

Technical Writing and Entrepreneurship Development

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Career Opportunities

- Technical Writers & Editors.
- Instructional Designers.
- Information Architects.
- Indexers.
- Globalization & Localization Specialists.
- Technical Illustrators

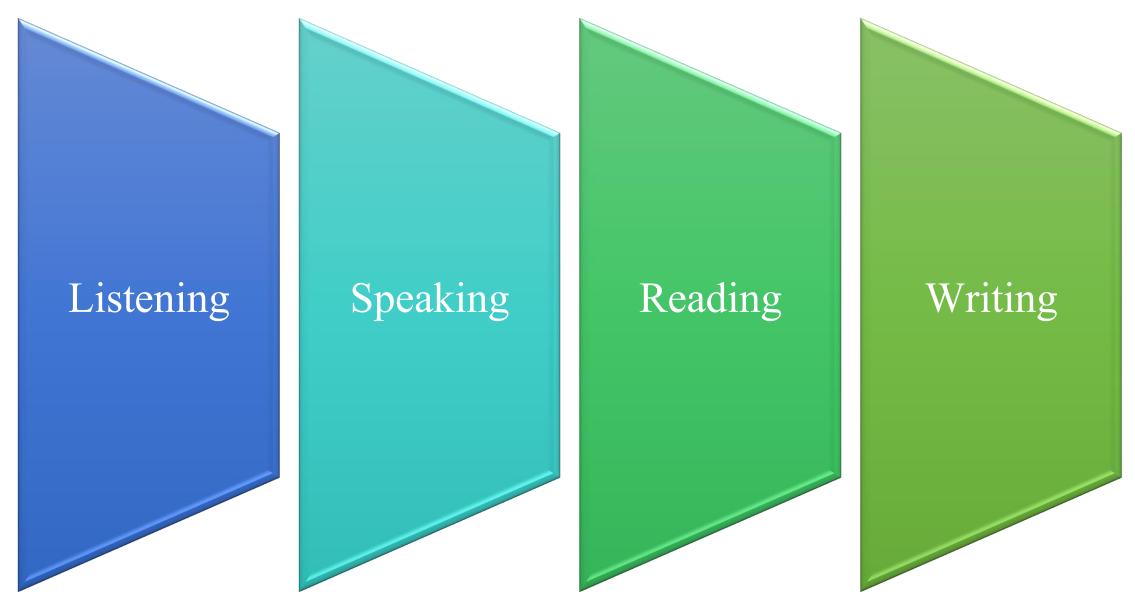
Unit I – Section I -Introduction to Technical Communication

- What Is Technical Communication?
- The Challenges of Producing Technical Communication
- Characteristics of a Technical Document
 - Measures of Excellence in Technical Documents
- Skills and Qualities Shared by Successful Workplace Communicators
- How Communication Skills and Qualities Affect Your Career?

Unit I – Section I - What Is Technical Communication?

- Includes any following form of communication
- Help users to accomplish a defined goal or task
- Technical information communicated through documents proposals, emails, reports, podcasts, computer help files, blogs, and wikis

Four Basic modes of communication



Listening & Reading – How?



Listening

Steve Jobs: Steve Jobs has been known as an iconic figure for the establishment of Apple like the biggest company. However, it is extremely shocking to know that the \$2 billion company with over 4000 employees has been started with only two persons in a garage. It is also to be noticed that this great establisher has been dismissed and fired from the company from which he has started his career. Further, realizing his potential and capabilities, Steve Jobs proceeded further towards establishing this biggest company which is famously known as 'Apple'.

Bill Gates: It was very much important for Bill gates to heed the lessons of failure in comparison to celebrating the joy of success. This great entrepreneur who has established Microsoft like the biggest software company is a dropout student from Harvard. Furthermore, he has also been known for his self-owned business figure known as Traf-O-Data which was one of the biggest failures in history. The entire investment of Bill Gates got vanished and unfortunately, even the education could also not get completed. But, the keen desire and the passion for the computer programming based stuff led him to establish such biggest software company with the brand name 'Microsoft'.

UNDERSTANDING PURPOSE

- Communication that helps others learn about a subject, carry out a task, or make a decision
- Communication that reinforces or changes attitudes and motivates readers to take action

