# Unit 1

Presentation by-

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# After Reading this unit , you would be able to

- Technical Communication: features: Distinction between General And Technical Communication

- Language as a tool of communications

- Levels of communication: Interpersonal, Organizational, Mass communication

- The flow of communication: Downward, Upward, Lateral/Horizontal (Peer group)

- Importance of technical communication

- Barriers to Communication

# What is communication?

**"COMMUNICATION IS THE KEY"**

Look around and you will find people involved in several activities, which involve

- Informal conversations
- Meetings
- Presentations
- Phone calls
- Tele-conferencing
- Video-conferencing
- Gossiping
- Net surfing
- Chatting and so on….

# **What is communication? Contd…**

In short, we need to communicate in order to interact. Communication is one of the essential conditions of social interaction; it plays a key role in our life.

Now let us try to understand what the term *'communication'* means. The term has been defined at various levels.

- **The word communication comes from the Latin word *communicare*, meaning 'to share, to impart, or to commune (to share your emotions and feelings with someone without speaking).**

- *It's literal meaning is 'giving or sharing information'.*

- **"Communication is a process of sharing information". The word process suggests that communication exists as a flow through a sequence or series of steps.**

- Communication is a dynamic interactive process that involves the effective transmission of facts, ideas, thoughts, feelings, and values. It is not passive and does not just happen. We actively and consciously engage in communication in order to develop the information and understanding required for effective group functioning. It is dynamic because it involves a variety of forces and activities interacting over a period of time.

# Nature of Communication

- (i) Transmission of subject-matter or message

- (ii) Involvement of two parties to complete the process of communication

- (iii) The person to whom the message is transmitted understands it in the same sense in which the sender of message wants him to understand it

# Characteristics of Communication:

- **(i) Interchange of information:**

- The basic characteristic of human communication is that it aims at exchanging information. It is a two-way process. The exchange can be between two or more persons. It may be at the individual or the organizational level.

- **(ii) Continuous process:**

- Communication is a continuous process. It is not static. It is constantly subject to change and is dynamic. The people with whom communication is held, its content and nature, and the situation in which communication is held – all keep changing.

- **(iii) Mutual understanding:**

- The main purpose of communication is to bring about mutual understanding. The receiver should receive and understand the message in the manner that the sender intended him to.

- **(iv) Response or reaction:**

- Communication always leads to some response or reaction. A message becomes communication only when the receiving party understands and acknowledges it, and also reacts and responds to it.

- **(v) Universal function:**

- Communication is a universal function, which covers all levels of authority.

- **(vi) Social activity:**

- Communication is a social activity, too. The components of a society are into a relationship of sharing, be it information, feelings or emotions.

- The same holds true for business communication. It involves the effort of people to get in touch with one another and to make them understood. The process by which people attempt to share meaning and relate to one another is, thus, a social activity.

# Purposes of Communication:

- i. To inform
- ii. To reassure
- iii. To teach
- iv. To deliver news, whether good or bad
- v. To understand
- vi. To explain
- vii. To persuade
- viii. To transact
- ix. To organize
- x. To control
- xi. To co-ordinate
- xii. To direct

# Technical communication / Technical writing Definition

Technical communication may be defined as the transmission and reception of facts, figures, ideas and all sorts of scientific and technical information by professionals of various fields such as engineering, medicine, science, research, education and space etc.

Technical communication is of two types:

- Written – More formal and objective.

- Oral – Less formal

- "Technical writing is the practical writing that people do as part of their jobs", write Pauley and Riordan.

- Technical written communication is related to trade and commerce and also to the science, medicine, space and engineering professions. Technical writing includes all official documents such as reports, proposals, technical articles, instruction manuals and brochures etc. issued to the juniors or superiors by the technocrats. In government and non government units, schools and hospitals people today need technical writing which enables them to maintain their operations.

