

## Technical Writing

Technical writing is communication written for and about business and industry, focusing on products and services: how to manufacture them, market them, manage them, deliver them, and use them.

Technical writing is written:

- in the work environment for supervisors, co leagues, subordinates, vendors, and customers

Technical writing includes:

- memos and e-mail
- letters
- reports
- instructions
- brochures and newsletters
- the job search
- web pages
- fliers
- PowerPoint presentations
- graphics

Technical writing is not literature; it's neither prose which recounts the fictional tales of characters nor poetry which expresses deeply felt, universal emotions through similes and metaphors.

Technical writing is neither an expressive essay narrating an occurrence nor an expository essay analyzing a topic.

Technical writing is not journalism, written to report the news. Technical writing does not focus on poetic images, describe personal experiences, or report who won the basketball game.

Instead, technical writing is:

- an instructional manual for repairing machinery
- a memo listing meeting agendas
- a letter from a vendor to a client
- a recommendation report proposing a new computer system

One reason to learn technical writing is to know the types of documents you will write on the job.

When you are employed and have to write on the job, will you write essays?

- The answer is no. When you are employed, you will not write essays at work. you will write essays while working on your college degree; you might even be asked to write an essay on your job application when applying for work. However, once the job begins, essays end.

Is technical writing a necessary component of every employee's professional skill?

- Employers want to hire people who can communicate effectively, both in writing and orally.
- In fact, we are told that on the job, an employee will spend at least 20 percent of his or her time writing.
- This number increases as an employee's responsibilities increase.
- Managers spend up to 50 percent of their time writing.
- CEOs spend between 80 and 100 percent of their work week communicating.

## **Characteristics of Technical Writing**

Technical writing is written to a different audience for a different purpose than essays. The reader of technical writing does not have time, nor necessarily the interest in the subject matter.

When writing any technical document, the following should be observed.

### **Clarity**

- Clarity in technical writing is mandatory.
- The most important criteria for effective technical writing is clarity.
- If the correspondence is not clearly understood, the reader will either call the writer for further clarification, or just ignore the information.
- In either case, the writer's time is wasted; the reader's time is wasted; the message is lost.
- If a student fails to clearly understand a poem, a short story, a play, or a novel, that is unfortunate; however, equipment is not damaged, no one is physically hurt, and no one is sued.
- If the company has written an installation manual for a product, and the manual unfortunately is not clear, three negative things can occur:
  1. The equipment might be damaged
  2. The user might be hurt
  3. The company might be sued.

### **How to achieve clarity**

- Two ways can be used
  1. Through six reporter's questions

For example: the manager writing a memo to a new employee that reads...

*Please plan to prepare a presentation on sales. Make sure the information is very detailed. Thanks.*

Nothing is clear in this memo, and the reasons are obvious. The manager has failed to answer Reporter's Questions: **who, what, when, where, why, how**.

The reporter's questions checklist is:

Who is the audience?

What do you plan to do? What do you want the audience to do? What do you want to know? When should the job be completed?

Where will the work take place?

Why is the task being undertaken (the rationale, motivation, goal)? Why is the desired date important?

How should the task be performed?

2. Clarity achieved through specificity

Words like *some, several, many, few, frequently, often, substantial, or recently* will take up space on the page and convey an impression. These connotative words will not mean the same thing to everyone.

For example: If a memo sent to six employees states that *the company has lost a substantial amount of business*, will all employees acquire the same knowledge? One might assume that a substantial loss equals \$1,000; another might assume that a substantial loss equals twelve clients. In each case, the employees are guessing, and that is not the goal of successful technical writing.

## Conciseness

- To be concise in writing means to be short and clearly written or stated.
- Successful technical writing should help the reader understand the text, not present challenges to understanding.
- If an individual reads literature, it is his or her responsibility to understand the writing. Creative writers seek to challenge us. However, technical writing is not literature. We read technical writing because it is a job requirement.
- Good technical writing is concise since it uses short words and short sentences, not like traditional essays.
- Conciseness is achieved through short words

E.g.    cognizant    know  
         Endeavour    try  
         Domicile    home  
         Morbidity    death

Terminate      end

- Conciseness is also achieved through short sentences.

e.g.

Not technical: In order to successfully accomplish their job functions, the team has been needing more work space for some time now.

Technical:      The team needs more work space to do its jobs.

- You can shorten a sentence by avoiding: **redundancy, prepositional phrases and passive voice**

**Redundancy: e.g.**      The used car will cost the sum of \$1,000.00  
The used car will cost \$1,000.00

We collaborated together on the project

We collaborated on the project

**Avoiding prepositional phrase: E.g.**

He drove at a rapid rate vs. He drove rapidly

I will see you in the near future vs. I will see you soon

**Avoiding passive voice:      E.g.**

The window was broken by the boys vs. The boys broke the window

It is my decision to run for office vs. I decided to run for office.

### **Accessibility (page layout):**

- Wall-to-wall words turn off readers. Highlighting techniques make the text open, airy, and inviting!
- Students can make information leap off the page by making content accessible through the following highlighting techniques:
  1. Graphics (table and figures)
  2. White space
  3. Boldface text
  4. Headings and subheadings
  5. Italics
  6. Underlining
  7. Varied Font sizes
  8. Bullets
  9. Numbered lists
  10. Varied Font types

## Audience Recognition

- Who is writing to whom? What does the audience know, need to know, and want to know?
- When your audience fails to understand the text, you have failed to communicate.
- Successful technical writers know that they can only achieve clarity by recognizing their audiences.
- Basically, we can write to either High Tech Peers, Low Tech Peers, or Lay Readers
- **High Tech Peers** know as much about a subject matter as you, have the same job title, same education, same years of experience, and the same level of expertise. For example, a medical doctor writing to another medical doctor would be writing High Tech to High Tech.
- **Low Tech Peers** are people who know something about the subject matter; they may not have the same job title, education, years of experience, or level of expertise. For example, a medical doctor writing to a staff nurse would be writing High Tech to Low Tech.
- **Lay Readers** are your customers. They are completely out of the loop. For example, a medical doctor communicating with a patient.
- Writing successfully to these three types of audiences requires different techniques.

For example:

1. When writing to a high tech peer, one can use acronyms and abbreviations, usually without any definition.
2. If accountants write to one of their fellow employees in sales, computer technology, or human resources (low tech peers), however, these high-tech terms or abbreviations and acronyms must be first defined in parenthesis.
3. Whereas high tech readers do not need acronyms or abbreviations defined, and low tech readers need a parenthetical definition, lay readers want to avoid the confusion completely. All they want is the definition—no abbreviations or acronyms. They might also need follow-up explanations.

## Accuracy

- Effective technical writing must be correct, whether grammatically, mathematically, electronically, etc.
- Errors in technical writing make the company and the employee look bad.
- More importantly, errors can lead to damages, injuries, lawsuits, or just embarrassment and misunderstandings.
- Technical writer must understand the importance of proofreading
- Use these proofreading techniques

- ❖ Use the computer's spell check, but remember that a spell check will not catch *form* if you mean *from*, *to* if you mean *too*, or *except* if you mean *accept*.
- ❖ Let it sit—for a day or a weekend. When the document is cold, writers are more objective about their own writing.
- ❖ Use peer evaluations—others will see the errors we miss.
- ❖ Read it aloud—sometimes we can hear errors.

**Professional appearance.**

You start to communicate before anyone reads the first word of the document. If the document looks neat and professional, readers will form a positive impression of it and of you. Your document should adhere to the format standards of your organization or your professional field, and it should be well designed. For example, a letter should follow one of the traditional letter formats and have generous margins