UNDERSTANDING AUDIENCE

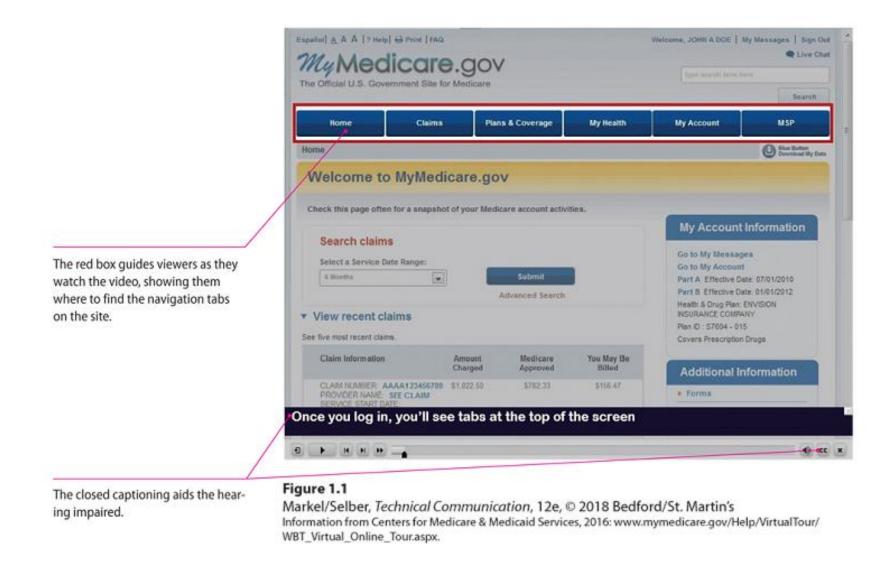


FIGURE 1.1 A Communication That Helps Others Carry Out a Task

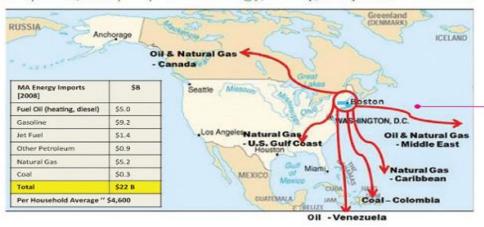
The purpose of this online video at <u>Medicare.gov</u> is to help members carry out the task of using the website.

Greater Energy Independence, Diversity, & Reliability

Massachusetts exports \$18 Billion dollars of its citizens' wealth every year to other states and countries to import the energy it needs. Over the long term, it will be difficult for Massachusetts to be globally competitive as an energy importer. Massachusetts has a vast offshore wind resource that is local, clean, and will never run out.

Energy Dollars Flowing out of MA

We spend \$22B per year on energy; 80% (\$18B) leaves the state



Cape Wind is just the start. After Cape Wind comes online there is another five gigawatts of offshore wind potential (ten times Cape Wind's size) available to tap in future years in Federal Waters offshore Massachusetts that have already been identified by the Department of Interior working with the Commonwealth of Massachusetts.

On its own, Cape Wind's 468 megawatts will provide a significant portion of the goal of 2,000 megawatts of wind energy announced by Massachusetts Governor Deval Patrick. Each year, Cape Wind will provide enough power for 200,000 homes, as much electricity as it would take a fossil fuel power plant to produce by burning 500,000 tons of coal, 113 million gallons of oil, or 10 billion cubic feet of natural gas. Cape Wind will increase electricity reliability during times of peak electric demand in New England in both the summer and winter during events in which the electric grid is under the greatest strain.

Due to a strong and fairly reliable "sea breeze effect," Cape Wind would have produced at twice its average production during peak summer electricity demand events over the past decade.

During a severe three-day cold snap in the winter of 2004 when natural gas availability for power generation was significantly reduced. Cape Wind would have been producing at near full capacity. The U.S. Department of Energy studied that episode and determined that Cape Wind's presence would have provided significant regional electricity reliability benefits to southeast New England during that critical time.

Figure 1.2

Markel/Selber, Technical Communication, 12e, © 2018 Bedford/St. Martin's Information from Cape Wind Associates, 2016: www.capewind.org/what.

FIGURE 1.2 A Communication That Aims to Change Attitudes

The purpose of this website, created by an energy development company, is to generate public support for an offshore wind park.

This page relies heavily on statistics and visual techniques to show the economic benefits of the wind park.

Why Technical Communication Important?

SKILL OR ABILITY	SCORE
Ability to verbally communicate with persons inside and outside the organization	4.63
Ability to work in a team structure	4.60
Ability to make decisions and solve problems	4.51
Ability to plan, organize, and prioritize work	4.46
Ability to obtain and process information	4.43
Ability to analyze quantitative data	4.30
Technical knowledge related to the job	3.99
Proficiency with computer software programs	3.95
Ability to create and/or edit written reports	3.56
Ability to sell or influence others	3.55

Unit I – Section II – The Challenges Producing Technical Communication

- Audience related factors
- Purpose related factors
- Setting related factors
- Document related factors
- Process related factors

Unit I – Section III – Characteristics of a Technical Document

- It addresses particular readers
- It helps readers solve problems
- It reflects the organization's goals and culture
- It is produced collaboratively
- It uses design to increase readability
- It consists of words or images or both

Measures of Challenges

- Honesty
- Clarity
- Accuracy
- Comprehensiveness
- Accessibility
- Usefulness
- Conciseness
- Professional Appearance
- Correctness

Clarity

1.

- The policy was revised consequent to the resignation of the chairman and the reconstitution of the board.
- The new board revised the policy following the resignation of the chairman.

2.

