**Technical Writing and Entrepreneurship Development**
**from the book**
**Technical Communication**
**By**
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# Unit I – Section III & IV –Writing Technical Documents & Writing Collaboratively

- **Writing Technical Documents**
  - Planning, Drafting, Revising, Editing, Proofreading
- **Writing Collaboratively**
  - Advantages and Disadvantages of Collaboration,
  - Managing Projects,
  - Conducting Meetings,
  - Using Social Media and Other Electronic Tools in Collaboration,
  - Gender and Collaboration, Culture and Collaboration

# Unit I – Section III - Writing Technical Documents -Planning

- Takes more than a third of the time of writing project

- Critically important from email to manual

- Factors that affect the communication:

  - **Audience :** Who is your reader?  What are your reader's attitudes and expectations? Why and how will the reader use your document?

  - **Purpose :** After your readers have read your document, what do you want them to know or do? What beliefs or attitudes do you want them to hold?

  - **Setting :** Your setting includes both the situation surrounding the problem you are trying to solve and the context in which your audience will use your document.

**Setting related issues to be considered**

High stakes vs. low stakes.

Physical vs. digital.

Formal vs. informal.

Mundane vs. socially or politically charged

Established vs. undefined norms of ethical behavior

# Unit I – Section III - Writing Technical Documents -Planning

**Selecting Your Document Application, Design, and Delivery Method**

Has the application already been chosen for me?

What will my readers expect?

What delivery method will work best?

**Analyzing the Writing Process**

Existing Project

Time

Budget

Tools

Collaboration

Document Testing

# Unit I – Section III - Writing Technical Documents -Drafting

Seeking the help from others

Organizing And Outlining Your Document

Drafting

Using Templates

Studying The Draft By Yourself

Document Analysis Activity

# GUIDELINES: Editing the Draft

**Elements of draft:**

**Are all paragraphs well developed?** Does each paragraph begin with a clear topic sentence that previews or summarizes the main point?

**Are all sentences clear and correct?** Make sure each sentence is easy to understand, is grammatically correct, and is structured to emphasize the appropriate information

**Are all the elements presented consistently?** Check to see that parallel items are presented consistently. For example, are all headings on the same level structured the same way (perhaps as noun phrases or as gerunds, ending in *-ing*)? And check for grammatical parallelism, particularly in lists, but also in traditional sentences

**Is the design effective?** Does the document or site look professional and attractive, and is it easy to navigate? Do readers find it easy to locate the information they want?

**Are graphics used appropriately?** Are there opportunities to translate verbal information into graphics to make the communication easier to understand and more emphatic? Are the graphic types appropriate and effective? Are the graphics linked to the text?

Proofreading is the process of checking to make sure you have typed what you meant to type.

There are for major reasons we should implementing health-promotion program.

Here they are:

1. "For" is the wrong word. The word should be "four."

2. "Implementing" is the wrong verb form. The verb should be "implement." This mistake is probably left over from an earlier version of the sentence.

3. The article "a" is missing before the phrase "health-promotion program." This is probably just a result of carelessness.

## ADVANTAGES OF COLLABORATION

**Collaboration draws on a wider knowledge base.** Therefore, a collaborative document can be more comprehensive and more accurate than a single-author document.

**Collaboration draws on a wider skills base.** No one person can be an expert manager, writer, editor, graphic artist, and production person.

**Collaboration provides a better idea of how the audience will read the document.** Because each collaborator acts as an audience, working with collaborators produces more questions and suggestions than one person could while writing alone.

**Collaboration improves communication among employees.** Because you and your collaborators share a goal, you learn about each other's jobs, responsibilities, and frustrations.

**Collaboration helps acclimate new employees to an organization.** New employees learn how things work — which people to see, which forms to fill out, and so forth — as well as what the organization values, such as ethical conduct and the willingness to work hard and sacrifice for an important initiative.

**Collaboration motivates employees to help an organization grow.** New employees bring new skills, knowledge, and attitudes that can help the organization develop. More experienced employees mentor the new employees as they learn. Everyone teaches and learns from everyone else, and the organization benefits.

# Unit I – Section IV - Writing Collaboratively

## DISADVANTAGES OF COLLABORATION

Collaboration can also have important disadvantages:

**Collaboration takes more time than individual writing.** It takes longer because of the time needed for the collaborators to communicate. In addition, meetings — whether they are live or remote — can be difficult to schedule.

**Collaboration can lead to groupthink.** When collaborators value getting along more than thinking critically about the project, they are prone to groupthink. Groupthink, which promotes conformity, can result in an inferior document, because no one wants to cause a scene by asking tough questions.

**Collaboration can yield a disjointed document.** Sections can contradict or repeat each other or be written in different styles. To prevent these problems, writers need to plan and edit the document carefully.

**Collaboration can lead to inequitable workloads.** Despite the project leader's best efforts, some people will end up doing more work than others.

**Collaboration can reduce a person's motivation to work hard on the document.** A collaborator who feels alienated from the team can lose motivation to make the extra effort.

**Collaboration can lead to interpersonal conflict.** People can disagree about the best way to create the document or about the document itself. Such disagreements can hurt working relationships during the project and long after.

# Unit I – Section III - Writing Collaboratively

- **GUIDELINES: Managing Your Project**

- **Break down a large project into several smaller tasks.** Working backward from what you must deliver to your client or manager, partition your project into its component parts, making a list of what steps your team must take to complete the project. This task is not only the foundation of project management but also a good strategy for determining the resources you will need to complete the project successfully and on time. After you have a list of tasks to complete, you can begin to plan your project, assign responsibilities, and set deadlines.