# Features of technical writing or Dos and Don'ts of Technical Writing

- **Accuracy**
- **Brevity**
- **Clarity**
- **Objectivity**
- **Impersonal Language**

# Accuracy

- 2 types
  - Accuracy of Information
  - accuracy of expression

Means grammatical, punctuation,spelling,accent,intonation correctness, non –verbal mannerisms.

- Now look at the following sentences. Say which sentence is correct and why.

a) Only Muneer scored two goals.

b) Two goals were scored by Muneer only.

c) Muneer scored two goals only.

d) Two goals only were scored by Muneer.

# Techniques  Of Precision

- Ignite –burn
- Retained unenclosed-open
- Yielding  - producing
- Colloquial-  informal
- Tumultuous-  noisy
- Exuberant -lively

# Word Choice:

| Category | Example | Substitute |
|---|---|---|
| nouns | utilization | **use** |
| | functionality | **feature** |
| verbs | facilitate | **cause** |
| | finalize | **end** |
| adjectives | aforementioned | **mentioned** |
| | individualized | **individual** |
| adverbs | firstly, secondly, | **first, second** |
| | heretofore | **previous** |

# Word Choice:

- *Avoid too many "to be" verbs*

  for example: "is" "was" "were" "has been" "have been".

- *Avoid excess words*, which slow comprehension of the main point.

| made arrangements for | arranged |
|---|---|
| made the decision | decided |
| made the measurement of | measured |
| performed the development of | developed |
| is working as expected | works as expected |

# II-Using exact words And Phrases

- Stationary-
- Stationery-
- Complement
- compliment

# III-Avoid difficult words and complex Jargon

Jargon: a vocabulary particular to a

place of work **(abbreviations, slang)**

• ***Audience familiarity*** with the topic determines appropriate use of jargon

Ex. 1: For the first year, the links with SDPC and the HAC were not connected, and all required OCS input data were artificially loaded. Thus CATCH22 and MERWIN were not available.

**Because some of the links in the computer**

**system were not connected the first year, we could**

 **not run all the software codes.**

# Brevity

 Brevity means economy in word usage, pruning away useless words. We should avoid repetition and redundancy.

 ***Never use two words when one word will do***.

 Look at the following sentences.

1) Maria lives in a city called Bangalore, in a place called Indira Nagar.

2) Maria lives in Indira Nagar in Bangalore.

3) On the face of it: apparently

# Techniques of Brevity

 Avoid Wordiness

 Avoid repetition

# Avoid wordiness

✖ It may be expected that the prevalence of relatively mild asthma could be underestimated.

✓ **The prevalence of mild asthma could have been underestimated.**

✖ The severity of this disease has been demonstrated to be associated with age.

✓ **The severity of this disease increases with age.**

**Definitive evidence: has been shown to be→ is**

**Less certain evidence: has been shown to be→ may be/can**

# Avoid repetition

- **Repeating key terms** throughout a paragraph can also help to maintain thought processes **but avoid using the same word twice in one sentence because it becomes clumsy and boring**.

- 1 ✖ We need reliable screening procedures for <u>identifying</u> the signs and symptoms <u>to identify</u> children who are at greatest risk.

- ✓ We need reliable screening tools to identify children who are at greatest risk.

- 2 ✖ No adequate <u>clinical</u> measures for quantifying back abnormalities in the <u>clinical</u> setting are currently available.

- ✓ There are no adequate methods for quantifying back abnormalities in clinical settings.

# Clarity

- Clarity in writing means the ability to state our thoughts without any ambiguity.

-  It is unnecessary to use a polysyllabic word where a monosyllabic one will do. Needless use of long words or abstract words result in obscurity

- There can be two types of clarity.

- grammatical and conceptual.

- Meaning clear to audience.Hence,analysis

# Avoid Ambiguity

 Choose words whose meanings are ***clear***.

 ***Order the words*** in your sentences carefully.

 Ex. 1: In low water temperatures and high toxicity levels of oil, we tested how well the microorganisms survived.

