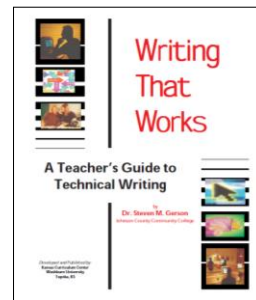
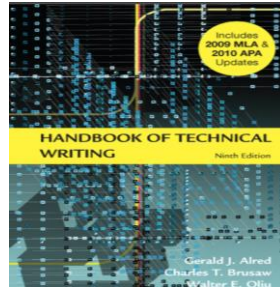
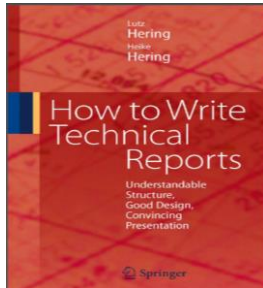




# Report Writing

# Reference Books



## Course Objectives

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- Prepare the students for writing their **assignments** work in **report form**.
- To know the possible **organization of reports**.
- To be able to organize and **write the contents of report sections correctly**.
- To improve **the writing style of a report**.
- To practice **preparing and analysis of the contents of a report**.

## Related objectives

---

- To get the concepts of **improving the writing skills is *a part of the communication skills***.
- To implement the **logical thinking** through the writing process.
- To know some **advanced methods for searching digital resources online**.

# What does a Report mean?

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*A report might be:*

- Email
- Business letter
- Project Proposal/ Documentation
- Minutes of Meeting
- Technical Report
- Others....

# Writing Skills Matter ...!!!

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## Course topics

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1. How to be a Good Technical Writer / Writing Skills
2. Email Etiquette
3. Reports 1,2,3
4. Presentation Skills
5. Writing a CV like a Pro
6. Writing Business Letters
7. Writing in the Field of Computer Science
8. Writing in Software Houses

***Note: Topics sequence may Vary 😊***

# Soft skills



## Soft Skills

- Soft skills are **personal attributes** that enhance an **individual interactions, career prospects and job performance**.
- Soft skills is a sociological term relating to a person's **"EQ" (Emotional Intelligence Quotient)**, the cluster of personality traits, social graces, communication, language, personal habits, friendliness, and optimism that characterize relationships with other people.

9

- ◆ Soft skills separate the good from the great
- ◆ These skills are key to succeeding
- ◆ Many students have no idea how to function in the real world
- ◆ Many computer science students mistakenly believe that technical skills are the only skills that are important

### What Are Soft Skills?

Soft skills are the personal character traits or qualities each of us has. They make up who we are, generally encompassing our attitudes, habits and how we interact with other people. They are much less tangible than hard or technical skills, and unlike them, you do not learn soft skills by enrolling in a training program. You can, however, acquire them through educational, work and life experiences but it will take a concerted effort on your part.

Let's say for example, you are terrible at managing your time but find yourself enrolled in a class that requires you to complete numerous projects. If you want to do well you will have to improve your time management skills in order to meet your deadlines. You can learn how to better manage your time by seeking advice from faculty and fellow students or reading helpful articles.

# Soft Skills

The infographic is set against a light beige background. At the top, a dark blue horizontal bar spans the width. Below it, the title 'Soft Skills' is centered in red. The main content is divided into two columns by a vertical line. The left column is headed 'Hard Skills' in a blue box, with a subtitle 'Teachable abilities or skill sets that are easy to quantify.' Below this, five items are listed, each with an icon: a speech bubble with Chinese characters for 'Proficiency in a foreign language', a certificate for 'A degree or certificate', a keyboard for 'Typing speed', a gear for 'Machine operation', and a code editor for 'Computer programming'. The right column is headed 'Soft Skills' in a light blue box, with a subtitle 'Also known as "people skills" or "interpersonal skills."' Below this, five items are listed with icons: a lightbulb for 'Communication', a curved arrow for 'Flexibility', a flag on a pole for 'Leadership', puzzle pieces for 'Teamwork', and a clock for 'Time Management'. In the center, between the two columns, is an illustration of a woman in a blue dress and a man in a yellow suit talking. At the bottom left of the infographic is the logo for 'the balance'.

