

Introduction to Technical Communication and Reading

Unit: 1

Introduction to the course



AASL 0401

Technical Communication

B Tech 2nd Year

Department of English



Evaluation Scheme

Technical Communication / IV semester									
Periods			Evaluation Scheme			End sem		Total	Credit
L	T	P	CT	TA	Total	TE	PE		
2	1	0	30	20	50	100		150	3

SYLLABUS – UNIT 1

- Introduction to the course
- Fundamentals of Technical communication
- Role of technical communication
- Reading Comprehension - central idea, tone, and intention
- Critical reading strategies

SYLLABUS – UNIT 2

Technical Writing 1

- Characteristics of technical writing; technical vocabulary, etymology
- Business letters /emails – types, format, style and language
- Notices, agenda and minutes
- Job application, CV and resume'

SYLLABUS – UNIT 3

Technical Writing 2

- Technical reports – types & formats
- Structure of a report
- Technical Proposal - structure and types
- Technical/Scientific paper writing

SYLLABUS – UNIT 4

Public Speaking

- Components of effective speaking (emphasis on voice dynamics)
- Seminar and conference presentation
- Conducting/ participating in meetings
- Appearing for a job interview
- Mobile etiquettes

SYLLABUS – UNIT 5

Manuscript Preparation

- Short report writing
- Copy editing and referencing
- Developing writing style – Jargons, Abbreviations
- Ethical writing

CONTENTS

- Course Objective
- Course Outcome
- CO-PO Mapping
- Introduction to the course
- Fundamentals of Technical communication
- Role of technical communication
- Reading Comprehension - central idea, tone, and intention
- Critical reading strategies

Introduction to Technical Communication and Reading

Unit: 1, Topic-1

Technical Communication

B. Tech 2nd Year



Department of English



Prerequisites and Recap

Prerequisites

- Basic knowledge of English
- Knowledge of parts of speech
- Basic reading and writing skills in English

Recap

- Introduction

Technical communication

- Sharing scientific and technical information in a scientific and technical manner
- Specific format
- Specific language
- Specific style
- Specific audience

Grice's "Cooperative Principles"

In his book *Logic and Conversation*, 1975

- **Maxim** (a saying that is widely accepted on its merits: **Axiom**)
- **Maxim of Quantity**- info no more no less
- **Maxim of Quality**- avoid false & untrue info
- **Maxim of relation**- Be relevant
- **Maxim of manner**-Unambiguous, brief & orderly

Forms of technical communication

- **WRITTEN**

- Letters
- Memo
- Notices
- Circulars
- Report
- Proposals
- Articles
- Emails
- Research papers

Forms of technical communication

- ORAL
- Presentation
- Meetings
- Telephonic conversation
- Video-conferencing
- Interview
- Conferences
- G.D.

Features of Technical Communication

- Completeness
- Conciseness
- Clarity
- Correctness
- Concreteness
- Consideration
- Courtesy

Technical communication Vs. general communication

DIFFERENCES



GENERAL COMMUNICATION

1. Contains a general message.
2. Informal in style and approach .
3. Indefinite pattern.
4. Mostly oral mode of propagation .
5. Not always for a specific audience .
6. Less use of technical terms or graphics .

TECHNICAL COMMUNICATION

1. Contains a technical message .
2. Mostly formal in style and approach .
3. Follows a set pattern .
4. Both oral and written way .
5. Always for a specific audience .
6. Frequently involves jargons, graphics etc.

ADAPTING MESSAGES TO PURPOSE AND AUDIENCE

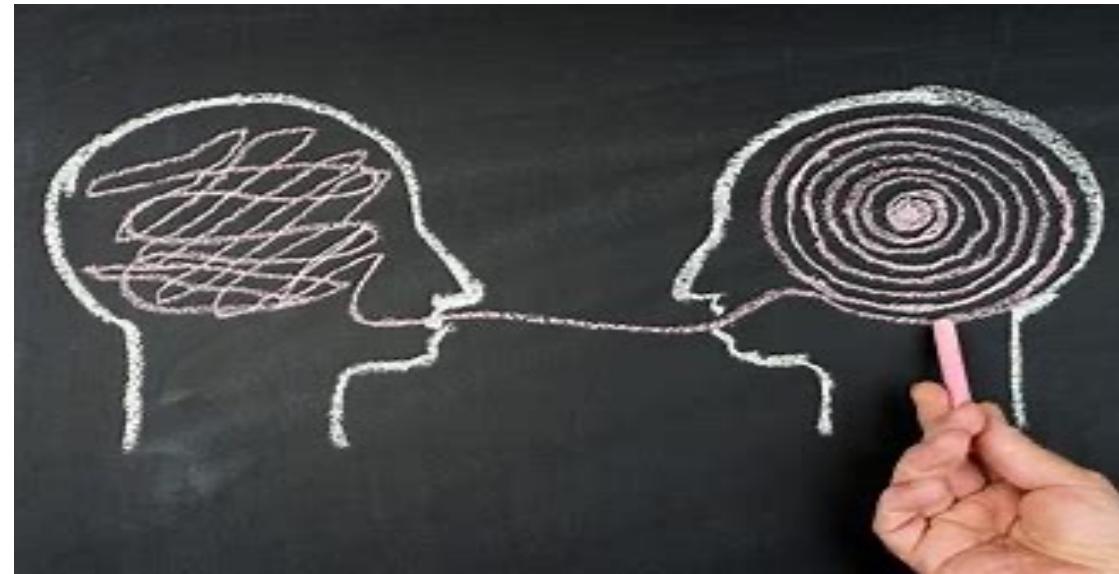
Increases the probability that communication will be successful