 **Ex. 2: We tested how well the microorganisms survived in low water temperatures and high toxicity levels of oil.**

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 **microorganisms survived in low water temperatures and high toxicity levels of oil.**

# Clarity: Define the Unfamiliar

☐ If you must abbreviate, define the term in its first occurrence, and **put abbreviations in parentheses.**

☐ **Italicize first occurrence** of unfamiliar terms and define them right away.

# Grammatical Clarity

One of the aid to clarity is adequate punctuation.

Look at the following sentence:

1) I wrote a book with Mr.Khalil and Mr. Mabruk and Mr. Nayim edited it

The ambiguity in the above sentence can be removed only by a comma.

2) I wrote a book with Mr.Khalil, and Mr. Mabruk and Mr. Nayim edited it.

3) I wrote a book with Mr.Khalil and Mr. Mabruk ,and Mr. Nayim edited it.

# Pronoun reference

He took out his handkerchief and his pen, then wiped his forehead, blew his nose, and put it back into his pocket.

Did he put his nose back in to his pocket(!) or his pen or his handkerchief?

For clarity, each pronoun should not be far away from the noun it refers to.

# Conceptual Clarity

By conceptual clarity, we mean that whatever concepts we are trying to describe should be such that the reader should be able to easily empathize with what we write.

Muna is a teacher at the college level and she is a knowledgeable person. She is thin but her students say that she can keep her class under control.

To show that I liked her I wrote:

Muna is a professor and she is a real scholar. She is slim and her students say that she is a born leader.

To show that I disliked her I wrote:

Muna behaves like a school ma'am and is a real egghead. She is skinny and her students say that he is a Hitler, a dictator to the core.

# Techniques of Clarity

Use direct language
   No scope for
✔ Roundabout construction
✔ Indirect expressions
✔ Exaggeration
✔ Artificial eloquence

# Avoid roundabout constructions

- ✖ *There are* three distinct flow characteristics in these photographs.

- ✓ These photographs **show** three distinct flow characteristics.

- ✖ *It* might be expected that *there* would be some flow separation. ✓ Some flow separation **might be expected**.

- ✖ *It* appears that the flow field over the nozzles is complex.

- ✓ The flow field over the nozzles **appears to be complex**. ✖ *It* was shown in reference 1 that... ✓ Reference 1 **showed** that...

- ✓ Hathwell (ref. 1) **showed** that...

- => Don't postpone important information.

# Objectivity

- As technical communication is a systematic discussion , analysis , and interpenetration of facts rather than expression of sentiments and emotions , the speaker or writer is not concerned with subjective comments and personal feelings.

- The concentration is on an objective and impersonal presentation of facts.

# Impersonal Language

Since technical communication is more concerned with 'what was done', 'what happened' or 'what was looked into', that is, 'action' rather than 'who did what' that is, 'actor', one should use impersonal language. The use of impersonal language involves the use of impersonal passive and the exclusion of personal elements and personal pronouns. The impersonal passive is the most important linguistic device used to make technical communication impersonal, objective, and formal. Impersonal passive may be used to describe scientific experiments, rules, procedures, and processes.

Note the use of impersonal passive forms (underlined) in the following description:

"Certain solids such as iron are strongly attracted to magnets. Such materials are called ferromagnetic. Other substances such as oxygen gas and copper sulfate are weakly attracted to magnets. They are called paramagnetic. Still other substances, such as sodium chloride, are very feebly repelled by magnets and are called diamagnetic. Ferromagnetism is exclusively a property of the solid state, but all three types of magnetic behaviour just described are believed to arise from electrons in atoms."

An impersonal passive construction contains the past participle form of the main verb preceded by the appropriate tense form of the verb 'to be'.

