**UNIT ONE**

**WRITE TO LEARN**

Think about the many types of writing you do—for example, writing for school, on your job, in a diary or journal for self-expression, or to family and friends. With what kind of writing are you most comfortable? What kind of writing do you find most difficult or most uncomfortable? Of the writing you do, which would you consider to be technical writing? How would you define the term *technical communication?*

Read the sample writing excerpts on pages 3–5.

• What is the subject?

• For whom was the document written?

• How is the document organized?

• How would you describe the writer’s (or writers’) style?

• What is the tone of the document?

• Does the document include any special features (for example, boldfacing, numbering, bulleted lists, visual aids, headings, or subheadings)?

What Is Technical Writing?

Writing @work

Mark Overbay manages marketing and communications for Counter Culture Coffee, a Durham, North Carolina–based specialty coffee organization. His many responsibilities include producing product copy, white papers, advertisements, packaging copy, online content, thematic signage, and tradeshow displays.

“Marketing is a form of storytelling,” says Mark, who believes that marketing copy must be “short and sweet.” “You only have a few words or phrases to ‘hook’ your readers, whether they are journalists reading a press release or grocery shoppers glancing at the coffee bags on a shelf. Good marketing copy must tell an interesting, sometimes even romantic story, but it should never be long-winded.”

Mark’s biggest technical writing challenge involves presentation and style: “Developing a Counter Culture Coffee ‘voice’ that authentically represents our company and all that we do is the most difficult aspect of my professional writing. When I write for our online news section or blog, I can write as Mark Overbay; but most of my professional writing is in the voice of Counter Culture Coffee, which represents not just me, but more than 40 staff members and hundreds of partnering coffee farmers.”

Mark relies heavily on e-mail. “E-mail, for all its limitations and sterility, is invaluable in my professional life. Not only does it allow for structured written communication and instant delivery, but it also provides a permanent record of every e-conversation.”

Mark advises aspiring technical writers to hone three skills in particular: (1) work ethic to constantly improve their writing; (2) preparation and care for each assignment because “. . . every word and detail matters. Successful communicators take the time to research their subjects thoroughly”; and (3) clarity because “successful communicators keep things simple—not dumbed down—and to the point. Be clear, concise, and confident in your message.”

**YOU ARE A TECHNICAL WRITER!**

Have you ever given someone written directions or drawn a map to your home? Have you ever written brief instructions for how to use a fax machine at work? Have you ever told someone how to make French toast? If you answered yes to any of those questions or have had similar experiences, you have already engaged in technical writing or technical communication.

**Definition of Technical Writing** Candace, an award-winning saxophonist, began teaching saxophone lessons to sixth graders. For the first lesson, she drew a diagram of an alto sax and created a step-by-step guide explaining how to take the instrument apart and reassemble it. When she saw how easily students could follow her instructions, she was pleased that her words were helping them learn to do something she enjoyed.

Candace might have been surprised to learn that she was using technical communication. **Technical communication** is communication done in the workplace. The message usually involves a technical subject with a specific purpose and audience. The approach is straightforward. Candace was giving practical information to a specific audience—information that would enable her audience to take action. When she referred to the diagram and explained the procedure aloud to her students, she was using technical communication. When she wrote the instructions to accompany her diagram, she was using technical writing. **Technical writing** is writing done in the workplace, although the workplace may be an office, a construction site, or a kitchen table. The subject is usually technical, written carefully for a specific audience. The organization is predictable and apparent, the style is concise, and the tone is objective and businesslike. Special features may include visual elements to enhance the message.

Use the *You Are a Technical Writer* worksheet as a guide to brainstorm the types of technical writing you already know. Go to www.cengage. com/school/bcomm/techwtg. Click the link for Chapter 1; then click Data Files.

Good writers understand that they will not always know who is reading their writing (especially e-mail) or how their writing will be used.

Technical documents can range from a half-page memo announcing the winner of a sales competition to a 500-page research grant proposal requesting money to test a new drug for treating obesity. The term *technical writing* describes documents produced in areas such as business, science, social science, engineering, and education. Sales catalogs, business letters, financial reports, standard operating procedures, medical research studies, lab reports—all of these and more are examples of technical writing.

**Technical Writing Is Essential in the Workplace** Written communication is essential in the workplace for many reasons. It allows readers to read and study at their convenience, easily pass along information to others, and keep a permanent record for future reference.

Regardless of the career you choose, you will write in the workplace. According to Paul V. Anderson in *Technical Communication: A Reader- Centered Approach,* conservative estimates suggest that you will spend at least 20 percent of your time writing in a technical or business occupation. Professionals in engineering and technology careers spend as much as 40 percent of their time writing.

In today’s business environment, employees can easily be overwhelmed by information overload, with information competing for their attention from every direction—television, radio, newspapers, magazines, books, e-mail, the Internet, CD-ROMs, and DVDs. Because of information overload, you must be able to read documents quickly and efficiently, understand them the first time you read them, and know that the information is accurate. Up-to-date information provides companies with a competitive edge, speeding critical decision making and allowing job specialization.