**Hard Skills**  
Teachable abilities or skill sets that are easy to quantify.

**Soft Skills**  
Also known as "people skills" or "interpersonal skills."

你好吗? Proficiency in a foreign language

A degree or certificate

Typing speed

Machine operation

Computer programming

Communication

Flexibility

Leadership

Teamwork

Time Management

the balance

Stop here

# Elements of Soft Skills

- Communication skills
- Time management
- Organizational skills
- Analytical skills
- Problem solving/  
Critical Thinking
- Creativity
- Motivating
- Writing Skills



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## Examples of Soft Skills

**Verbal Communication:** People with good verbal communication skills have the ability to convey information to others by speaking.

**Interpersonal Skills:** Having good interpersonal skills means that one has not only the ability to communicate with others, but is willing to listen to people without judging them, share ideas and pitch in when co-workers need help.

**Writing:** Good writing skills allow you to relate information using the written word.

**Problem Solving and Critical Thinking:** Problem solving is the ability to identify a problem and then come up with possible solutions. Critical thinking skills allow you to evaluate each possible solution, using logic and reasoning, to determine which one is most likely to be successful.

**Active Listening:** Good listeners make an effort to understand what others are saying, interrupting only when appropriate to ask questions that will help clarify the information being shared.

**Active Learning:** Active learners are willing and able to acquire knowledge and then apply it to their jobs.

**Organizational:** Those who have strong organizational skills know how to take a systematic approach to every task.

**Time Management:** Those who are good at managing their time know how to schedule their tasks in order to complete projects according to deadlines. They are good at prioritizing their work.

**Team Player:** Those who are team players are cooperative and can be leaders or participants, as necessitated by the situation at hand. They are willing to share responsibility with other team members, whether that means taking credit for successes or responsibility for failures.

**Professionalism:** This characteristic is hard to define, but it's very apparent when someone is lacking it. It's probably the one trait that every employer desires, regardless of what you do or where you work. Professionalism encompasses many things including showing up on time, being polite, being generally pleasant and helpful, dressing appropriately and taking responsibility for your own actions.

**Reading Comprehension:** Individuals with strong reading comprehension skills have little difficulty understanding the content of written materials.

**Flexibility and Adaptability:** People who are flexible and adaptable react well to changes in their jobs and work environments. They have a positive can-do attitude about anything that gets thrown their way.

# Elements of Soft Skills

- **Communication skills**
- Time management
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# Communication Skills

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- Listening and speaking
- Reading and Writing
- Non verbal communication
- Presentation skills
- Teamwork
- Customer service
- Professional behaviour

Discussion

## Soft Skills for technical writing

### Why do we Care?

14

#### Why Do You Need Soft Skills?

Soft skills help us do our jobs. They allow us to effectively and efficiently use our technical skills and knowledge. They improve the way we interact with our bosses, co-workers and customers. They permit us to get our work done on time. They influence how we feel about our jobs and how others perceive us.

Every single occupation you can think of demands that you have specific character traits, whether you're a doctor who needs to be an excellent communicator in order to convey information to her patients, a janitor who must have good interpersonal skills so that he can get along with his co-workers or an actor who must be persistent in spite of facing rejection over and over. An important thing to note is that soft skills are [transferable](#) between occupations. While you may have to go back to school to learn new technical skills if you change careers, you can always take your soft skills with you since they are valued in a variety of fields.

In addition to what is required by your occupation, employers also expect you to have certain character traits. Just look at any job announcement and you will see a laundry list of [qualifications](#) that includes not only the technical skills you need to do the job, but qualities like "excellent communication skills," "strong organizational skill," "team player," and "strong listening ability" listed there as well. Even if you have the technical skills required for a job, if you can't demonstrate that you have the specified traits you probably won't get the job. Make sure your resume lists accomplishments that demonstrate the desired soft skills and that you also find ways to discuss them during your [job interview](#)

# Technical Writing

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Technical writing involves communicating complex information to those who need it to accomplish some task or goal.

15

Technical writing is sometimes defined as ***simplifying the complex***. A significant subset of the broader field of *technical communication*, technical writing involves communicating complex information to those who need it to accomplish some task or goal.

A technical writer's main task is to convey information to another person or party in the most clear and effective manner possible. The information that technical writers convey is often complex, and it is one of their main tasks to analyze the information and present it in a format that is easy to read and understand. A good technical writer needs strong writing and communication skills and must be proficient with computers, as technical writers do not just convey information through text.

