

# COMMUNICATION

## Unit Structure

- 1.0 Objectives
- 1.1 Introduction, Concept of Communication
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## 1.0 OBJECTIVES

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At the end of this chapter, the student will be able to:

- (a) Describe the process of communication.
- (b) Explain the various challenges of communication.
- (c) Describe the effective ways of communication in the classroom.
- (d) Explain and practice the skills of effective communication

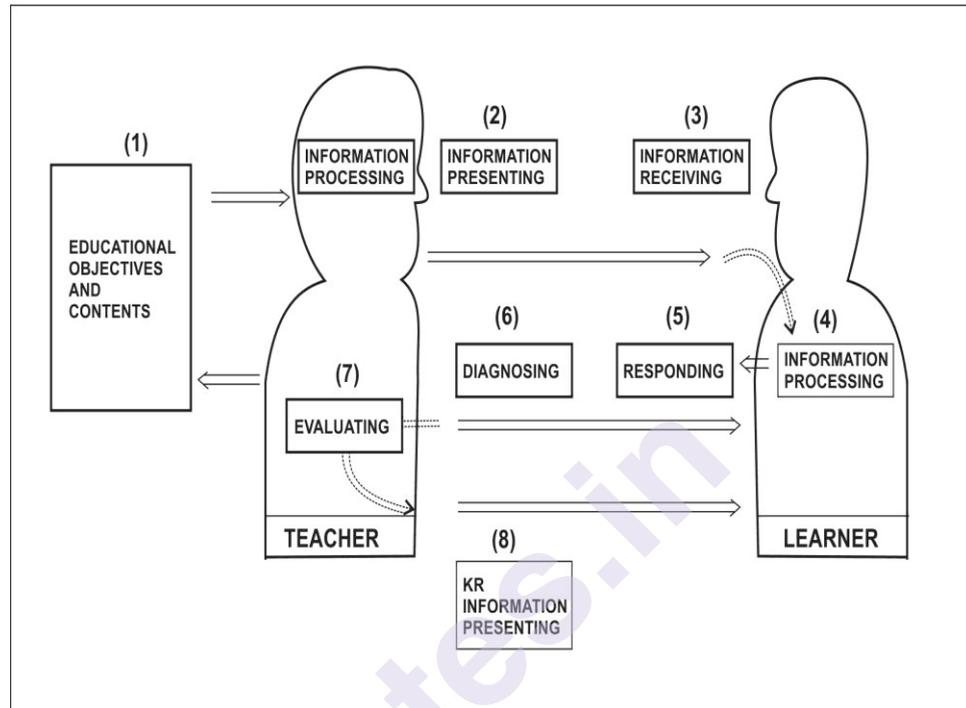
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## 1.1 INTRODUCTION AND CONCEPT OF COMMUNICATION

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Communication skill is one of the elements of the set of generic skills, required to excel in life. It creates a huge impact on human's life by establishing the social process which helps in establishing a social institution. It influences the cultural and social structure unimpeded. Communication has an integral role in formal or informal learning, teaching and in the scaffolding process. All types of teaching-learning is possible through communication. It is skill in listening, skill of questioning, skill of critical thinking, skill of speaking, skill of responding, reflecting, language element, change of behavior, appearances on a particular situation and non-verbal communication. Teachers are considered as good communicators and a student can improve with good

skills like receiving, responding and reflecting. Three-way communication which comprises eight (8) steps helps in behavioral and attitudinal change in the learner- starts with instructions to the learner, response from the learner to teacher for affirmation and teacher to learner and directs the discourse of knowledge.



Teaching-Learning Process Consisting of 8 Steps

### Concept of Communication

Ideas, thoughts, beliefs, feelings and information can be transacted / exchanged through it. Communication may help in a mutual understanding of a fact, principle or theory. Some tools and technology can be assistive and complementary in nature can be used in this process for better engaging and getting optimum benefits, for e.g., E-mail, radio, fax, printer, telephone, newspaper, broadcast, social media.