- **Plan your project.** Planning allows collaborators to develop an effective approach and reach agreement before investing a lot of time and resources. Planning prevents small problems from becoming big problems with a deadline looming. Effective project managers use planning documents such as *needs analyses, information plans, specifications,* and *project plans*.

- **Create and maintain an accurate schedule.** An accurate schedule helps collaborators plan ahead, allocate their time, and meet deadlines. Update your schedule when changes are made, and either place the up-to-date schedule in an easily accessible location (for example, on a project website) or send the schedule to each team member. If the team misses a deadline, immediately create a new deadline. Team members should always know when tasks must be completed.

- **Put your decisions in writing.** Writing down your decisions, and communicating them to all collaborators, helps the team remember what happened. In addition, if questions arise, the team can refer easily to the document and, if necessary, update it.

- **Monitor the project.** By regularly tracking the progress of the project, the team can learn what has already been accomplished, whether the project is on schedule, and if any unexpected challenges exist.

- **Distribute and act on information quickly.** Acting fast to get collaborators the information they need helps ensure that the team makes effective decisions and steady progress toward completing the project.

- **Be flexible regarding schedule and responsibilities.** Adjust your plan and methods when new information becomes available or problems arise. When tasks are held up because earlier tasks have been delayed or need reworking, the team should consider revising responsibilities to keep the project moving

# Unit I – Section IV - Writing Collaboratively

- **GUIDELINES: Listening Effectively**

- Follow these five steps to improve your effectiveness as a listener.

- **Pay attention to the speaker.** Look at the speaker, and don't let your mind wander.

- **Listen for main ideas.** Pay attention to phrases that signal important information, such as "What I'm saying is …" or "The point I'm trying to make is …."

- **Don't get emotionally involved with the speaker's ideas.** Even if you disagree, continue to listen. Keep an open mind. Don't stop listening in order to plan what you are going to say next.

- **Ask questions to clarify what the speaker said.** After the speaker finishes, ask questions to make sure you understand. For instance, "When you said that each journal recommends different protocols, did you mean that each journal recommends several protocols or that each journal recommends a different protocol?"

- **Provide appropriate feedback.** The most important feedback is to look into the speaker's eyes. You can nod your approval to signal that you understand what he or she is saying. Appropriate feedback helps assure the speaker that he or she is communicating effectively.

# Unit I – Section IV - Writing Collaboratively

- **GUIDELINES: Setting Your Team's Agenda**

- **Define the team's task.** Every team member has to agree on the task, the deadline, and the approximate length of the document. You also need to agree on more conceptual points, including the document's audience, purpose, and scope.

- **Choose a team leader.** This person serves as the link between the team and management. (In an academic setting, the team leader represents the team in communicating with the instructor.) The team leader also keeps the team on track, leads the meetings, and coordinates communication among team members.

- **Define tasks for each team member.** There are three main ways to divide the tasks: according to technical expertise (for example, one team member, an engineer, is responsible for the information about engineering), according to stages of the writing process (one team member contributes to all stages, whereas another participates only during the planning stage), or according to sections of the document (several team members work on the whole document but others work only on, say, the appendixes). People will likely assume informal roles, too. One person might be good at clarifying what others have said, another at preventing arguments, and another at asking questions that force the team to reevaluate its decisions.

- **Establish working procedures.** Before starting to work, collaborators need answers—in writing, if possible—to the following questions:
  - When and where will we meet?
  - What procedures will we follow in the meetings?
  - What tools will we use to communicate with other team members, including the leader, and how often will we communicate?

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# Unit I – Section IV - Writing Collaboratively

- **GUIDELINES: Setting Your Team's Agenda**

- **Establish a procedure for resolving conflict productively.** Disagreements about the project can lead to a better product. Give collaborators a chance to express ideas fully and find areas of agreement, and then resolve the conflict with a vote.

- **Create a style sheet.** A style sheet defines the characteristics of the document's writing style. For instance, a style sheet states how many levels of headings the document will have, whether it will have lists, whether it will have an informal tone (for example, using "you" and contractions), and so forth. If all collaborators draft using a similar writing style, the document will need less revision.

**Establish a work schedule.** For example, for a proposal to be submitted on February 10, you might aim to complete the outline by January 25, the draft by February 1, and the revision by February 8. These dates are called *milestones.*

- **Create evaluation materials.** Team members have a right to know how their work will be evaluated. In college, students often evaluate themselves and other team members. In the working world, managers are more likely to do the evaluations.

# Unit I – Section IV - Using Social Media and Other Electronic Tools in Collaboration

- The major technologies that enable collaboration:
  - Word-processing tools,
  - Messaging technologies,
  - Videoconferencing,
  - Wikis
  - Shared document workspaces
  - Virtual worlds.

# Unit I – Section IV - Gender and Collaboration, Culture and Collaboration

Gender: Effective collaboration involves two related challenges: maintaining the team as a productive, friendly working unit and accomplishing the task. Scholars of gender and collaboration see these two challenges as representing the feminine and the masculine perspectives

Cultural : People from other cultures

- might find it difficult to assert themselves in collaborative teams
- might be unwilling to respond with a definite "no"
- might be reluctant to admit when they are confused or to ask for clarification
- might avoid criticizing others
- might avoid initiating new tasks or performing creatively