- Language
 - Format
 - Style



Language

- Appropriate language is the language that has been adapted to the receiver while retaining a naturalness with respect to the sender



Format

- Depends on the receiver (audience) and on the purpose



Style

- Formal
- Simple
- Natural



Faculty Video Links, Youtube & NPTEL Video Links and Online Courses Details

- <https://www.youtube.com/watch?v=w9ZFYbelU78>
- <https://www.youtube.com/watch?v=RIzGQKxfYsI>
- <https://www.youtube.com/watch?v=9IMUq4hgrlk>

Daily Quiz

1. Technical communication uses _____ audience.

- a. General
- b. Specific

2. Clarity in communication requires emphasis on a particular message rather than trying to achieve too much at once.
(True/False)

3. _____ is not one of the 7Cs of communication.

- a. Conciseness
- b. Clarity
- c. Character
- d. correctness

Daily Quiz Answer

1. Technical communication uses _____ audience.
 - a. General
 - b. **Specific**
2. Clarity in communication requires emphasis on a particular message rather than trying to achieve too much at once.
(True/False)
3. _____ is not one of the 7Cs of communication.
 - a. Conciseness
 - b. Clarity
 - c. **Character**
 - d. Correctness

MCQs

1. Technical communication involves use of jargons.(T/F)
2. General communication refers
 - a. general science communication
 - b. communication for military general
 - c. personal communication
 - d. none of the above
3. Technical communication prefers
 - a. abstractions
 - b. concrete words
 - c. figures of speech
 - d. rhymed expression
4. Technical communication must be
 - a. clear
 - b. correct
 - c. courteous
 - d. all of these

MCQs Answers

1. True
2. (b) personal communication
3. (b) concrete words
4. (d) all of these

Summary

- **Technical Communication:** To convey the facts, figures, ideas and all types of scientific and technical information is technical communication
- **Features:** Completeness, clarity, consideration, courtesy, concreteness, conciseness and correctness
- **Distinction between General and Technical communication:**
Technical communication should be brief, precise and to the point. It should not be rambling (confused) and verbose. (talkative). General communication should be personal ,subjective, poetic, figurative and is done for all

Role of Technical Communication

Unit: 1, Topic-2

AASL 0401
Technical Communication

B Tech 1st Year



Department of English



Prerequisites and Recap

Prerequisites

- Basic knowledge of English
- Knowledge of parts of speech
- Basic reading and writing skills in English

Recap

Basic knowledge of Technical Communication

Dimensions of Technical Communication

Flow of Communication can be of two types:

- 1. Internal**
- 2. External**

Internal- Understanding the forms of communication within an organization

Internal flow of communication in an organization comprises the following:

Dimensions of Technical Communication

Downward Communication

- Communication which flows from the top level to a lower level in an organization is known as downward communication. This flow of communication is used by the managers to convey work-related information to the employees at lower levels

Upward Communication

- Flow of Communication which flows to a higher level in a company is known as upward communication. It gives feedback on how well the company is working. The subordinates use upward communication to express their performances and problems to their superiors

Dimensions of Technical Communication

Horizontal Communication

- The communication which occurs at same levels of hierarchy is known as horizontal communication, that is, communication between managers, between peers at same levels or between any horizontally equivalent organizational members

Diagonal Communication

- The diagonal flow of communication is concerned with communication between managers and employees based at diverse functional divisions

