

Communication Skills

Reading Comprehension — Note Taking, Vocabulary and Grammar

1. Note Taking

Note taking is the practice of recording key information, ideas, and facts from a text, lecture, or discussion, in a concise and organised form, for the purpose of later review, revision, or reference. Effective note taking is an essential academic and professional skill, since it helps a reader or listener actively engage with material, retain important information, and organise complex content into a manageable, structured form.

Good note taking should focus on capturing the main ideas and essential supporting details of a text, rather than attempting to copy it word for word, and should use a clear, consistent structure that makes the notes easy to review and understand later.

Some commonly used note-taking methods are described below:

Method	Description
Outline Method	Notes are organised in a structured, hierarchical format, using headings, sub-headings, and indented bullet points to reflect the relationship between main ideas and supporting details.
Cornell Method	The note page is divided into three sections: a narrow column for keywords or questions, a larger column for detailed notes taken while reading or listening, and a summary section at the bottom, written after review.
Mapping (Mind-Map) Method	Notes are organised visually around a central topic, with related ideas branching outward, useful for showing relationships between concepts rather than a strictly linear sequence.
Abbreviation and Symbol Method	Common words and phrases are shortened using abbreviations and symbols (such as 'w/' for 'with', '→' for 'leads to', or '∴' for 'therefore'), allowing notes to be taken more quickly without losing essential meaning.

2. Reading Comprehension

Reading comprehension refers to the ability to read a piece of text and understand, interpret, and derive meaning from it, including its main ideas, supporting details, tone, and underlying purpose. Strong reading comprehension skills are essential not only for academic study, but also for everyday professional tasks such as understanding technical manuals, reports, emails, and instructions accurately.

Several reading strategies can be used, depending on the purpose of reading a particular text:

Strategy	Purpose
Skimming	Reading quickly through a text to get a general idea of its overall content and main theme, without focusing on every detail.
Scanning	Reading quickly through a text with the specific purpose of locating a particular piece of information, such as a date, name, or figure.
Detailed (Close) Reading	Reading a text slowly and carefully, in order to understand its full meaning, including finer details, tone, and the relationships between ideas.
SQ3R Method	A structured reading technique involving five steps: Survey (previewing the text), Question (forming questions about the content), Read (reading actively to answer those questions), Recite (summarising the content in one's own words), and Review (revisiting the material to reinforce understanding).

3. Sample Passage for Practice

Read the following passage carefully, and then attempt the note-taking, comprehension, vocabulary, and grammar exercises based on it.

The Challenge of Storing Renewable Energy

Renewable sources of energy, such as solar and wind power, have become increasingly important in the global effort to reduce dependence on fossil fuels. Unlike conventional power plants, which can generate electricity on demand, solar and wind installations produce power in an intermittent manner, depending on weather conditions and the time of day. This mismatch between the timing of electricity generation and the timing of actual consumer demand presents a significant challenge for engineers and grid planners.

One increasingly viable solution to this problem is large-scale battery storage. By storing surplus electricity generated during periods of high renewable output, and releasing it later when demand rises or generation falls, battery storage systems help to curtail wastage and smooth out fluctuations in electricity supply. In recent years, the cost of battery technology, once considered prohibitive for widespread use, has fallen considerably, making large-scale storage projects increasingly practical.

Many electricity grids around the world are now being retrofitted with battery storage facilities alongside existing renewable power plants, allowing surplus energy to be captured rather than wasted. As storage technology continues to improve, some experts believe that certain traditional backup power sources, such as older gas-fired 'peaking' plants used only during times of high demand, may eventually become redundant, replaced instead by cleaner, battery-based alternatives. However, significant technical and economic challenges

remain before renewable energy, supported by storage, can fully replace conventional power generation on a global scale.

(This is an original passage composed for practice purposes.)

4. Comprehension Exercise

Answer the following questions based on the passage above.

1. Why do solar and wind power installations present a particular challenge for grid planners, compared to conventional power plants?
2. What solution does the passage suggest for managing the mismatch between renewable energy generation and consumer demand?
3. According to the passage, what change has occurred in the cost of battery technology in recent years?
4. What does the passage suggest could eventually happen to older gas-fired 'peaking' power plants?
5. Does the passage suggest that renewable energy can already fully replace conventional power generation? Support your answer with a phrase from the passage.

