

Unit – I

Academic Writing & Essential Features

Academic writing can be divided into two types: student academic writing, which is used as a form of assessment at university, as well as at schools as preparation for university study; and expert academic writing, which is writing that is intended for publication in an academic journal or book. Both types of academic writing (student and expert) are expected to adhere to the same standards, which can be difficult for students to master.

Academic writing should have a clear structure. The structure will often derive from the genre of writing. For example, a report will have an introduction, a method section, a results section, and a discussion section, while an essay will have an introduction (including a thesis statement), clear body paragraphs with topic sentences, and a conclusion. The writing should be coherent, with logical progression throughout, and cohesive, with the different parts of the writing clearly connected. Careful planning before writing is essential to ensure that the final product will be well structured, with a clear focus and logical progression of ideas.

Academic writing should be evidenced, in other words the opinions and arguments should be supported by facts, reasons, statistics, and cited information from experts in the field. Academic writing should be critical, rather than simply descriptive. As an academic writer, you should not simply accept everything you read as fact. You need to analyse and evaluate the information you are writing about, in other words make judgements about it, before you decide whether and how to integrate it into your own writing.

Academic writing should be balanced. This means giving consideration to all sides of the issue and avoiding bias, as well as showing the strength of your arguments by using hedges or boosters. Academic writing is objective. In other words, the emphasis is placed on the arguments and information, rather than on the writer. As a result, academic writing tends to use more passive structures, rather than active voice.

Finally, academic writing is more formal than everyday writing. It tends to use longer words and more complex sentences, while avoiding contractions and colloquial or informal words or expressions that might be common in spoken English.

1. Courtesy in Academic Writing

Meaning

Courtesy means **being polite, respectful, and professional** in writing. In academic writing, we must respect the reader, the teacher, the examiner, and other researchers.

Why Courtesy is Important

- Creates a **positive impression**
- Shows **professional attitude**
- Helps in **clear academic communication**
- Avoids rude or emotional language

Features of Courteous Writing

- Use **polite and formal words**
- Avoid harsh criticism
- Respect others' opinions
- Maintain a neutral and academic tone

Examples

Wrong:

This author's idea is useless and wrong.

Correct:

The author's argument has certain limitations and needs further clarification.

Wrong:

You are wrong in saying this.

Correct:

This viewpoint may be reconsidered based on recent studies.

Tips

- Avoid slang and casual language
- Do not use emotional or insulting words
- Use phrases like:
 - *It may be observed that...*
 - *The study suggests...*
 - *It can be argued that...*

2. Clarity in Academic Writing

Meaning

Clarity means **expressing ideas clearly and understandably** so that the reader can easily grasp the message.

Why Clarity is Important

- Helps the reader understand ideas quickly
- Reduces confusion
- Improves marks in exams and assignments

Characteristics of Clear Writing

- Simple vocabulary
- Short and meaningful sentences
- Logical flow of ideas
- Proper use of headings and paragraphs

Examples

Unclear:

The system shows improvement in performance which is related to many factors.

Clear:

The system shows improved performance due to better hardware and optimized software.

Unclear:

This method is good.

Clear:

This method is effective in reducing processing time.

Tips

- Use **one idea per sentence**
- Avoid unnecessary technical jargon
- Explain technical terms when used
- Read your writing once to check if it is easily understandable

3. Conciseness in Academic Writing

Meaning

Conciseness means **expressing ideas in minimum words without losing meaning.**

Why Conciseness is Important

- Saves reader's time
- Makes writing more effective
- Avoids repetition
- Improves readability

Features of Concise Writing

- No unnecessary words
- No repetition of ideas
- Direct sentences

Examples

Wordy:

Due to the fact that the experiment failed, it was repeated again.

Concise:

Since the experiment failed, it was repeated.

Wordy:

In my personal opinion, I think that this project is useful.

Concise:

This project is useful.

Tips

- Avoid phrases like “*I think*”, “*in order to*”, “*due to the fact that*”
- Remove repeated ideas
- Use active voice when possible

4. Correctness in Academic Writing

Meaning

Correctness means **using correct grammar, spelling, punctuation, facts, and format** in writing.

Why Correctness is Important

- Shows academic discipline
- Improves credibility
- Avoids misunderstanding
- Essential for exams, research papers, and reports

Areas of Correctness

a) Grammar

Wrong: He go to lab every day.

Correct: He goes to the lab every day.

b) Spelling

Wrong: enviroment

Correct: environment

c) Punctuation

Wrong: The experiment was successful however it took more time

Correct: The experiment was successful; however, it took more time.

d) Facts and Data

- Always check technical facts
- Use correct formulas and units
- Cite sources properly if required

Tips

- Revise grammar basics
- Proofread before submission
- Use spelling and grammar tools

Coherence and Completeness in Academic Writing

Academic writing should be **clear, connected, and complete**. Two important qualities that help achieve this are **Coherence** and **Completeness**.

1. Coherence in Academic Writing

Meaning

Coherence means **logical connection and smooth flow of ideas** in writing.

When a piece of writing is coherent, **each sentence and paragraph is linked** and easy to follow.

In simple words:

Coherence makes writing “flow like a chain” rather than broken pieces.