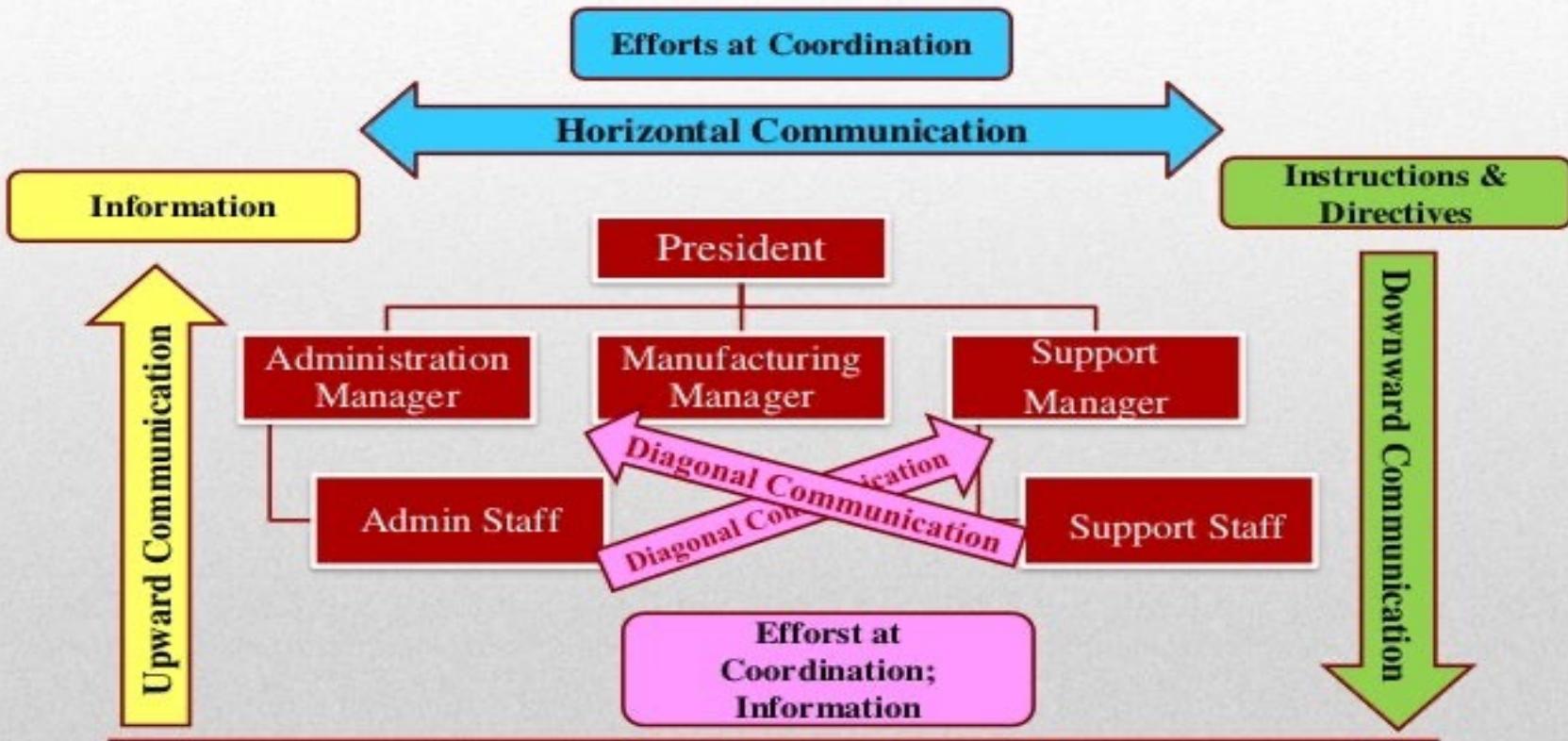
Dimensions of Technical Communication

External

- The external flow of communication takes place between a manager and external groups such as suppliers, vendors, banks, financial institutes, etc. for various reasons:
- Press releases, conferences
- Speeches
- Advertising, marketing
- Letters, email
- Meetings with the community, stakeholders
- Blogs

Dimensions of Technical Communication

ILLUSTRATION OF DIRECTION OF COMMUNICATION



Role of Technical Communication

- The purpose of technical communication is to make information clear and understandable in order to make business more productive and consumer goods more convenient. Effective technical communication will help employers understand and complete job tasks more successfully

Role of Technical Communication

Technical communication serves three purposes:

- To inform: anticipate and answer your readers questions
- To instruct: enable your readers to perform certain tasks
- To persuade: motivate your readers

Importance of Technical communication at the workplace

To demonstrate just how important communication is at work, we've listed some of the benefits it can have on your professional life.