Thus, the structure of the impersonal passive sentence is:

**Object + to be + Verb in past participle form**

| 'to be' verb forms | Tense/verb form |
|---|---|
| is/am/are | Simple present |
| is being/are being/am being | Present continuous |
| was/were | Simple past |
| was being/were being | Past continuous |
| has been/have been | Present perfect |
| had been | Past perfect |
| will be/shall be | Future |
| would be | Conditional |
| would have | Perfect conditional |
| to be | Present infinitive |
| to have been | Perfect infinitive |
| being | Present participle |
| having been | Past participle |

# Features of technical writing or Dos and Don'ts of Technical Writing

1. **Use of familiar and easy words:** Only familiar and easy words should be used, complicated words should be avoided.

2. **Use of clear sentences:** Simple sentence structure should be used. Normal word order of Subject – Verb – Object should be followed.

3. **Use of sentences of moderate length. (12 to 25 words):** Sentences of 12 to 25 words only should be used.

4. **Use of active voice:** Active voice should be used as it is easy to understand and emphasis is laid on the subject and not on the object.

5. **Avoid redundant phrases** (lengthy and incorrect expressions) and use concise word or phrase.
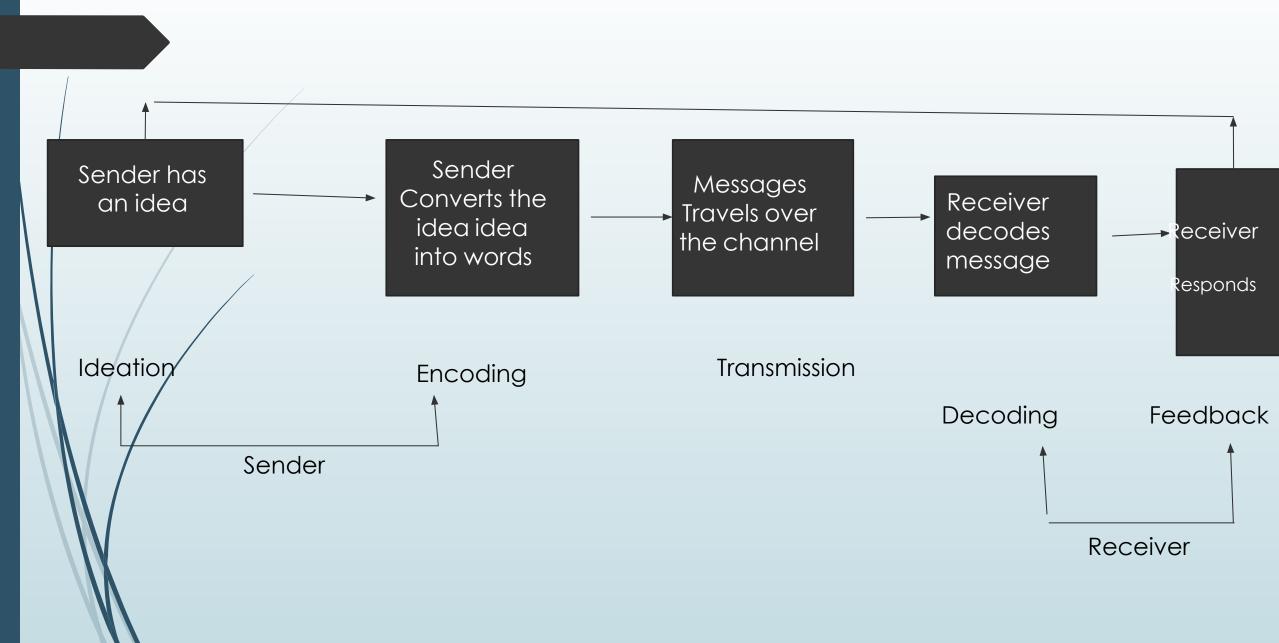
# Features of technical writing or Dos and Don'ts of Technical Writing:

- 6) **Avoid Repetition:** Repetition should be avoided as it can mar the beauty of expression.