The **etymological** derivation of this term communication is Common and **epistemological** of communication is the Latin word ‘Communis’. Literally, communication is an act of sharing commonness or common understanding and experiences with others.

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## 1.2 DIFFERENT MEDIA OF COMMUNICATION

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### Communication Media

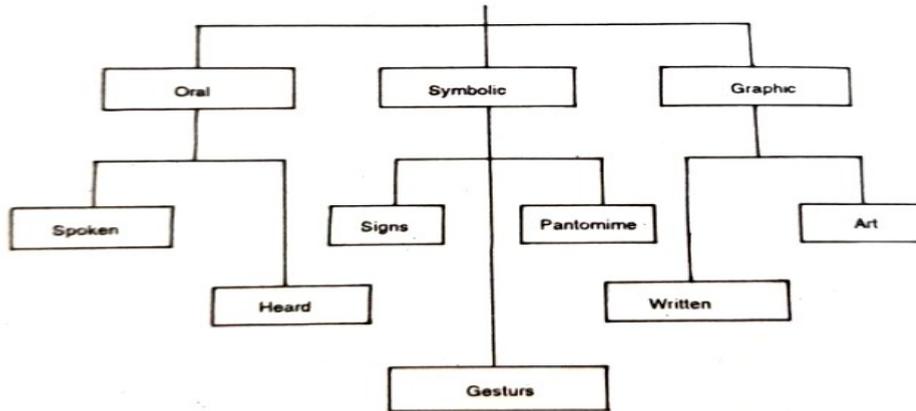
Media through which effective and efficient communication can be achieved, termed as the communication media. According to Wilber Schramm of Stanford University, “The communication media can be which humans try to convey meaning, message and value to one another.”

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## 1.3 FORMS OF COMMUNICATION

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These may be written, spoken, signs, gestures, action or silence.



**Forms of Communication**

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## 1.4 THE INFLUENCE OF COMMUNICATION

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1. Information, ideas, images and products are the sources for communication
2. All subject bounded/researched development is possible due to constant and in-depth communication.
3. Social media plays an integral role in fast communication and to the remotest part of the world.
4. Communication is the basis of human relationship, consisting of perception, motivation and other psychological processes like thinking, reasoning etc.
5. Communication helps in collecting, distributing the information.
6. Knowledge, values and social norms are established through communication. i.e. there is transmission of the social heritage from one generation to the next.
7. Public opinion, feeling, emotions can be transferred in effective ways.
8. Social cohesion gets impetus through communication.

The definition involves two aspects in communication:

- (1) The facts, feelings, ideas, etc., can be transmitted to a receiver so communication is to occur. The sender of a message must consider the receiver while structuring his message from a technical standpoint as well as in delivering it. When the receiver is not considered, there is either no response or there is wrong response.

- (2) The definition emphasizes the understanding element in the communication. Sharing of understanding would be possible only when the person, to whom the message is meant, understands it in the same sense in which the sender of the message wants him to understand. Thus, communication involves something more than mere transmission of the message or transmission and physical receipt thereof. From the point of view of organizational efficiency, the greater the degree of understanding present in the communication, the more the likelihood that human action will proceed in the direction of accomplishment of goals.

### **How do we define communication?**

- "Communication is something so simple and difficult that we can never put it in simple words," says T.S. Mathews.
- Peter Little defines communication as follows: "Communication is the process by which information is transmitted between individuals and / or organizations so that an understanding response results."
- W.H. Newman and C.F. Summer Jr: "Communication is an exchange of facts, ideas, opinions, or emotions by two or more persons".
- Edgar Dale (1961), the Newton of audio-visual aid and instrumental technology, has defined, "Communication is defined as the sharing of ideas and feelings in a mood of mutuality."
- According to Aristotle, communication is a means of persuasion to influence the other so that the desired effect is achieved.
- Dewey defines communication as a process of sharing experiences till it becomes possession. It helps in modification the disposition of both the parties who partake in it.