1. It improves team building
2. It boosts growth
3. It increases innovation
4. It improves productivity
5. It increases efficiency
6. It reduces mitigation & conflict
7. It increases employee engagement
8. It resolves problems
9. It enhances skills

Faculty Video Links, Youtube & NPTEL Video Links and Online Courses Details

- [Organizational Communication – YouTube](#)
- [10 Importance of Communication in Business Organization – YouTube](#)
- [Grapevine Communication - YouTube](#)

Daily Quiz

1. Communication in an organization is multidimensional. (True/False).

2. Which of these is not a method for upward communication?
 - a. Open-door policy
 - b. Complaints
 - c. Suggestion
 - d. Scolding

3. Effective communication is not necessary to complete target task.(True/False).

Daily Quiz

1. Communication in an organization is multidimensional. (True/False).

2. Which of these is not a method for upward communication?
 - a. Open-door policy
 - b. Complaints
 - c. Suggestion
 - d. **Scolding**

3. Effective communication is not necessary to complete target task.(True/False).

MCQ s

Q1. Which of these moves from the grass root level.

- a. Downward communication
- b. Diagonal communication
- c. Upward communication
- d. Vertical communication

Q2. _____ communication flows from a superior to subordinate.

- a. Upward
- b. Downward
- c. Horizontal
- d. Diagonal

Q3. Which of these is frequently used channel of communication.

- a. Downward communication
- b. Horizontal communication
- c. Upward communication
- d. Diagonal communication

Q4. In an organisation, which is not a type of communication:

- a. Downward
- b. Horizontal
- c. Upward
- d. Curve

MCQ s Answers

1. (c) upward communication
2. (b) downward
3. (b) Horizontal
4. (d) Curve

Summary

- Communication is a pervasive activity. It takes place at all levels (top, middle, and low) and in all functional areas (production, finance, marketing personnel, etc.) of a business enterprise.
- Communication in an organization is multidimensional as it flows in several directions. It may flow vertically, horizontally and diagonally. Vertical communication flows between superiors and subordinates. It may flow downward or upward.

Reading Comprehension

Unit: 1, Topic-3

Technical Communication

B Tech 2nd Year



Department of English



TC

Unit 1

TC

Prerequisite and Recap

Prerequisites

- The student must have a good degree of control over simple grammatical forms and some complex grammatical forms of English language
- The student should be able to speak English intelligibly

Recap

- The student should be able to understand the importance of technical communication

What is Reading comprehension?

Reading comprehension is the ability to process text, understand its meaning, and to integrate with what the reader already knows.



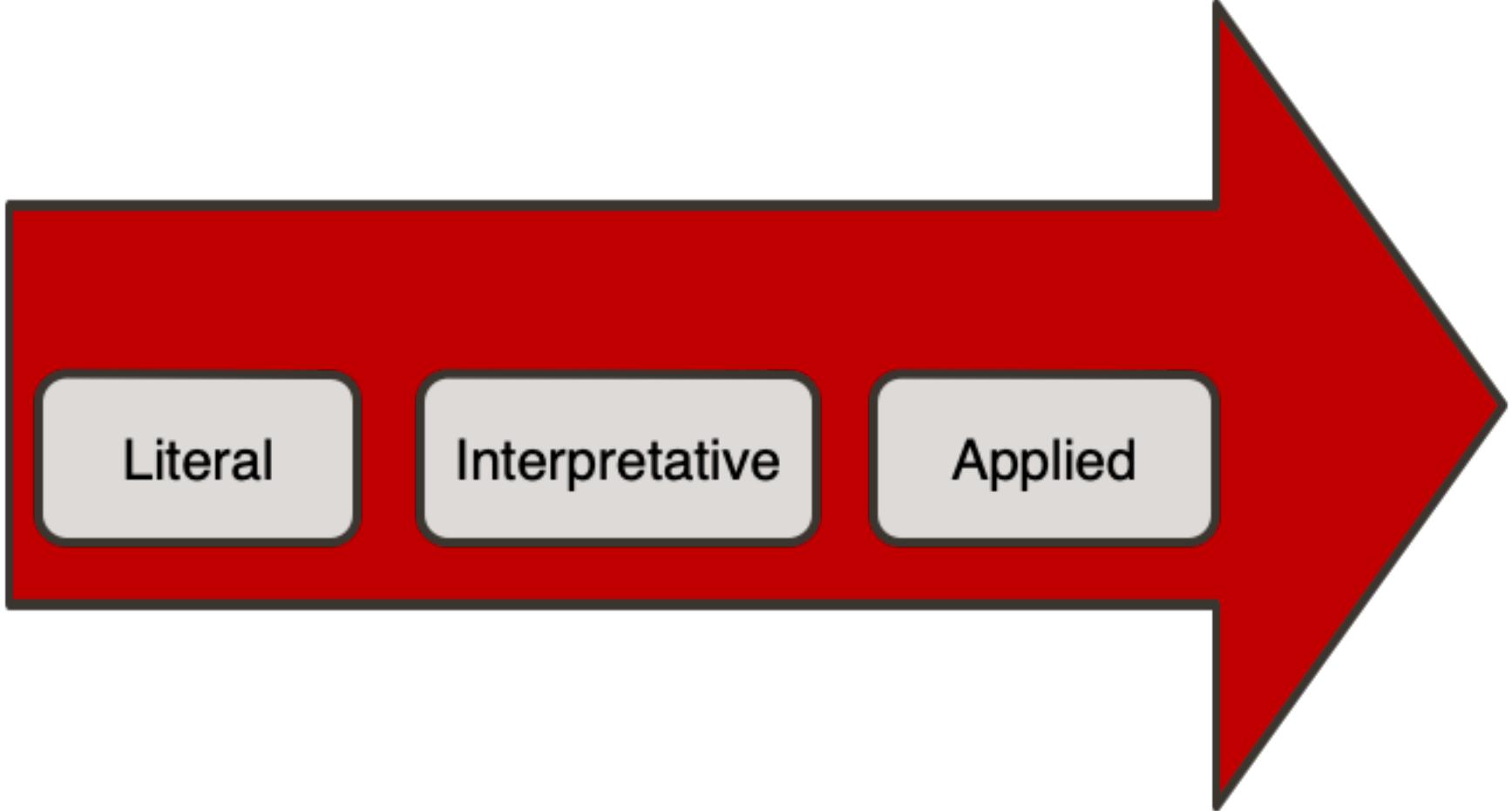
Reading Comprehension cont...

