



Technical Writing

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*“The fundamental purpose of scientific discourse is not the mere presentation of information and thought but rather its **actual communication**. It does not matter how pleased an author might be to have converted all the right data into sentences and paragraphs; it matters only whether a large majority of the reading audience accurately perceives what the author had in mind.”*

George Gopen and Judith Swan
The Science of Scientific Writing

- 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.

The five traits of technical writing are:

- **Clarity**
 - Important points come first
 - Reporter's Questions answered
 - Specific words used
- **Conciseness**
 - Words are generally one or two syllables
 - Sentences average 10-12 words
 - Paragraphs do not exceed six type lines
- **Accessible document design**
 - Emphasize main points to help access
 - Highlighting techniques not overused
- **Audience recognition**
 - Writer defines all high-tech terms
 - Writer considers audience needs
 - Writer uses pronouns to involve audience
- **Accuracy**
 - Correct punctuation
 - Correct spelling
 - Correct grammar & usage

Good Technical Writer

❖ Planning

- Identify your audience and their expectations
- Know your purpose
- Know your material
- Organize your thoughts and materials

❖ Clarity

- Avoid Jargon
- Define the Unfamiliar

❖ Brevity

- Never use two words when one word will do
- Pare your language down to the essential message you want to get across to your readers
- Place key information in the main clause
- Combine overlapping sentences when possible

Good Technical Writer

❖ Simplicity

- Use Details Wisely
 - Specific details are desirable, but be careful to balance detail with audience needs for clarity—significance is more important.
 - Many engineers want to provide as much specific detail as possible, but this can come at the expense of readers understanding and their main point

❖ Word Choice

- Needless Complexity/words
- Avoid ambiguity (be clear)

owing to the fact that
in spite of the fact that
call your attention to the fact that
I was unaware of the fact that
the fact that he had not succeeded
the fact that I had arrived

since (because)
though (although)
remind you (notify you)
I was unaware that (did not know)
his failure
my arrival

the question as to whether
there is no doubt but that
used for fuel purposes

whether (the question whether)
no doubt (doubtless)
used for fuel

Macbeth was very ambitious. This led him to wish to become king of Scotland. The witches told him that this wish of his would come true. The king of Scotland at this time was Duncan. Encouraged by his wife, Macbeth murdered Duncan. He was thus enabled to succeed Duncan as king. (51 words)

Encouraged by his wife, Macbeth achieved his ambition and realized the prediction of the witches by murdering Duncan and becoming king of Scotland in his place. (26 words)

Word misuse

(And / or)

Confusing or ambiguous

First of all, would an honor system successfully cut down on the amount of stealing **and/or** cheating?

First of all, would an honor system reduce the incidence of stealing or cheating or both?

But

Particularly awkward is one but closely following another

Our country had vast resources but seemed almost wholly unprepared for war. But within a year it had created an army of four million.

Our country seemed almost wholly unprepared for war, but it had vast resources. Within a year it had created an army of four million.

In terms of

Padding usually best omitted

The job was unattractive in terms of salary.

The salary made the job unattractive.

Commit to Writing as a Process (not a task)

Good technical writing is developed by practice and reading other technical reports.