Answer Key (Comprehension)

1. Because their power output is intermittent, depending on weather and time of day, unlike conventional plants which can generate electricity on demand. 2. Large-scale battery storage, which stores surplus electricity and releases it when needed. 3. The cost of battery technology, once prohibitive, has fallen considerably. 4. They may eventually become redundant, replaced by cleaner, battery-based alternatives. 5. No; the passage states that 'significant technical and economic challenges remain before renewable energy, supported by storage, can fully replace conventional power generation on a global scale.'

5. Note-Taking Exercise

Using the outline method or the Cornell method described in Section 1, prepare a set of concise notes summarising the sample passage in Section 3. Your notes should include:

- The main topic or theme of the passage.
- The key problem described in the passage.
- The main solution discussed, and how it works.
- Any important supporting details or examples mentioned.

- A one- or two-line overall summary of the passage, written in your own words.

6. Vocabulary Enhancement

The following words have been taken from the sample passage. Study their meanings and example usage, and then attempt the synonym/antonym exercise that follows.

Word (from the passage)	Meaning	Example Sentence
Intermittent	Occurring at irregular intervals; not continuous	The intermittent nature of wind and solar power poses a challenge for grid planners.
Curtail	To reduce or limit something	Engineers seek ways to curtail the wastage of surplus renewable energy.
Viable	Capable of working successfully; feasible	Battery storage is becoming an increasingly viable solution for renewable energy systems.
Retrofit	To add a new component or feature to something that did not have it when built	Many older buildings are being retrofitted with rooftop solar panels.
Redundant	No longer needed or useful; superfluous	Improved battery technology may eventually make certain backup generators redundant.
Prohibitive	So high or demanding as to prevent something from being done	The cost of early solar panels was often prohibitive for average households.

Synonym and Antonym Exercise

For each of the following words (all taken from the passage), one possible synonym and one possible antonym are given below. Try to use each word correctly in a new sentence of your own as further practice.

Word	Synonym	Antonym
Intermittent	Sporadic, irregular	Continuous, constant
Curtail	Reduce, limit	Extend, expand
Viable	Feasible, workable	Impractical, unworkable
Redundant	Unnecessary, superfluous	Essential, necessary
Prohibitive	Excessive, restrictive	Affordable, reasonable

7. Grammar Exercises Based on the Passage

Exercise A: Identifying Tenses

Identify the tense used in each of the following sentences, taken or adapted from the passage:

6. “Renewable sources of energy... have become increasingly important...” (Identify the tense of the underlined verb phrase.)
7. “Solar and wind installations produce power in an intermittent manner...” (Identify the tense.)
8. “The cost of battery technology... has fallen considerably...” (Identify the tense.)

Answer Key: 1. Present perfect tense. 2. Simple present tense. 3. Present perfect tense.

Exercise B: Fill in the Blanks (Prepositions and Articles)

Fill in each blank with an appropriate preposition or article, based on the context of the passage:

9. Battery storage systems help to curtail wastage and smooth out fluctuations ____ electricity supply.
10. Many electricity grids around the world are now being retrofitted ____ battery storage facilities.
11. ____ increasingly viable solution to this problem is large-scale battery storage.

Answer Key: 1. in. 2. with. 3. An.

Exercise C: Sentence Correction

Each of the following sentences contains a grammatical error. Identify and correct the error.

12. “Solar and wind installations produces power in an intermittent manner.”
13. “The cost of battery technology have fallen considerably in recent years.”
14. “Many electricity grids is now being retrofitted with battery storage facilities.”

Answer Key: 1. 'produces' should be 'produce' (subject-verb agreement with the plural subject 'installations'). 2. 'have' should be 'has' (subject-verb agreement with the singular subject 'cost'). 3. 'is' should be 'are' (subject-verb agreement with the plural subject 'grids').

8. Multiple Choice Questions (MCQs)

Answer the following questions by selecting the most appropriate option.