- Comprehension is the essence of 'reading' (Durkin 1993)
- Reading comprehension is the ability to read a text, process it and understand its meaning
- It is the way of understanding what is being read

Reading Comprehension cont...

- Reading comprehension is an intentional, active and interactive process that occurs during, before and after a person reads a particular piece of writing.

Three levels of comprehension

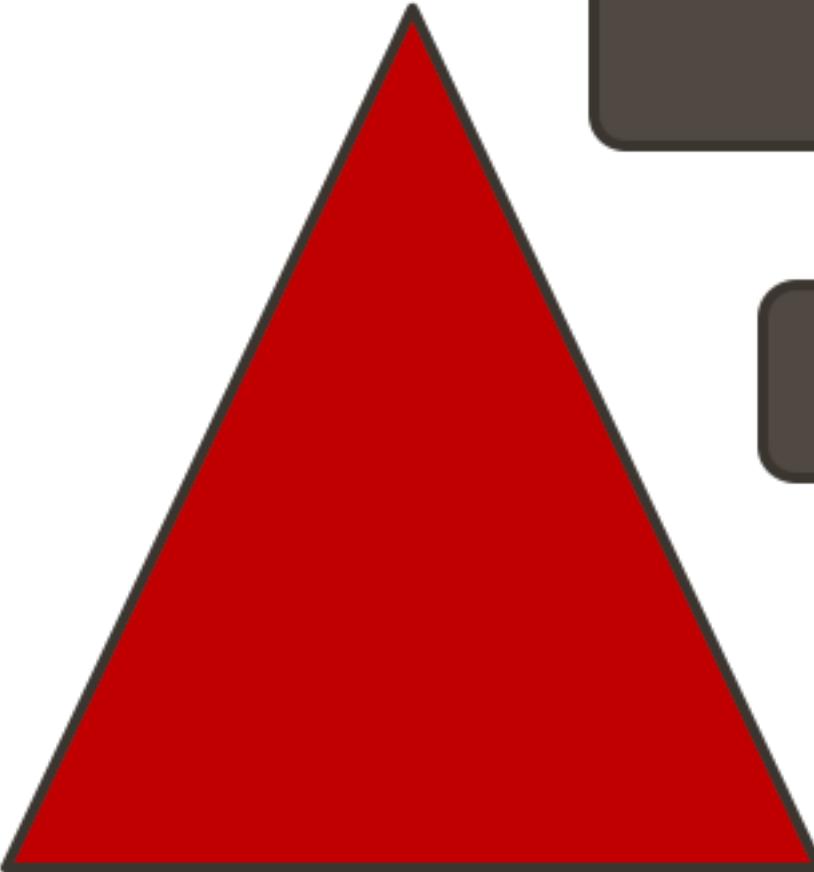


Literal

Interpretative

Applied

Process of Reading Comprehension



Reading beyond the lines

Reading between the lines

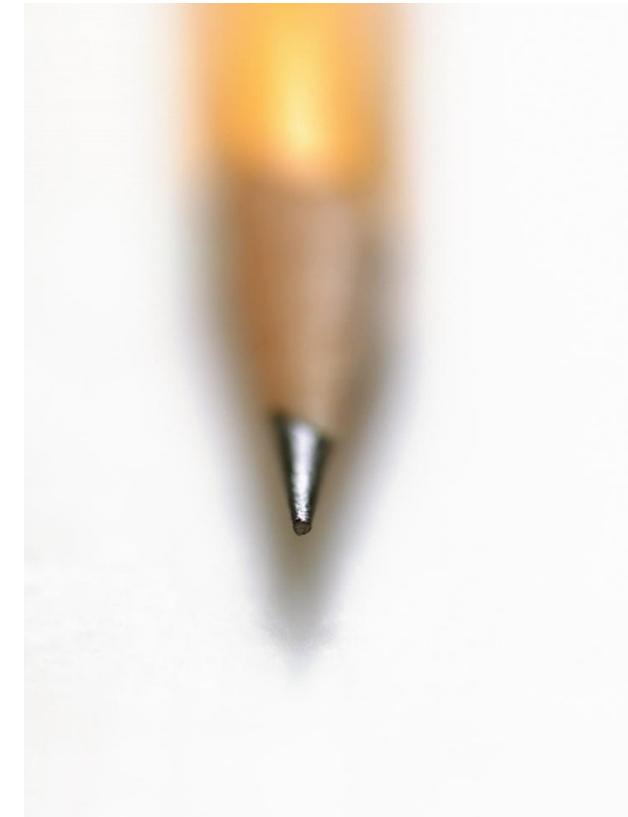
Reading the lines

Reading strategies you can use to improve your comprehension skills

- Improve your vocabulary
- Create questions about the text you are reading
- Use context clues
- Look for the main idea
- Write a summary of what you read
- Break up the reading into smaller sections
- Do not memorize

Reading Comprehension – Central Idea

- The main idea is the “big point” or the most important idea that the writer is communicating to the reader
- Often the reader can find the main idea just by looking at the title
- For example, a passage titled: “Why Students Should Have Less Homework” will include reasons for that idea



What's the Point?

Read this short paragraph:



Engineers create wealth for society. So, tennis is a game, and the resources of the earth are scarce. Have you gone mad? Thus, the only solution is to educate the public on being socially responsible.

DID THIS MAKE SENSE?????

OF COURSE NOT!!!



- It didn't have a **MAIN IDEA!**
- We would go *crazy* if texts were written like this all the time
- It was difficult to understand because it was made of different ideas that did not link. There was no common thread
- **The good news is that normal passages have main ideas!**

Central Idea

- It is like the heart of the text or a paragraph
- It is the controlling idea
- All the other supporting details in the text or within a paragraph should tell us more about the main idea

Ask Yourself....



**WHO or WHAT
is this passage
about?"**

TONE

- What is tone?
- Why do students need to understand the author's tone?
- How to identify tone?

Tone