Technical writing is intent on expressing certain key concepts so that these may be understood as easily as possible by the intended readers

# Technical Writing

16



## Technical Writing Includes

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- Contracts
- Design documents
- FAQs
- How-to videos
- Instructions
- Online help
- Websites
- Emails and Memos
- Project documents
- Product catalogues
- Requirements specifications
- Training course materials
- User manuals
- Business Letters

# How to be a Good Technical Writer

**Take-home message:** Good writing can be learned!

**Read, pay attention, and imitate.**

## How to be a Good Technical Writer

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1. **Clarity above all** (Clarity in sentence, structure, Grammar)
2. **Waste no time** (when you are to the point in an email, you save the reader time, if you write a bad email; you will be ignored) Good writer make extra effort to make reading efficient for his audience.
3. **Craft your voice**
  - **Don't sound smart, be smart** (match your tone with your audience, complexity detracts from your goal, say what you mean in simpler ways)
  - **Be the Authority** (be smart, capable and confident, avoid wishy-washy words, like: should, maybe, could, might, think)
4. **Everyone needs an editor**

## How to be a Good Technical Writer

---

- **What makes a good writer?**

Having something to say

- **Logical thinking.**

A few simple, learnable rules of style (the tools you'll learn in this class).

**Take-home message: Good writing can be learned!**

- In addition to taking this class, other things you can do to become a better writer:

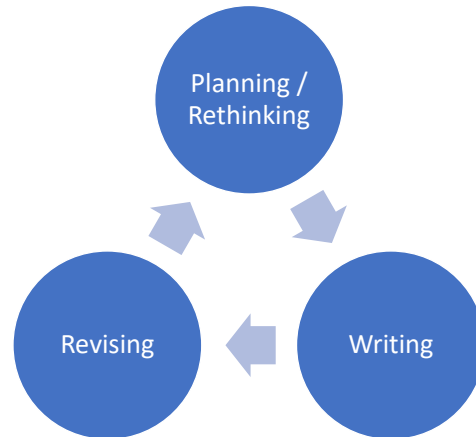
**Read, pay attention, and imitate.**

- **Write in a journal.**

- Let go of "academic" writing habits (deprogramming step!)
- **Talk about your research** before trying to write about it.
- **Write to engage your readers**—try not to bore them!
- **Stop waiting for "inspiration."**
- Accept that **writing is hard** for everyone.
- **Revise.** Nobody gets it perfect on the first try.
- **Never become too attached to your words.**
- Find a **good editor!**
- **Take risks.**

# Writing Process

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21

## **Planning:**

- Keep objectives in mind and research the topic
- Think about the audience
- Outlining helps organize thoughts

## **Writing:**

- Follow your outline, use your handbook
- Inspiration is acceptable but must be carefully reviewed
- Use the interview approach to supplement the outline (who, what, where, when, how)

## **Quality control:**

- Reread your work
- Be critical of your own work

## Plan, Plan, Plan

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- Identify your audience and their expectations.
- Know your purpose.
- Know your material.
- Organize your thoughts and materials.
- Allocate adequate time to write, review, revise and edit.

22

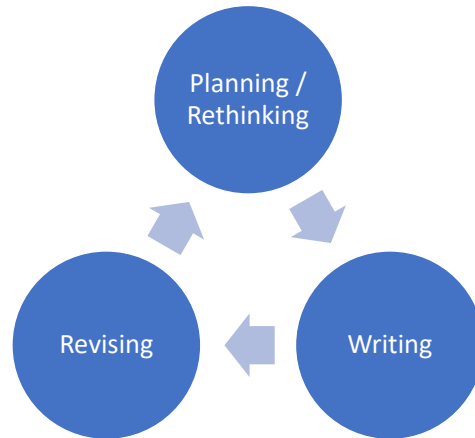
A technical writer needs to be aware of his or her audience's existing knowledge about the material he or she is discussing because the knowledge base of the writer's audience will determine the content and focus of a document.

### **Essential steps before writing**

- 1- Gathering the Basic information & Data
- 2- Analyzing and Sorting the Results
- 3- Outlining the Report

# Writing Process

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23

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# Writing Tips

24



**Having a unique personal writing style guarantees **poor** technical writing.**

25

Good technical writing reads as if you wrote it yourself, and therefore comes across as being perfectly understandable to all readers. In other words, a good technical writer strives to write just like everybody else who publishes in the scientific literature. Such homogeneity is precisely what you want to achieve. Save your unique and creative personal writing style for your next novel!

