

Assignment
In small teams or as individuals, write an e-mail to the boss, Carol Haley, detailing the problems and suggesting solutions. Be sure to consider page layout and space limitation presented by technology.

3. Electronic City is a retailer of DVDs, televisions, CDs, computer systems, cameras, telephones, fax machines, printers, and more. Electronic City needs to create a Web site to market its products and services. The content for this Web site should include the following:

<table>
<thead>
<tr>
<th>Prices</th>
<th>Store hours</th>
<th>Warranties</th>
<th>Service agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job opportunities</td>
<td>Installation fees</td>
<td>Extended holiday hours</td>
<td>Discounts</td>
</tr>
<tr>
<td>Technical support</td>
<td>Product information</td>
<td>Special holiday sales</td>
<td>Delivery fees</td>
</tr>
</tbody>
</table>

Assignment
Review the list of Web site topics above. Using an organizational chart, decide how to group these topics. Which will be major links on the Web site’s navigation bar? Which will be topics of discussion within each of the major links?

Once you have organized the links, sketch the Web site by creating a storyboard.

4. You are the special events planner in the Marketing Department at Thrill-a-Minute Entertainment Theme Park. You and your project team need to plan the grand opening of the theme park’s newest sensation ride—The Horror—a wooden roller coaster that boasts a 10 g drop. What activities should your team plan to market and introduce this special event?

Assignment
Using at least three of the planning techniques discussed in this chapter, gather ideas for a day-long event to introduce The Horror. Report your findings as follows:

• In the brief report to your Marketing Department boss, explain why you are writing, give options for the event and clarify which techniques you used to gather ideas, and sum up by recommending what you think are the best marketing approaches.
• Write an e-mail to your teacher providing options for the event and explaining which techniques you used to gather data.
• Give an oral presentation in class providing options for the event and explaining which techniques you used to gather data.

INDIVIDUAL AND TEAM PROJECTS
1. To practice prewriting, take one of the following topics. Then, using the suggested prewriting technique, gather data.
   a. **Reporter’s questions.** To gather data for your resume, list answers to the reporter’s questions for two recent jobs you have held and for your past and present educational experiences.
   b. **Mind mapping.** Create a mind map for your options for obtaining college financial aid.
   c. **Brainstorming or listing.** List five reasons why you have selected your degree program or why you have chosen the school you are attending.
   d. **Outlining.** Outline your reasons for liking or disliking a current or previous job.
   e. **Storyboarding.** If you have a personal Web site, use storyboarding to graphically depict the various screens. If you do not have such a site, use storyboarding to graphically depict what your site’s screens would include.
f. **Creating organizational charts.** What is the hierarchy of leadership or management at your job or college organization (fraternity, sorority, club, or team)? To graphically depict who is in charge of what and who reports to whom, create an organizational chart.

g. **Flowcharting.** Create a flowchart of the steps you followed to register for classes, buy a car, or seek employment.

h. **Researching.** Go online or find a hard copy of the *Occupational Outlook Handbook*. Then, research a career field that interests you. Reading the *Occupational Outlook Handbook*, find out the nature of the work, working conditions, employment opportunities, educational requirements, and pay scale.

2. Using the techniques illustrated in this chapter, edit, correct, and rewrite the following flawed memo.

---

**PROBLEM-SOLVING THINK PIECE**

In an interview, a company benefits manager said that she spent over 50 percent of her workday on communication issues. These included the following:

- Consulting with staff, answering their questions about retirement, health insurance, and payroll deductions
- Meeting weekly with human resources (HR) colleagues
- Collaborating with project team members
- Preparing and writing quarterly reports to HR supervisors
- Teleconferencing with third-party insurance vendors regarding new services and/or costs
- E-mailing supervisors and staff, in response to questions
- Calling and responding to telephone calls
- Faxing information as requested
- Writing letters to vendors and staff to document services

---

**DATE:** April 3, 2008  
**TO:** William Huddleston  
**FROM:** Julie Schopper  
**SUBJECT:** TRAINING CLASSES

Bill, our recent training budget has increased beyond our projections. We need to solve this problem. My project team has come up with several suggestions, you need to review these and then get back to us with your input. Here is what we have come up with.

We could reduce the number of training classes, fire several trainers, but increase the number of participants allowed per class. Thus we would keep the same amount of income from participants but save a significant amount of money due to the reduction of trainer salaries and benefits. The downside might be less effective training, once the trainer to participant ratio is increased. As another option, we could outsource our training. This way we could fire all our trainers which would mean that we would save money on benefits and salaries, as well as offer the same number of training sessions, which would keep our trainer to participant ratio low.

What do you think. We need your feedback before we can do anything so even if you are busy, get on this right away. Please write me as soon as you can.
Though she had to use various methods of both written and oral communication, the communication channels each have benefits and drawbacks. E-mailing, for example, has pluses and minuses (convenience over depth of discussion, perhaps). Think about each of the communication options above. Using the table below, list the benefits of each particular type of communication versus the drawbacks.

<table>
<thead>
<tr>
<th>Communication Channels</th>
<th>Benefits</th>
<th>Drawbacks</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-on-one discussions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaborative projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written reports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teleconferences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone calls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faxes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Letters</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WEB WORKSHOP

1. Proofreading is a key component of successful technical communication. Access the following Web sites and read what these sites suggest as editing/proofreading hints. Compare the content to your approaches to proofreading and editing. Write an e-mail message or memo summarizing your findings.
   - Literacy Education Online, http://leo.stcloudstate.edu/acadwrite/genproofed.html
   - Purdue University’s Online Writing Lab, http://owl.english.purdue.edu/handouts/general/gl_edit.html

2. The Society for Technical Communication provides a link to professional articles about usability testing: http://www.stcsig.org/usability/. Read any of the articles found in this Web site and report on your findings in an e-mail message or memo.

QUIZ QUESTIONS

1. What are the three main parts of the writing process?
2. What are four ways you can provide technical communication content?
3. What can you achieve by prewriting?
4. What is the difference between external and internal motivation?
5. Why should you consider your audience before you begin writing?
6. What are four different prewriting techniques?
7. Why do you consider format when you write a business document?
8. What are four rewriting techniques?
9. What happens when you fail to revise accurately?
10. How can the writing process help ensure that you become a successful writer?
11. What are four goals of technical communication?
12. What are three search engines?
13. How do reporters’ questions differ from mind mapping?
14. What is usability testing?
15. How can software help you to rewrite your documents?