- The attitude that an author takes toward the audience, the subject, or the character
- Conveyed through the author's words and other details

Words that describe tone

POSITIVE	NEGATIVE	NEUTRAL
Optimistic	Pessimistic	Detached
Formal	Informal	Objective
Humorous , Witty	Sarcastic	Authoritative
Amused, Cheerful	Ironic	Straight-forward
Joyful, Jubilant	Critical	Matter- of- fact
Complimentary	Threatening, Horror	Candid
Compassionate	Foreboding, Ominous	Impartial
Reverent, Respectful	Indifferent	Disinterested

Example -1

"This is one of the best essays I've ever seen. It's clear, concise, and convincing"

- The writer specifies three things that make the reader's essay exceptional: It's "clear, concise and convincing."
- The use of more specific adjectives makes this writer's praise seem sincere & Genuine

Complimentary

Example 2

"Did you see what he just did? My goodness!

- The exclamation mark (!) that follows the question is a clue revealing that the observer is surprised

=> surprised

(!) It is often used to denote surprise

The purpose of understanding tone

- Fully understand the writer's intention
- Have an objective view on the reading

How to identify the TONE?

- Tone must be inferred through the use of descriptive words
- You can recognize the tone/ attitude by the language/ word choices the author uses
- His language will reveal his perspective/ opinion

The purpose of understanding tone

- Fully understand the writer's intention
- Have an objective view on the reading

Intention in Reading

- Intention is the overall feelings or emotions that are created in the reader
- The “power of the pen” can move mountains
- Authors “move” their readers’ moods through their choice of words and level of detail

Example - 1

- During the holidays, my mother's house glittered with decorations and hummed with preparations. We ate cookies and drank juice while we helped her wrap bright packages and trim the tree. We felt warm and excited, listening to Christmas carols and even singing along sometimes. We would tease each other about our terrible voices and then sing even louder
- Intention : Content, happy

How do we know?

- Words like "**warm, excited, glittered**" are used by the author.