### **ANALOGY**

*"Communication is an on-going process of sharing or exchanging experiences, information, ideas, opinions, sentiments, thoughts and feelings etc. between the source of communication and the receiver through some mutually agreeable or known media (verbal or non-verbal)", is transmitted between individuals and organizations, so that it results in an understanding and due response."*

Communication transmits/shares information not only about tangible facts and determinable ideas and opinions but also about emotions. When a communicator passes on or transmits some information, he may also, either deliberately or unconsciously, be communicating his attitude or the frame of his mind. And sometimes the latter may be more relevant to the reality that is being communicated.

Often we may have come across words of high praise spoken in a scoffing tone. In such a case, the words signify nothing and the tone is the real

thing. Similarly, high-sounding expressions of bravery may be only a mask to conceal a person's timidity and cowardice that may be betrayed by his facial expressions.

**This definition highlights four imperative points:**

1. The process of communication involves the communication of ideas.
2. The ideas should be accurately replicated (reproduced) in the receiver's mind, i.e., the receiver should get exactly the same ideas as were transmitted. If the process of communication is perfect, there will be no dilution, exaggeration, or distortion.
3. The transmitter is assured of the accurate replication of the ideas by feedback, i.e., by the receiver's response, which is communicated back to the transmitter. Here it is suggested that communication is a two way process including transmission of feedback.
4. The purpose of all communication is to elicit action.

It is a fairly comprehensive definition and covers almost all aspects of communication. But two comments can be made on it:

- (a) The concept of ideas should be adequately enlarged to include emotions also.
- (b) Even in administrative communication, the purpose may not always be to elicit action. Seeking information or persuading others to a certain point of view can be equally important objectives of communication.

If we accurately identify “What” has to be conveyed to succeed. Communication has several purposes:

1. Communicate to inform: supporting capability for transaction of detail and fact oriented.
2. Communicate to enquire: ability to ask incisive questions.
3. Communicate to educate: helps in making a person better learned or informed.
4. Communicate to motivate: boosting to achieve happiness and engagement in the work.
5. Communicate to inspire, trust, build to achieve.
6. Communicate to influence: accountability of attracting on our terms.
7. Communicate to clarify: doubt/conflict resolution.
8. Communicate to console: healing touch/empathy/caring in distress.
9. Communicate to convince: negotiation skill/accept the thought process.

**Objectives or purpose /goals of communication:**

The objective of communication may be defined as the passing of ideas and understanding from the sender to the target with the view to getting the desired behavioral response. It also helps in motivating, suggesting, warning, ordering, establishing better relations with all to make learning meaningful and understood.

“Communication is a process of sharing experiences till it becomes a common possession”.

- to encourage give and take through feedback to the person who tends to change the ideas.
- to convey correct/goal-oriented information to save time through different forms.
- to convey relevant emotions, feelings, expressions like happiness, anger, displeasure, confidence and fear.
- to get action to follow the instruction, else communication is worthless.

Thus, in short, communication is:

- Passing of information, acknowledged, understood.
- Reacted to responded
- Integrated into a learning attitude.

**Check your Progress**

1. What is communication?

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2. Describe the possible modes and media of classroom communication.

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3. While explaining the meaning and nature of communication, discuss the roles of various elements associated with the process of communication.

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## 1.5 SIGNIFICANCE OF COMMUNICATION

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Just as communication is vital to our existence in civilized society, it is essential to the functioning of the organizations our society has produced. In fact, we could go so far as to say that organizations exist through communication; without communication, there would be no organizations. As Herbert Simon expresses it. "Without communication there can be no organization, for there is no possibility then of the group influencing the behaviour of the individual."

Communication is a dual process of speaking and listening from another party, which can be either verbal or non-verbal. Consistency is must to have proper sending and retrieval of information. Communication is an integral part of human existence, it is the ingredient that maintains all relationships. It is communication that decides the very identity of human beings, Modern society is turning into an information society and communication is the exchange of information. It is the process of transferring information from a sender to a receiver with the use of a medium in which the communication information is understood by both sender and receiver.