**Avoid** writing as you might **speak**.

26

In conversation, or when speaking before a group, we tend to speak in rather convoluted and complex sentences, much like this one, that are sequenced and qualified, with various adorning phrases, to conform with the way the mind *listens*, much of the time anyway—and they're often grammatically incorrect. Plus, tone, voice quality, emphases, and facial expressions infer the speaker's true intent. However, the mind *reads* differently. **It expects simple, declarative, and straightforward written sentences.** Use this difference between hearing and **reading** to your advantage, both when writing and speaking. Do not simply write down your thoughts as you might express them verbally. Also, writing affords some efficiency tools that speaking does not.

Use simple **direct** sentences.

27

Simple, direct sentences (subject verb object period) convey thoughts efficiently.

Every extra word or letter costs money and time – to write it, to print it, to read it, etc.  
Cut words and simplify sentences whenever possible.

Also ask yourself if your meaning could possibly be misconstrued by a naive reader because of ambiguity or lack of clarity or specificity.

**The Active Voice is direct, vigorous, natural, and informative.**

## Find the perfect **balance** between brevity and completeness.

28

Don't be too brief that you leave out essential information.

### **Brevity: Most Important First**

- Place **key information in the main clause**

Ex. 1: Despite winning the game, the Patriots made several errors in the first half.

Ex. 2: **Despite making several errors in the first half, the Patriots won the game.**

Ex. 3: **The Patriots won the game, despite making several errors in the first half.**

### **Brevity: Remove Redundancy**

- Combine overlapping sentences** when possible

Ex. 1: Water quality in Hawk River declined in March. This decline occurred because of the heavy rainfall that month. All the extra water overloaded Tomlin county's water treatment plant.

Ex. 2: **Water quality in Hawk River declined in March because heavy rainfalls overloaded Tomlin County water treatment plant.**

### **Simplicity: Use Details Wisely**

- Specific details are desirable, but be careful to **balance detail with audience needs for clarity**—significance is more important.

Ex. 1: The average house in the area has a radon level of 0.4 picocuries per litre.

Ex. 2: **The average house in the area has a radon level of 0.4 picocuries per litre, which is considered low by the EPA [Lafavore, 1987]. Levels between 20 and 200 picocuries per liter are considered high, and levels above 200 picocuries per liter are considered dangerous. For reference, the average radon level in outdoor air is about 0.2 picocuries per litre.**

**Do not underestimate layout and design.**

29

Document design and layout are also very important components of technical writing. Technical writers spend much time ensuring their documents are laid out in a fashion that makes readability easy, because a poorly designed document hampers a reader's comprehension. Technical document design stresses proper usage of document design choices like bullet points, font-size, and bold text. Images, diagrams, and videos are also commonly employed by technical writers because these media can often convey complex information, like a company's annual earnings or a product's design features, far more efficiently than text.

Choose **sentence length** carefully.

30

Often we encounter sentences which run on too long. Understanding such sentences is extremely difficult, as short term memory has a very limited capacity. A complex train of thought can only benefit from being broken down into sentences of convenient length. Temptation to ramble on in one long sentence may be great. Resist. Your logic will benefit. Also cut out anything not necessary to the immediate cause at hand.

Short sentences are easily read, but tend to look breathless and overly excited.

In general, try to vary the length of sentences.

Choose **sentence length** carefully.

It is given as a rule, which however is not the only such rule you may encounter, that sentences should not exceed a desirable length of **ten to fifteen** words, never should fall below **seven** words or extend beyond the ultimate limit of tolerable length reached at twenty words, even though longer sentences may be found in high literature, where even punctuation as it is used in this example to facilitate reading is often omitted in novel experimental ways.

Sentences may be short. Then they are easy to read. And understand, too. But they look cheap. And breathless. As well as leaving the reader restless.

31

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Short sentences are easily read, but tend to look breathless and overly excited.

In general, try to vary the length of sentences.

**Never**, ever, use the word 'I' in technical writing.





**Avoid** strong words.

33

- Don't use words like "never", "strongest" etc.

**Avoid** big words.

34

- Complex vocabulary does not mean you are a good writer, you write for people to understand.