Reading Comprehension

- <https://www.youtube.com/watch?v=ZNq2JHEd0HE&list=PLffLKBjSzxT-HLDZ--bm5i51TQ159iN2q>

Understanding tone and mood in Reading Passages

- <https://study.com/academy/lesson/understanding-tone-and-mood-in-a-reading-passage.html>

Understanding writer's tone and point of view

- <https://study.com/academy/lesson/how-to-determine-the-writers-tone-and-point-of-view.html>

Student Volunteers Needed!

On Saturday, December 12th, from 10 A.M. until 4 P.M., Carverton Middle School will be holding a music festival in the school gymnasium. The special event will feature a variety of professional musicians and singers.

TASK	TIME	DATE
Make posters	1 P.M.–4 P.M.	December 5th
Set up gym	11 A.M.–4 P.M.	December 11th
Help performers	9 A.M.–4 P.M.	December 12th
Welcome guests	10 A.M.–2 P.M.	December 12th
Clean up gym	4 P.M.–7 P.M.	December 12th

- Interested students should speak with Ms. Braxton, the music teacher. Students who would like to help at the festival must have written permission from a parent or guardian.

Daily Quiz

1. What time will the festival begin?

- A) 10 A.M.
- B) 11 A.M.
- C) 1 P.M.
- D) 2 P.M.

2. In line 3, the word feature is closest in meaning to _____.

- A) Look
- B) Keep
- C) Include
- D) entertain

3. What job will be done the day before the festival begins?

- A) Making posters
- B) Setting up the gym
- C) Cleaning up the gym
- D) Helping the performers

4. Who is told to talk to Ms. Braxton?

- A) Parents
- B) Students
- C) Teachers
- D) Performers

Daily Quiz: Answers

Answer1: Option A

Answer2: Option C

Answer3: Option B

Answer4: Option B

Summary

- Reading comprehension is the ability to process text, understand its meaning, and to integrate with what the reader already knows.
- The three levels of comprehension are Literal, Interpretative and Applied
- Process of Reading Comprehension are:
 - Reading the lines
 - Reading between the lines
 - Reading beyond the lines

Critical Reading Strategies

Unit: 1, Topic -4

Technical Communication

B Tech 2nd Year



Dr. Anjali Pundhir
Department of English



TC

Unit 1

TC

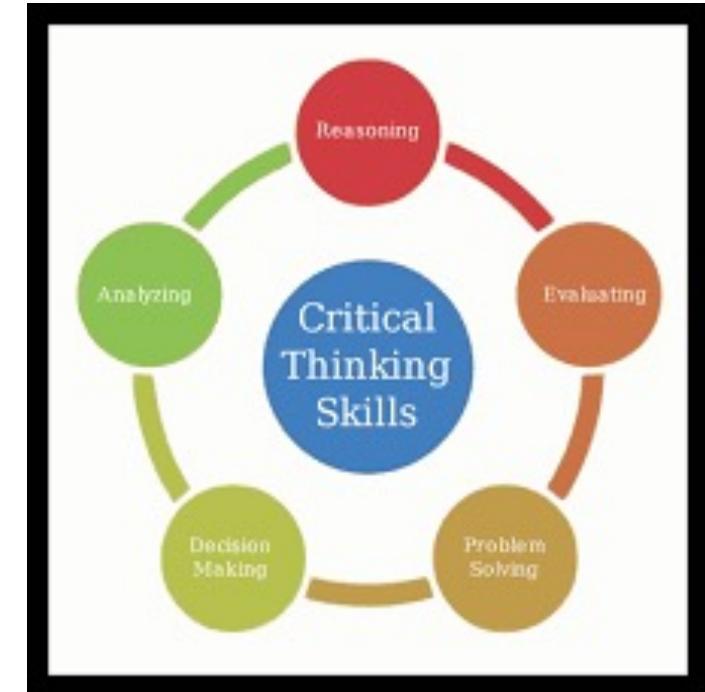
Prerequisites and Recap

- **Prerequisites**
- Basic Reading skills
- Knowledge of tone and intention in reading

- **Recap**
 - Reading comprehension is the ability to process text, understand its meaning, and to integrate with what the reader already knows
 - Three levels of comprehension
 - Process of Reading Comprehension

Critical Reading

- Critical reading is a more ACTIVE way of reading
- It is a deeper and more complex engagement with a text
- Critical reading is a process of analyzing, interpreting and, sometimes, evaluating
- When we read critically, we use our critical thinking skills to QUESTION both the text and our own reading of it



Critical Reading

- Critical reading means engaging in what you read by asking yourself questions such as, '*what is the author trying to say?*' or '*what is the main argument being presented?*'
- Critical reading involves presenting a reasoned argument that evaluates and analyses what you have read.
- Being critical, therefore - in an academic sense - means advancing your understanding, not dismissing and therefore closing off learning.