Hiring, firing, selection, coordination, management of all resources happens due to proper communication. Effective communication promotes a spirit of understanding and cooperation.

"Communication is imminently essential in business, in government, and in military organizations. It is difficult, in fact, to imagine any kind of interpersonal activity which does not depend upon communication."

External communication includes communication with the government agencies and departments on the one hand and distributors, retailers, individual customers and the general public on the other.

Personal communication is all the incidental exchange of information and feelings in which human beings engage whenever they come together. Human beings are social animals. They have a need to communicate, and they would communicate even when they have little or nothing to say. In fact, they communicate even when they do not communicate anything.

The main elements of communication are the receiver and sender, encoding-decoding, messages, feedback, feed forward, communication channels, environment, disorder, ethic and interpersonal competence. In delivering information, a communication skill is an important aspect that needs to be emphasized. This is because certain information can be wrongly deciphered by the recipient due to the mistake of the informant and recipient in communication. It is the anchor of all types of feeling. Politeness is a must of consideration in communication among human beings.

Communication comprises the skill of writing, reading, arguing, listening, ethics in communication and also involves the usage of technology. Language skill is an important aspect as a medium in daily life. Effective

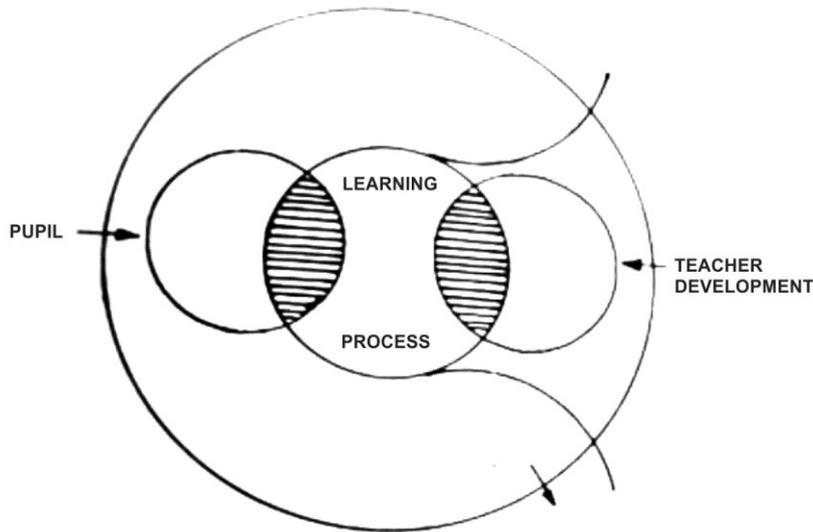
communication not only helps in problem solving but also fixes relationships. Experts in the field of communication believe that weak communication is the cause of many problems and effective communication resolves most of them. The high frequency of communication develops a better consciousness.



### WHY DO I NEED COMMUNICATION?



To reach out for the purpose to be upheld. Communication provides clarity of a situation. It settles the confusion in the air. Sometimes we do not get clarity about something, for various reasons, which can lead to conflict. Ego can be one among many which don't allow to mellow down the issues, hence challenges remain unresolved. To establish connections, doors of negotiation and clarification need to be well ventilated. Good listening skills with right body language gives signals for further communication in progress. It can develop incessantly with practice. Better relationships can be established with a positive outlook and mindset. Failure in communication has been reported to be anxiety-breeding by the respondents. Even immemorial, period, Socratic method of communication was used to get the queries to be handled.



### Teaching-Learning Process and The Teacher-Taught Interaction

#### Communication Methods:

Some favorable gestures, which can lead to effective communication are have been proved with these practices:

1. Facing a person squarely.
2. An open posture (Avoid crossed arms).
3. Leaning towards the other.
4. Eye contact.
5. Relaxed posture.
6. Sincere Desire to Listen
7. Focusing on the other person's feelings.
8. Being non- judgmental Seeking to understand the speaker without giving him/her advice or judging his/her conduct.
9. Acknowledging the speaker's feelings "I know what you are going through. I know your feelings, good or bad, right or wrong and it's alright for you to feel that way."

