scientific and technical text

Science refers to the process of exploring new knowledge methodically through observation and experiments. Technology refers to the process of applying scientific knowledge in practical applications for various purposes. 02. It focuses on ethical process of gathering data.

Scientific text is read to gain knowledge in a particular area of science. Technical text is read for the purpose of learning more about a subject or understand how to complete a task.

Technical text is a type of informational text that explains the steps for how to do something.

Examples- Science magazines, science textbooks, and experiments are example of scientific texts. Technical text provide detailed information about a specific topic or how to perform a specific task. User manuals, instructions, brochures, and recipes are examples of technical text.

SCIENTIFIC TEXT

1/ Concept and Definition

A text is a coherent set of statements to communicative purpose through signs. The scientific word, in turn, means what belongs or relates to science (i.e. the set of methods and techniques for organizing information).

That said, a scientific text is based on the use of scientific language. It is a type of text that uses clear language, with a not too complex syntax and phrases ordered, the objective being that the information is not poorly interpreted (these texts should therefore be accurate).

Write a scientific text, to avoid ambiguous terms so that the meaning of the words is unique, with a single meaning and only one served. To do this, it must minimize any kind of subjectivity and rely on concrete information rather than opinions.

The aim is that the scientific text is understood by any person belonging to the target group to which it is addressed. It must aspire to universality using a specific terminology while allowing for precise and accurate translations in other languages where the erroneous interpretations have no place.

The scientific texts present statements that are subject to an important check to ensure that their information is credible and real. This kind of text is generally produced in a scientific community to communicate and demonstrate the progress achieved in research work. Through scientific disclosure magazines, these contents reach as many receivers although these publications as rather tend to use a language accessible to the average reader (general public).

2/ Characteristics of good scientific writing:

Good scientific writing is:

a/ Clear: it avoids unnecessary detail;

<u>b/ Simple</u>: it uses direct language, avoiding vague or complicated sentences. Technical terms and jargon are used only when they are necessary for accuracy;

<u>c/ Impartial</u>: it avoids making assumptions (Everyone knows that ...) and unproven statements (It can never be proved that ...). It presents how and where data were collected and supports its conclusions with evidence;

<u>d/ Structured logically</u>: ideas and processes are expressed in a logical order. The text is divided into sections with clear headings;

e/ Accurate : it avoids vague and ambiguous language such as about, approximately, almost;

<u>f/ Objective</u>: statements and ideas are supported by appropriate evidence that demonstrates how conclusions have been drawn as well as acknowledging the work of others.

3/ The purpose of a scientific text:

The purpose of a scientific text is **to inform**, or **to provide** an explanation. When the author wants to provide an explanation for a scientific phenomenon, they will clearly explain a process or a scientific concept. ... Texts that provide an explanation are written simply to present information to the reader.

4/ Scientific text analysis:

- 1. Begin by reading the introduction, not the abstract.
- 2. Identify the big question.
- 3. Summarize the background in five sentences or less.
- 4. Identify the specific question(s).
- 5. Identify the approach.
- 6. Read the methods section.
- 7. Read the results section.

*What tense to use in scientific writing?

Using the right **tense**:

In your **scientific** paper, **use** verb **tenses** (past, present, and future) exactly as you would in ordinary **writing**. **Use** the past **tense** to report what happened in the past: what you did, what someone reported, what happened in an experiment, and so on.

5/ Summarizing a Scientific Text:

Summarizing a short scientific text in one paragraph:

A summary is a shortened version of a longer piece of writing. It captures all the most important parts (main ideas) of the original, but expresses them in a shorter way. Then, it should be expressed--as far as possible--in your own words.

To have a coherent summary of a scientific text, you should follow some reading strategies;

Reading strategies:

- Read the original quickly, and try to understand its main subject or purpose.
- Read it **again** to understand it in more detail, identify **keywords** and highlight the essential information.
 - Look up any technical words or concepts you don't know.

After a good reading, you should then:

A/ Identifying the main sections:

- Work through the text to identify its main sections. A main section can be made up of one or various paragraphs. (Number each different section.)
- Write a one or two-sentence account of each section you identify.
- Focus your attention on the main point and leave out any illustrative examples.

B/ The starting point:

- Write a sentence which states the central idea of the original text.
- Complete the paragraph by including one or two sentences per main point or important part.

Write the Definition

Write the definition of each of the key terms below:

- Technical text
- Jargon
- Didactic literature
- Textbooks

Answer Key

- A technical text is a text written with the purpose of educating or instructing the reader.
- Jargon is language that is specific to a particular context or field.
- Didactic literature is the overarching category of text that technical texts fall under.
- Textbooks are a type of technical text: textbooks are written with the intent of educating the reader.

Attributes of Technical Texts

From the following list, circle the words or phrases that describe a technical text:

- Intended to educate or to instruct
- Includes organizational techniques (like chapters, headings, subheadings, etc.) meant to make information easier to understand
- Often features poetic, literary language
- Is always and has always been available to a general audience

Answer Key:

- Intended to educate or to instruct
- Includes organizational (like chapters, headings, subheadings, etc.) meant to make information easier to understand

Examples of Technical Texts

Below is a list of different types of texts. Based on your knowledge of these texts, determine whether they are technical or not. Provide an explanation for why the text can or cannot be considered technical.

- Camera manual
- Comedy special on Netflix
- An op-ed in the New York Times
- APA style guide

Answer Key

- A camera manual is a technical text because its purpose is to provide instruction for readers about using their camera.
- A comedy special on Netflix, or any other entertainment provider, is not a technical text because its purpose is to entertain, not to inform.
- An op-ed is meant to express an opinion and to engage readers in a current event; op-eds are not highly-specific texts meant to educate or to instruct readers and are usually accessible to general audiences.
- An APA style guide (APA is one of the major types of citation style used in academics) is meant to instruct readers on how to use APA; therefore, this is an example of a technical text.