What to do as a Critical Reader?

Prepare to become a part of the writer's audience

- Learn about the author, anticipated audience and read instructions and notes

Prepare to read With an open mind

- Give the writer a chance to develop ideas and then reflect thoughtfully and objectively on the text

Consider title

- The title will provide clues to the writer's attitude, goals, views and approaches

Read slowly

Use the dictionary and other appropriate reference works

Make notes

- Underline, highlight and jot the main ideas, the thesis and author's viewpoints to support the theory

Keep a reading journal.

- Record your responses and thoughts in a more permanent place

Characteristic features of Critical Reading

- **Examine the evidence or arguments presented**
 - Check out any influence on the evidence or arguments
 - Check out the limitations of study design or focus
 - Examine the interpretations made
 - Decide to what extent you are prepared to accept the author's arguments, opinions or conclusions

Why Critical Reading?

You need to step into the academic debate and to make your own evaluations of how much you are willing to accept what you read, rather than blind acceptance

Critical Reading does not have to be all negative!

- The aim of C.R. is not to find fault, but to assess the strengths of the evidence and arguments

How to become a Critical Reader?

- Consider the title
- Think about What you already know about the topic. What else do you need to know?
- Look at how the text is structured: subdivisions, chapters, acts etc.? Skim the opening sentence of each paragraph. Any hint?
- Read carefully, marking or highlighting confusing parts. (dictionary?)
- Identify key issues or arguments along with important terms and interesting ideas.

Contd.

- You may take notes in margins or in reading journal.
- Question the sources: personal experience, research, imagination etc.
- What question would you like to ask the author?
- Think about the work as a whole: what is it saying?
- Did you get what you expected?

Critical Reading Vs Critical Thinking

- Critical reading is a technique for discovering information and ideas within a text and critical thinking is a technique for evaluating information and ideas, for deciding what to accept and believe
- Critical Reading and Critical Thinking work together
- First you read critically and then think critically

General critique guidelines

Although you are not an expert writer, still you can identify the primary strengths and weaknesses. The followings are areas to be considered:

- **Content:** consider the topic and the way it has been developed
(Appropriateness, interest, clarity of arguments, scope, amount, evidence etc.)
- **Organization:** how the topic is introduced and concluded. Is there thesis statement, does the body develop, is it organized, and does the conclusion restate the thesis.

General critique guidelines

- **Style:** Is the style (humorous, serious, reflective, reflective, satirical etc.) appropriate?
- Is there sufficient creativity?
- Is the word choice interesting?
- **Correctness:** Check for grammar, punctuation and form. Feel free to mark an error. You can put an "X" when a sentence seems wrong to you

Critical Review

- Does a direct thesis convey both the subject and the reviewer's value judgment?
- Does the review provide a summary or description to help you experience the film, music, event, etc.? Note places where the author provides too much or too little detail
- Does the essay clearly identify relevant criteria for evaluation? Are they appropriate, believable and consistent?
- Are any important features of the reviewed subject omitted?
- Logos (logic, content): Does the essay provide sufficient, relevant and interesting details and do examples sufficiently inform and entertain?

Contd.

- Ethos (author): Does the author's judgment seem accurate and convincing?
- Pathos (emotional appeals): Does the author responsibly and effectively utilize emotional appeal to the audience?
- Does the author include adequate reference to the opposition and respond to that opposition appropriately?

Process of Critical Reading

- **Critical reading: the process**
- **Step 1: Pre Read-**Do not start reading right away, look at the title, material, headings and subheadings
- **Step 2: Read-**After pre reading you will have some idea of the passage, start reading with full attention, find out purpose, ideas context
- **Step 3: Annotate-**After reading this is the time to take notes
- **Step 4: Questions-**Write down the questions that you may have in the margins
- **Step 5: Review and Summarise-**review and summarize the text
- **Step 6: Reflect-**Spend some time thinking about the text
- **Step 7: Evaluate -**Evaluate the text

Critical Reading

<https://www.youtube.com/watch?v=H2znt-udk1A>

Critical Reading

<https://www.youtube.com/watch?v=5Hc3hmwnymw>

Summary

- Critical reading is a form of language analysis that does not take the given text at face value but involves a deeper examination of the claims put forth as well as the supporting points and possible counter arguments.
- As a critical reader you should reflect on what the text says; what the text describes; interpretation of the text; critical thinking is an extension of critical reading
- The process of critical reading are step 1: Pre Read; step 2: Read; step 3: Annotate; step 4: Questions; step 5: Review and Summarize; step 6: Reflect; step 7: Evaluate