Technical writers who help companies manage the information overload are vital resources. They understand that their readers must be able to skim or skip text and find important information quickly. As a professional in great demand, the technical writer faces a challenging, exciting, and rewarding future.

Different careers generate different kinds of reports: Nurses chart a patient’s medical condition so that the next shift’s nurses can continue patient care. Police accident reports record facts for later use in court. Chemists and engineers document procedures to comply with government regulations. Accountants prepare annual client reports. Sales representatives write sales proposals. Professors write grant proposals. Park rangers write safety precautions. Insurance claims adjusters write incident reports. Travel agents design brochures. Public relations officers write news releases, letters, and speeches.

When you write, you demonstrate your ability to analyze, solve problems, and understand technical processes. For example, Matheus Cardoso, personnel director for Osgood Textile Industries, impresses his supervisor and earns his colleagues’ respect when his proposal for tax-deferred retirement plans is approved. On the other hand, the drafting crew at Stillman Manufacturing is frustrated with Jeff Danelli’s instructions for installing wireless computing at the industrial site. The crew must redraft plans because Jeff’s instructions are vague and incomplete. When writing is not clear, the thinking behind the writing may not be clear either.

All careers rely on technical communication to get the job done. Technical writing is the great connector—the written link—connecting technology to user, professional to client, colleague to colleague, supervisor to employee, and individual to community. No matter what career you choose, you can expect to read and compose e-mail, send accompanying attachments, give and receive phone messages, and explain procedures.

In addition to work-related writing, the responsibilities of being a community and family member require technical communication.

**Questions:**

1. Discuss the importance of technical writing in the workplace. [10 marks]
2. What is technical writing? And how is it different from technical communication? [10 marks]

**CHARACTERISTICS OF TECHNICAL WRITING**

While technical writing shares some characteristics with other kinds of writing, it is also significantly different. From the factual treatment of the subject to audience considerations, technical writing is unique. Subject, audience, organization, style, tone, and special features all contribute to the description of writing that is appropriate for the workplace.

1. **Subject** The subject of each model at the beginning of this chapter is hearts, but the approach is different in each document. The personal essay expresses a young person’s disappointment and frustration at the behavior of a sibling, an experience with which you might be able to identify. **Expressive writing** is created to convey personal observations or feelings. It relies on personal experience for research. Expressive writing is likely to be the type with which you are most familiar.

The purpose of the research paper is not to relate personal experience, but to explain facts gained from research. Writing to explain or inform is **expository writing.** Like expressive writing, your academic career has probably required that you do some research writing. The excerpt from the research paper at the beginning of the chapter involves the pros and cons of using tissue from pigs for heart valve replacement in humans. While most academic research papers are factual papers written on topics that are interesting to the reader, the technical research document is written to fulfill a need.

In technical writing, often the need is to share information or to have someone perform an action. For example, a person may need to have heart surgery. Therefore, the technical document fulfills the special needs of a specific reader. The writer of the technical document on page 4 targets cardiac patients and explains the disease and its diagnosis. Technical writing may require library research, scientific observation, or **field research** (research done in the field, especially through surveys and interviews). Whether to inform or persuade, technical writing relies on data presented with precision and accuracy.

1. **Audience**

The writer of the personal essay expects some understanding

from his or her readers as they share experiences. The writer also expresses his or her point of view. The writer of the research paper may be interested in the subject and hopes that

Technical writers must be familiar with

a reader will read the research paper for its facts.

desktop publishing software. Using

The technical writer, however, expects more from a very programs such as Microsoft® Word, Adobe®

specific reader—one needing information about mitral valve PageMaker®, and QuarkXPress®, technical

replacement and possessing some knowledge of the topic and writers can apply special features (for

its specialized vocabulary. The technical writer not only expects example, boldfaced type, bulleted lists, and

the reader to understand the writing, but also wants the reader tables) to their documents. In addition, they

to do something after reading—decide on surgical options. can add visual aids such as diagrams, charts,

When you want something specific from a reader, you must and graphs to enhance the message.

1. **Organization** The personal essay and research paper make standard use of a topic sentence and transitional expressions, but you still need to read far into each document before the main point and the organization become apparent.

However, the Sample Technical Document Excerpt uses headings to help you perceive the organization at a single glance. Questions in the headings draw your attention to the information this document provides even before you read it. Also, headings give you an opportunity to read only what you want or need to read. When a person who has not been diagnosed wants to learn about symptoms, the heading “How do I know that I have mitral valve prolapse?” allows his or her eye to travel quickly to the information needed.

1. **Style** The **style** of a document, the way an author uses words and sentences, usually gives the audience an idea of the type of document they are reading. For example, the personal essay is casual, almost conversational, and predictable for an essay. The writer uses examples and some description. The style of the research paper also is predictable for a research paper— formal and more distant than the personal essay, with a thesis to clarify the purpose of the paper and documentation to enhance credibility.