- We are enclosing the monthly statement for payments due from you.
- The statement of account is enclosed.

3.

- We request the pleasure of your company...
- We cordially invite you...

4.

- The enquiry commission has come to the following conclusion and declared that the police did not act in excess of their authority.
- "There was no police excess", declared the enquiry commission.

Conciseness

• Conciseness means wordiness, i.e, communicating what you want to convey in least possible words without forgoing the other C's of communication. Conciseness is a necessity for effective communication

- "There is a rule on the books to cover appropriate fence styles for the homeowners' association" is not as clear or concise as
- "The homeowners' association rulebook covers appropriate fence styles."

Correctness and Accuracy

• **correctness** is freedom from error while **accuracy** is the state of being **accurate**; freedom from mistakes, this exemption arising from carefulness; exactness; nicety; **correctness**.

- This document has to be signed with ink.
- This document has to be signed in ink. (correctness related to grammar)
- He is an imminent lawyer.
- He is an eminent lawyer. (correctness related to vocabulary)



BILLION

\$117 billion in annual health care costs are associated with inadequate physical activity.



could save us over the next decade.



IMPACT ON MILITARY READINESS



are too heavy to serve in our military.

Long-term military readiness is at risk unless a large-scale change in physical activity and nutrition takes place in America.

> Mission: Readiness Military Leaders for Kids

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PHYSICAL ACTIVITY SAVES LIVES AND PROTECTS HEALTH



premature deaths could be prevented by getting enough physical activity.

It could also prevent:



breast cancer



colorectal cancer



diabetes



heart disease

Physical activity is the closest thing we have to a wonder drug.

Dr. Tom Frieden, CDC Director

INVESTING IN PHYSICAL ACTIVITY MAKES SENSE



BENEFITS FOR CHILDREN

- · Improves aerobic fitness
- · Improves muscular fitness
- · Improves bone health
- · Promotes favorable body composition
- · Improves attention and some measures of academic performance (with school physical activity programs)



BENEFITS FOR ADULTS

- . Lowers risk of high blood pressure
- · Lowers risk of stroke
- · Improves aerobic fitness
- · Improves mental health
- · Improves cognitive function
- · Reduces arthritis symptoms
- · Prevents weight gain



BENEFITS FOR HEALTHY AGING

- · Reduces risk of falling
- · Improves balance
- · Improves joint mobility
- · Extends years of active life
- · Helps prevent weak bones and muscle loss
- Delays onset of cognitive decline

PHYSICAL ACTIVITY BENEFITS COMMUNITIES



ECONOMIC

Building active and walkable communities can help:

- Increase levels of retail economic activity and employment
- Increase property values
- Support neighborhood revitalization
- Reduce health care costs



Walkable communities can improve safety for people who walk, ride bicycles, and drive.



WORKFORCE

Physically active people tend to take fewer sick days.



U.S. Department of Health and Human Services Control and Prevention

FOR MORE INFORMATION PLEASE VISIT:

Division of Nutrition, Physical Activity, and Obesity www.cdc.gov/nccdphp/dnpao

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Unit I – Section IV - Skills and Qualities Shared by Successful Workplace Communicators

- Ability to perform research
- Ability to analyze information
- Ability to speak and write clearly

Unit I – Section V - How Communication Skills and Qualities Affect

Your Career?

GUIDELINES: Communicating Professionally

When you communicate in the workplace, model the behavior of successful professionals.

- ▶ Be honest. Successful communicators tell the truth. They don't promise what they know they can't deliver, and they don't bend facts. When they make mistakes, they admit them and work harder to solve the problem.
- Be willing to learn. Successful communicators know that they don't know everything not about what they studied in college, what their company does, or how to write and speak. Every professional is a lifelong learner.
- Display emotional intelligence. Successful communicators understand their own emotions and those of others. Because they can read people — through body language, facial expression, gestures, and words — they can work effectively in teams, helping to minimize interpersonal conflict and encouraging others to do their best work.
- Be generous. Successful communicators reply to requests for information, and they share information willingly. (Of course, they don't share confidential information, such as trade secrets, information about new products being developed, or personal information about colleagues.)
- Monitor the best information. Successful communicators seek out opinions from others. They monitor the best online sources for new approaches that can spark their own ideas. They use searching and filtering tools to help them stay on top of the torrent of new information on the Internet. They know how to use social media and can represent their organization online.
- Be self-disciplined. Successful communicators are well organized and diligent. They finish what they start, and they always do their best on any document, from the least important text message to the most important report.
- Prioritize and respond quickly. Successful communicators know that the world doesn't always conform to their own schedules. Because social media never sleep, communicators sometimes need to put their current projects aside in order to respond immediately to a problem or request. And even though speed is important, they know that quality is, too; therefore, they make sure every document is fully professional before it goes out.

Unit I – Section VI - Measures of Excellence in Technical Documents

- Prepare your resume
- Let others discuss on your resume
- What qualities are present in the resume?
- What measures are missing?