1. Skimming a text is best used when a reader wants to:

- A) Locate one specific fact quickly
- B) Get a general idea of the overall content
- C) Memorise every word exactly
- D) Translate the text into another language

2. Scanning a text is best used when a reader wants to:

- A) Understand the emotional tone of the text
- B) Locate a specific piece of information quickly
- C) Summarise the entire passage
- D) Analyse the grammar used

3. In the SQ3R method of reading, the letter 'Q' stands for:

- A) Quiet
- B) Question
- C) Quick-read
- D) Quote

4. In the Cornell note-taking method, the page is typically divided into:

- A) One single column only
- B) Three sections: keywords/questions, detailed notes, and a summary
- C) Five separate pages
- D) Only a title and a date

5. The main purpose of using abbreviations and symbols while taking notes is to:

- A) Make the notes harder to understand later
- B) Allow notes to be taken more quickly without losing essential meaning
- C) Avoid understanding the material
- D) Replace the need for reading altogether

6. Reading comprehension refers to the ability to:

- A) Read a text aloud fluently, regardless of understanding
- B) Understand, interpret, and derive meaning from a written text
- C) Memorise a text word for word
- D) Translate a text into another language only

7. The word 'intermittent' most nearly means:

- A) Continuous
- B) Occurring at irregular intervals
- C) Extremely powerful
- D) Completely absent

8. The word 'viable' most nearly means:

- A) Impossible
- B) Feasible or workable
- C) Expensive
- D) Outdated

9. The word 'curtail' most nearly means:

- A) To increase greatly
- B) To reduce or limit
- C) To repair
- D) To celebrate

10. An antonym of the word 'redundant' is:

- A) Unnecessary
- B) Superfluous
- C) Essential
- D) Excessive

11. An antonym of the word 'prohibitive' (as used to describe cost) is:

- A) Excessive
- B) Affordable
- C) Restrictive
- D) High

12. The mapping (mind-map) method of note-taking is particularly useful for:

- A) Showing strictly linear, sequential information only
- B) Showing relationships between ideas branching out from a central topic
- C) Avoiding the use of any visual structure
- D) Recording only numerical data

13. Vocabulary enhancement while reading is best supported by:

- A) Skipping unfamiliar words entirely
- B) Noting down new words along with their meanings and usage in context
- C) Avoiding the use of a dictionary
- D) Reading only very simple texts permanently

14. Grammar exercises based on a reading passage typically help learners to:

- A) Ignore sentence structure entirely
- B) Identify and apply correct tense, sentence structure, and word usage in context
- C) Avoid reading comprehension altogether
- D) Focus only on vocabulary, not grammar

15. Detailed (close) reading, as a reading strategy, is most useful when:

- A) A reader wants only a general overview
- B) A reader needs to understand the full meaning, tone, and finer details of a text
- C) A reader is searching for a single date or figure

D) A reader has very limited time available

Answer Key

1. B) Get a general idea of the overall content | 2. B) Locate a specific piece of information quickly | 3. B) Question | 4. B) Three sections: keywords/questions, detailed notes, and a summary | 5. B) Allow notes to be taken more quickly without losing essential meaning | 6. B) Understand, interpret, and derive meaning from a written text | 7. B) Occurring at irregular intervals | 8. B) Feasible or workable | 9. B) To reduce or limit | 10. C) Essential | 11. B) Affordable | 12. B) Showing relationships between ideas branching out from a central topic | 13. B) Noting down new words along with their meanings and usage in context | 14. B) Identify and apply correct tense, sentence structure, and word usage in context | 15. B) A reader needs to understand the full meaning, tone, and finer details of a text

9. Broad / Long Answer and Practice Questions

1. Explain the importance of note-taking as a study and professional skill, and describe any two methods of note-taking in detail.
2. Distinguish between skimming and scanning as reading strategies, giving an example of when each would be most appropriately used.
3. Explain the five steps of the SQ3R method of reading, and discuss how it helps improve reading comprehension.
4. Read any short technical article of your choice (from a textbook, magazine, or reliable website) and prepare a structured set of notes using the Cornell method, following the format described in this chapter.
5. Summarise the sample passage given in Section 3 in your own words, in not more than 60 words.
6. Using the words 'intermittent', 'viable', and 'redundant' (from the vocabulary section), write three original sentences of your own, different from the examples given in this chapter.
7. Explain why vocabulary enhancement is considered an important part of developing strong reading comprehension skills.
8. Identify and explain any three grammatical rules illustrated by the grammar exercises in Section 7 (such as subject-verb agreement or verb tense usage).

9. Choose a short paragraph from any technical subject you are currently studying, and identify at least five words in it that could be considered part of your 'technical vocabulary'. Provide a simple definition for each.
10. Discuss how strong reading comprehension, note-taking, vocabulary, and grammar skills, taken together, contribute to effective technical communication in an engineering or professional career.

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