- 7) **Accuracy:** Accuracy includes accuracy of information as well as accuracy of expression.

- 8) **Logical division of paragraphs:** Paragraphs should be logically divided; as a paragraph

- should convey only a single idea. If there is more than one idea then write those many

- numbers of paragraphs.

- 9) **Proper mechanical means to convey information:** Select the most suitable technique to

- carry your message, e.g. – email, fax, courier, post etc.

# Communication Process / Stages of Communication / Communication Cycle

As we know, communication is a dynamic interactive process. It consists of five steps, that is:

1) **Ideation**

2) **Encoding**

3) **Transmission**

4) **Decoding**

5) **Feed back / Response**

# Communication Process / Stages of Communication / Communication Cycle

1) **Ideation:**

 Process of communication begins with ideation which refers to the formation of idea or selection of message. It consist of 'what ' communication and is concerned with the content the specific message to be presented . The scope of ideation is generally determined by the sender's :

1. Knowledge
2. Experience
3. Abilities
4. Purpose of communication
5. Context of the communicative situation

Messages generally have two kinds of content

 **Logical** – Such messages consist of factual information.

 **Emotional** – Such messages consist of feelings and emotions.

# 2) Encoding:

It is the second step in communication. It is the process of changing the information into some form of logical and coded message. It involves –

a) **Selecting a language**

 Selecting the right language is essential for effective coding, verbal messages need a common language code, which can be easily decoded by the receiver.

b) **Selecting a medium of communication**

 It involves making the right choice out of many available options. There are three basic options for sending interpersonal messages i.e. speaking, writing and non-verbal signs & symbols (body movements, facial expressions, touching patterns, speech mannerisms).

c) **Selecting an appropriate communication form**

 Selection of the appropriate communication form largely depends on the sender – receiver relationship, and need and purpose of the communication. Various communication forms can be –

 Interpersonal face to face communication.

  Group Communication

  Speaker – audience communication

  Telephonic Communication

  Written Communication (Reports, Proposals, Memos, Letters, Emails etc.)

# 3) Transmission

 It refers to the flow of message over the chosen channel. It involves choosing the

 Proper time (When to communicate)

  Proper place (Where to communicate)

 Proper way (How to communicate)

 Channels of transmission can be internet, fax, telephone, courier service, Television, etc.

# 4) Decoding

- Decoding is the process of converting a message into thoughts. It is important to note that it is the message that is transferred, as meaning can not be transferred from one person to another. The receiver has to assign meaning to a message in order to understand it. The process of decoding involves interpretation and analysis of a message. Decoding involves reading and understanding of the written communication and listening and understanding of the oral communication.

# 5) Feed back / Response

- Response is the last stage in the communication process. It is the action or reaction of the receiver to the message. Response is the key to communication. It helps the sender know that that message was received and understood.

# NOISE

- **Noise** is a variety of sound. It means any unwanted sound. Sounds, particularly loud ones, that disturb people or make it difficult to hear wanted sounds, are noise.

- For example, conversations of other people may be called noise by people not involved in any of them; any unwanted sound such as dogs barking, neighbours playing loud music, road traffic sounds, or a distant aircraft in quiet countryside, are noise.

# Types of Noise:

- **Physical Noise**

Sometimes the biggest impediment to clear communication is everyday environmental noise. This can include loud passersby, music (think talking over a band at a concert), traffic or children playing. Even a simple phone ringing can distract a listener so that she cannot fully focus on a conversation. Other physical conditions that can hinder communication are physical illness, being under the influence of drugs or alcohol, or being tired.

- **Semantic Noise**

Semantic noise affects communication when people communicate from different playing fields. In other words, they are working from different understandings, such as different primary languages, dialects or basic cultural characteristics. Poor handwriting and using slang can also be semantic noises that complicate effective communication.