Learning is important and it happens through various sources. Learning through reflection is essential and effective communication makes the way for learning to survive. Communication is one of the integral parts of life skills. Use of the right word at the right time in the presence of the right type of people is essential. At the same time, the opposite of the previous case results in war, confrontation.

Actions and expressions should be coherence with the selection of words, it is like the arrow which has left the bow to reach the destination for action, it can't be reversed so wise selection of words are utmost needed. Pitch and loudness should be appropriate while transacting with others. Depending upon the situation it should be used. Firmness, lousiness, blunt,

diplomatic, emotionless are the different types which can be either right or wrong depending upon the needs of the person.

An administration/judge has to be firm in his tone while giving the verdict, whereas we all have different styles of responding. These styles are reflected in our behaviour. Aggressive behaviour stems from disrespect towards others’ feelings and views. A balance of firmness and caring is required for assertiveness. Practising assertiveness helps strengthen relationships.

Interaction with people helps make friends and develop good interpersonal relationships. We experience different feelings. To express them we need to use appropriate words and feelings in communication to stimulate meaningful interaction among adolescents and their peers to reinforce the socialization process by relating to others in a friendly way. Communication is the act of conveying intended meanings from one entity or group to another through the use of mutually understood signs and semiotic rules.

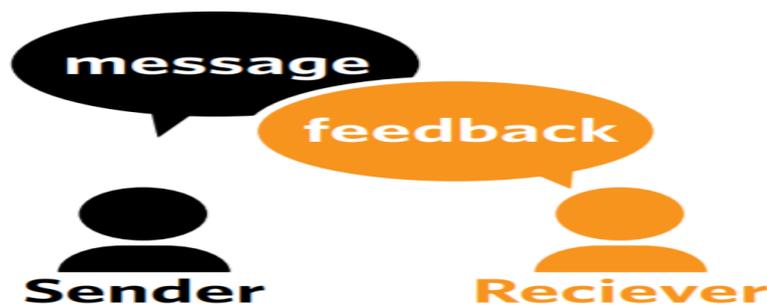
The main steps and elements inherent to all communication are:

1. The forming of communicative motivation or reason.
2. Message composition (further internal or technical elaboration on what exactly to express).
3. Message encoding (for example, into digital data, written text, speech, pictures, gestures and so on).
4. Transmission of the encoded message as a sequence of signals using a specific channel or medium.
5. Noise sources such as natural forces and in some cases human activity (both intentional and accidental) begin influencing the quality of signals propagating from the sender to one or more receivers.
6. Reception of signals and reassembling of the encoded message from a sequence of received signals
7. Decoding of the reassembled encoded message.
8. Interpretation and making sense of the presumed original message.

Table 1.2 : Elements within Communication Skills

Researcher	DeVito (2007)	Pederson, Miloch & Laucella (2007)	Lasswell (1984)	Schramm (1954)	Shannon & Weaver (1949)	Hassan & Mohd (2002)	Othman & Ahmad (2006)
<b>Element</b>	-Sender and receiver -Encoding decoding -Messages -Feedback -Feedforward - Communication channels -Environment -Disorder -Ethics -Interpersonal competence	-Sender and receiver -Messages -Feedback -Communication channels -Environment -Disorder	-Sender -Receiver -Messages -Feedback - Communication channels	-Sources -Messages -Receiver	- Information Sources -Spreader -Disorder -Receiver - Destination	-Messages - Communication channels - Communication Disorder -Listening -Feedback - Destination	-Sender and receiver -Messages -Feedback - Communication channels - Environment -Sources Disorder

Communication is important as it helps in expressing feelings and thoughts, sharing information and explaining behaviour.



Indispensable to Human Behaviour or the art of dealing or interacting with people is communication. However, communication incorporates, besides commonality, the concepts of transfer, meaning, information, receiving, acknowledging and assimilation.