Why Coherence is Important

- Helps the reader understand ideas easily
- Avoids confusion
- Improves quality of answers in exams
- Makes reports and projects professional

Features of Coherent Writing

1. Logical Order of Ideas

Ideas should be arranged from:

- general to specific
- cause to effect
- problem to solution

2. Use of Linking Words (Connectors)

Words that connect ideas:

- *and, but, however, therefore, moreover, because, for example*

3. Clear Paragraph Structure

- One main idea per paragraph
- Supporting sentences explain the main idea

4. Consistency in Tense and Point of View

- Do not change tense suddenly
- Use same person (usually third person)

Example

Incoherent:

The experiment was successful. Temperature was high. The result was noted.

Coherent:

The experiment was successful because the temperature was maintained at a high level; therefore, accurate results were obtained.

Tips

- Plan before writing
- Use proper connectors
- Read your answer once to check flow
- Avoid jumping between ideas

2. Completeness in Academic Writing

Meaning

Completeness means **providing all necessary information** so that the reader does not have unanswered questions.

In simple words:

Completeness means saying everything that is required—no missing points.

Why Completeness is Important

- Helps in scoring full marks
- Makes answers meaningful
- Avoids vague or half answers
- Essential in lab records and project reports

Features of Complete Writing

1. **All Parts of the Question Answered**
 - Introduction
 - Explanation
 - Examples (if needed)
 - Conclusion
2. **Clear Explanation of Ideas**
 - What?
 - Why?
 - How?

3. Supporting Details

- Definitions
- Diagrams / examples
- Data or results (if required)

Example

Incomplete:

Communication is important in engineering.

Complete:

Communication is important in engineering because engineers must explain designs, present ideas, and work in teams effectively.

Tips

- Read the question carefully
- Do not leave ideas half-explained
- Use examples where required
- Write a brief conclusion

Difference Between Coherence and Completeness

Aspect	Coherence	Completeness
Meaning	Logical flow of ideas	Full information
Focus	Connection between ideas	Coverage of ideas
Main Question	Is it connected?	Is anything missing?
Result	Easy to read	Fully understood

Types of Academic Writing

Academic writing can be classified into **four main types** based on **purpose and approach**. Each type is used in different academic and technical contexts.

1. Descriptive Writing

Meaning

Descriptive writing **describes facts, events, processes, or concepts**. It answers “**What is it?**” or “**What happened?**”

It only explains, not analyses or judges.

Purpose

- To give information
- To explain procedures or processes
- To describe systems, tools, or experiments

Features of Descriptive Writing

- Simple and factual language
- No personal opinion
- Clear and logical order
- Use of definitions and examples

Examples (Engineering Context)

A transformer is an electrical device used to increase or decrease voltage levels in power transmission. The experiment was conducted using a DC motor and the readings were recorded at regular intervals.

Students Use It

- Lab records
- Definitions in exams
- Describing equipment or processes
- Technical manuals

2. Analytical Writing

Meaning

Analytical writing **examines information by breaking it into parts** and explaining **how and why** something works.

It answers “How?” and “Why?”

Purpose

- To analyze causes and effects
- To explain relationships
- To interpret data or results

Features of Analytical Writing

- Logical reasoning
- Cause–effect explanation
- Comparison and contrast
- Use of data and examples

Examples

The efficiency of the motor decreases as temperature increases because higher heat causes energy loss.

The results show that Algorithm A performs better than Algorithm B in terms of time complexity.

Students Use It

- Result analysis in lab reports
- Data interpretation
- Technical assignments
- Project discussions

3. Persuasive Writing

Meaning

Persuasive writing **tries to convince the reader** to accept a particular idea or solution using **logical arguments and evidence**.

It answers “Why should we accept this?”

Purpose

- To argue for a solution
- To recommend a method or design
- To justify a project choice

Features of Persuasive Writing

- Clear opinion or claim
- Logical arguments
- Supporting evidence
- Formal and confident tone

Examples

Renewable energy should be adopted in engineering projects because it reduces pollution and ensures sustainable development.

This software tool is recommended as it improves accuracy and reduces processing time.

Students Use It

- Project proposals
- Seminar presentations
- Technical reports
- Opinion-based exam questions

4. Critical Writing

Meaning

Critical writing **evaluates ideas by questioning, comparing, and judging** them.

It discusses **strengths and weaknesses**.

It answers “How good is it?” and “What are its limitations?”

Purpose

- To evaluate theories or systems
- To identify advantages and disadvantages
- To suggest improvements

Features of Critical Writing

- Balanced view (positive and negative)
- Logical judgment
- Evidence-based evaluation
- Academic tone

Examples

Although artificial intelligence improves efficiency, it also raises concerns related to data privacy and job displacement.

The design is cost-effective; however, its performance under high load conditions is limited.

Students Use It

- Literature review
- Project evaluation
- Research papers
- Higher-order exam answers

Comparison of Types of Academic Writing

Type	Focus	Key Question
Descriptive	Facts & explanation	What is it?
Analytical	Reason & relationship	How and why?
Persuasive	Argument	Why accept it?
Critical	Evaluation	How good is it?