The technical document uses a simple, concise, straightforward style that is easily understood. The long sentences are simply lists. The other sentences are short, and the sentence order is predictable. There are no surprises for the reader. **Jargon,** the highly specialized language of a particular discipline or technical field, is used.

1. **Tone Tone** refers to emotional overtones—the way the words make a person feel. It describes the emotional character of a document. The tone of a document also hints at the kind of document the audience is reading.

The tone of the personal essay is casual, dejected, and agonized. The tone of the research paper is generally objective. The tone in technical writing is best described as objective or businesslike.

The expressive nature of a personal essay can display a range of emotions— sadness, excitement, irony, humor. The aim of research papers and technical documents is not to convey emotion. In fact, emotion can get in the way of a technical document.

Readers of technical documents read for information, not for entertainment. They read to learn something or to take action. Some people say that technical writing is boring because of its lack of emotion. However, for the person needing or wanting that information, the targeted audience, the topic is not boring.

1. **Special Features** Technical writers use special features such as boldface, italics, capital letters, columns, underlining, and bulleted lists to draw readers’ attention to certain words and to help important information stand out. Also, the use of graphics such as tables, graphs, pictures, and diagrams helps the audience grasp complex information quickly.

**Communication Dilemma**

**HOW TECHNICAL WRITING COMPARES TO OTHER WRITING**

Technical writing has much in common with the academic writing you have experienced in school. Technical writing also shares aspects of the literature you have read. The differences, however, set technical writing apart from other writing that is familiar to you.

**Technical Writing and Academic Writing**

**Academic writing** (for example, personal essays, research papers, analyses, and arguments) is the expository and **persuasive writing** (writing to convince others) done in academic circles. It must be unified, coherent, and well organized. Technical writing also must be unified, coherent, and well organized. Style and standard usage (the spoken and written English expected in business communication) are important in academic and technical writing. Both types of writing rely on a process of thinking and writing that takes place over a few hours, a few days, or several weeks. The purpose is often the same—to inform or persuade.

The difference between academic writing and technical writing is in the presentation, audience, and approach. Academic writing includes paragraphs—usually an introductory paragraph, paragraphs that develop a thesis (a statement of purpose), and a concluding paragraph. Academic writing is written for an academic audience—an instructor, classmates, or a group of interested scholars.

The purpose of academic writing is to expand on an idea or make observations about human experience. For example, Francis Bacon’s essay entitled “On Reading” elaborates on the benefits of reading. In “Two Views of the Mississippi,” Mark Twain observes that while a close study of the river is necessary to reveal its dangers, that study also takes away the river’s mystery.

Technical writing also includes paragraphs. It, too, often begins with an introduction and closes with a conclusion. But technical writing (with its headings, itemized lists, boldfaced type, and graphics) looks different from academic writing. Technical writing is written for a specific audience. The subject is generally technical, business-related, or scientifically oriented. Generally, there is less flexibility in the subject matter, style, and tone. Often the intent is to clarify and consolidate rather than expand.

**Technical Writing and Imaginative Writing**

Imaginative writing also adheres to principles of unity, coherence, and standard usage. Imaginative writers let their ideas emerge and develop over time. However, compared to technical and academic writing, imaginative writing is less academic and more artistic and creative.

**Imaginative writing** includes novels, short stories, drama, and poetry whose situations grow out of fantasy or imagination. Events and people are fictional, although the themes may reveal universal truths. Imaginative writing is often **ambiguous,** meaning that more than one interpretation is possible and describing writing that means different things to different people. Imaginative writing also requires the reader to draw **inferences,** which are judgments about the reading.

Technical writing should be unambiguous and direct. A work of literature may be rich because it means different things to different readers. A reader might ponder the different meanings of the old man’s voyage in Hemingway’s *The Old Man and the Sea,* but W. Earl Britton says “that the primary, though not the sole, characteristic of technical and scientific writing lies in the effort of the author to convey one and only one meaning in what he says” (114).

The meaning of a sentence in technical writing must be clear. “Turn there,” Mr. Ybarra said, and his daughter turned

*www.cengage.com/school/bcomm/techwtg*

left when he meant for her to turn right. The word *there* can have different meanings to different people. However, “Turn right at Nottingham Road, the next paved road,” has only one meaning.

Imaginative writing such as Emily Dickinson’s “Because I could not stop for Death—He kindly stopped for me” often requires you to make inferences. You do not expect to make inferences about technical writing. If the poet’s doctor gave the following instructions to a nurse, what would happen? *Because I couldn’t remember the name of Ms. Dickinson’s medication, would you kindly call the pharmacy and ask for the bottle that holds the blue and red pills?* Poor Ms. Dickinson. She’d find more comfort in the words of her poem than in the advice of her doctor.

Questions:

1. Write a paragraph comparing technical writing to academic and imaginative writing.

[10 marks]

1. What are the characteristics of technical writing? Explain each. [10 marks]