## Psychological Noise

Psychological noise can be more difficult to define in a particular situation, as the mental makeup of every person is different. This type of noise includes concepts like prejudices, narrow-mindedness and personal bias. Communication can also be difficult if a person is feeling very emotional -- anger, sadness and even joy can affect how much someone can pay attention to a conversation or lecture.

# Levels of Communication

☐   Human communication takes place at various levels:

1) Extra-personal

2) Intra-personal

3) Inter-personal

4) Organizational

5) Mass Communication

# Extra-personal communication:

- Communication between human beings and non-human entity is known as extrapersonal communication. For example, when your pet dog comes to you wagging its tail as soon as you return home from work, it is an example of extra-personal communication. i.e. communication between pets (dogs, monkeys, parrot) and their masters.

- More then any other form, this form of communication requires perfect coordination and  understanding between the sender and the receiver because at least one of them transmits information  or responds in signs language only.

# Intrapersonal Communication

- This takes place within the body of the individual; we know that the brain is linked to all parts of the body by an electrochemical system. For example, when you begin to feel hot, the information is sent to the brain and you may decide to turn on the cooler, responding to instructions sent from the brain to the hand.

- This kind of communication pertains to thinking, which is the basis of information processing. Without such internal dialogue, you can not proceed to the further levels of communication – interpersonal, organizational and mass communication.

- In fact while we are communicating with the other party internal dialogue with oneself continues concurrently – planning, weighing, considering, and processing information.

- At times you motivate yourself or consciously resolve to complete a certain task.

- Self motivation, self determination and the like take place at the intrapersonal level

# Interpersonal Communication

- Communication at this level refers to the sharing of information among people, people are in close physical proximity to each other and feedback is immediate as it is direct interaction. This form of communication is advantageous because direct and immediate feed back is possible. If a doubt occurs, it can be instantly clarified.

- Interaction among friends and interaction with sales executives are examples of interpersonal communication.

# Organizational Communication

- Communication which takes place within and outside an organization at different hierarchical levels is known as organizational communication.

- It is extremely necessary for the sustenance of any organization.

- Since a large number of employees are involved in different activities, the need to communicate becomes greater in an organization.

- With a proper networking system, communication in an organization is possible even without direct contact between employees. It can be further divided in to –

**a) Internal Operational:**

All communication that occurs in conducting work within an organization is classified as internal operational.

**b) External operational:**

The work related communication that an organization does with people outside the organization or other organization is called external operational.

**c) Personal:**

All communication in an organization that occurs without purpose as far as business is concerned is called personal communication.

# Mass Communication

It refers to the communication involving large number of people as audience. As the messages are meant for large audience the approach is impersonal, also it is persuasive in nature than any other form of communication.

- For this type of communication we require a mediator – such as journals, books, television and newspaper which mediate such communications.

- Mass communication is of two types

- Oral

- Written

- **Oral:** Oral form of mass communication takes place through mass media and requires some equipments such as microphones and amplifiers etc.

- **b) Written:** Written form of mass communication needs print or visual media.

- **Characteristics of Mass Communication:** Mass communication has following characteristics**a)**

- Large Reach

- **b)** Impersonal

- **c)** Persuasive

- **d)** Presence of a gatekeeper

**a) Large Reach:**

 Mass media communications reach audience scattered over a wide geographical area.

**b) Impersonal:**

 This type of communication is largely impersonal as the participants are unknown to each other, as it is meant for large audience.

**c) Persuasive:**

 Mass communication is persuasive in nature than any other form of communication.

**d) Presence of a Gatekeeper:**

Mass communication needs additional persons, institutions or organizations to convey the message from sender to receiver and these additional people are known as gatekeeper. This gatekeeper could be a person or an organized group of persons active in transferring or sending information from the source to the target audience through mass medium. For example in a newspaper the editor decides which news makes it to the hands of the reader. The

editor therefore is a gatekeeper; in the mass communication process.