## Principles of Effective Writing

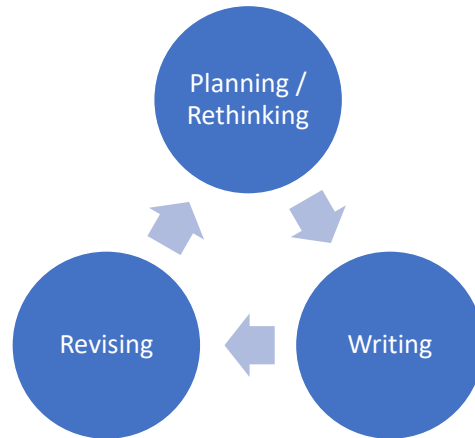
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- “The secret of good writing is to strip every sentence to its cleanest components. Every word that serves no function, every long word that could be a short word, every adverb that carries the same meaning that’s already in the verb, every passive construction that leaves the reader unsure of who is doing what—these are the thousand and one components that weaken the strength of a sentence. And they usually occur in proportion to the education and rank.”

-- William Zinsser in *On Writing Well*, 1976

# Writing Process

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36

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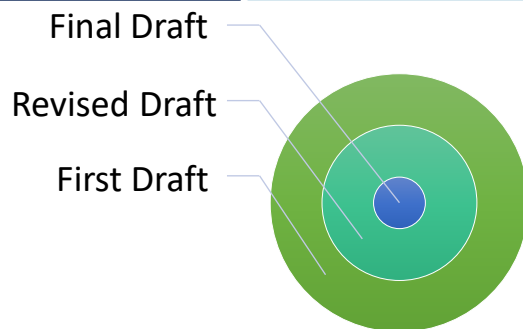
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- Reread your work
- Be critical of your own work

## Revision



Good writing doesn't happen overnight; ***it requires planning, drafting, rereading, revising, and editing.***

Learning and improvement requires ***self-review, peer-review, subject-matter expert feedback, and practice.***

37

Good writing doesn't happen overnight; ***it requires planning, drafting, rereading, revising, and editing.***

- Learning and improvement requires ***self-review, peer-review, subject-matter expert feedback, and practice.***
- There are ***no shortcuts***; practice makes perfect!

# Common Clutter

---

**1. Dead weight words and phrases**

*As it is well known, As it has been shown, It can be regarded that, It should be emphasized that*

**2. Empty words and phrases**

*basic principles of, methodologic, important*

**3. Long words or phrases that could be short**

*muscular and cardiorespiratory performance*

**4. Unnecessary jargon and acronyms**

*muscular and cardiorespiratory performance, Gliomagenesis, miR*

**5. Repetitive words or phrases**

*studies/examples, illustrate/demonstrate, challenges/difficulties, successful solutions*

**6. Adverbs**

*very, really, quite, basically, generally, etc.*

# Common Clutter

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  - B. very, really, quite, basically, generally, etc.
  - C. As it is well known, As it has been shown, It can be regarded that, It should be emphasized that
  - D. illustrate/demonstrate, challenges/difficulties, successful solutions.
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## Long words and phrases that could be short

---

<b>A majority of</b>	<b>most</b>
<b>A number of</b>	<b>many</b>
<b>Are of the same opinion</b>	<b>agree</b>
<b>Less frequently occurring</b>	<b>rare</b>
<b>All three of the</b>	<b>The three</b>
<b>Give rise to</b>	<b>cause</b>
<b>Due to the fact that</b>	<b>because</b>
<b>Have an effect on</b>	<b>affect</b>

## Eliminate negatives

---

- Not honest  
dishonest
- Not harmful  
safe
- Not important  
unimportant
- Does not have  
lacks
- Did not remember  
forgot
- Did not pay attention to  
ignored
- Did not succeed  
failed

## Practice- Re-write in brief

---

- An IQ test measures an individual's abilities to perform functions that usually fall in the domains of verbal communication, reasoning, and performance on tasks that represent motor and spatial capabilities.

### Possible Rewrite

An IQ test measures an individual's verbal, reasoning, or motor and spatial abilities.

# General Tips

**Writing is learned by writing.**

45

- Practice, practice, practice
- Choose good role models
- Study good examples
- But there are also techniques and rules to learn

**Writing well is difficult and time-consuming.**

46

Writing well is difficult and time-consuming, even for those who do it all the time. Spending ten minutes on a sentence expressing a complicated thought is par for the course. Spending another ten minutes re-writing it the next day is common. Often, an entire day's work consists of several well-crafted paragraphs of several hundred words. Write slowly and carefully, selecting each word and molding each phrase deliberately, re-reading and editing and revising over and over again. Do not get frustrated by the slow pace—that's just how it goes. Schedule plenty of time for writing.