Positive Thinking is equally important in communicating and relating with people. A person who strives to communicate positive thoughts and actions is readily able to maintain Smooth Interpersonal Relationships (SIR) and easily gains the respect and esteem of those around him.

**Advice:** Giving advice is another important objective of communication. Information is always factual and objective. But advice, since it involves personal opinions, is likely to be subjective. Information is neutral in itself. When it is offered to a person, he may use it as he likes. But advice is given to him either to influence his opinion or his behaviour. It may prove helpful, but it may also lead to disaster.

**Counseling** is very similar to giving advice. Only, counsel is objective and impersonal. The counselor is a man of greater skill or knowledge on some specific subject and he offers his counsel without any personal interest or involvement. Advice has a personal touch about it; counsel is almost professional.

**Listening** to what other people are trying to say to us is an important good communication skill. It helps in order to really understand others. Active listening is the start of “empathy” which means understanding others, even when we disagree with what is being said, and being able to show compassion and caring for them. It is important to listen – we expect others to listen to us and we also have to listen to others. Listening carefully, understanding what others are feeling, and caring about them is a way of showing respect towards others. If we are having a conflict with another boy then there are good ways to find a solution. If we ignore or don’t try to find a solution then there is a big chance that the problem will get worse.

- Body language, gestures, good eye contact
- Responsive to questions, encouraging attitude

- Important you know what the person is saying
- Keep your mind open
- Encouraging words or sounds
- Listening skills
- Feedback

Good communication skills have an impact on all other life skills; so, it is important to be conscious of how you are communicating at all times and to take steps to become a good communicator.

- (1) An **Order** is an authoritative communication. It is a directive to somebody, always a subordinate, to do something, to modify or alter the course of something he is already doing, or not to do something.

**Types of Orders:** Keeping different aspects of orders in mind, we can classify orders in various ways:

- (a) **Written and oral orders:** Written orders are usually given in the following cases:

1. The order is of a highly responsible nature. It is essential to keep a record of it and to make it absolutely specific.
2. The task is repetitive in nature. It is cumbersome and inconvenient to issue oral orders every time the task is to be done.
3. The person being ordered is remotely situated and it is not possible to give him oral orders.

- (b) **Oral orders** are given in the following cases:

1. The job is required to be done immediately.
2. It is an ordinary job and there is no need of maintaining any written record.
3. There is a kind of permanent superior-subordinate relationship between the giver and the receiver of the order and the order-giver does not feel the need of entering into the cumbersome process of issuing written orders.

- (2) A **Persuasion** may be defined as an effort to influence the attitudes, feelings, or beliefs of others, or to influence actions based on those attitudes, feelings, or beliefs. Persuasion is an important objective of communication.

Human nature is not amenable to coercion or repression. Whenever force is applied to command a particular action, it breeds resentment and indignation. It is better to use persuasion than compulsion. But even persuasion seeks to change beliefs and attitudes, which people do not like at all. So, in order to be successful, persuasion has to be indirect and suggestive. Do not impose yourself on the receiver of your communication. Do not overwhelm him with arguments. Give indirect hints and subtle suggestions.

- (3) A **Suggestion** is a very mild and subtle form of communication. Still, since it flows horizontally or vertically upwards, it may hurt someone's ego to recognize its utility and readily accept it. But enlightened executives should set aside the ridiculous notions of false self-importance and welcome positive, constructive suggestions with an open mind.
- (4) A **Warning** is a forceful means of communication, for it demands immediate action. But in order to retain its effectiveness, it should be used sparingly and discreetly.

**The Learning Process in Education** is a very conscious process of communication. It involves both teaching and learning and extends over considerably long periods. The main purpose of education is to widen knowledge as well as to improve skills. Communication is a vehicle for imparting and receiving knowledge, a two-way process in which source of information (giver) and recipient interaction construct it. Hence, learners and knowledge providers are required to acquire this competency. Communication is an art and technique.

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## 1.6 COMMUNICATION PROCESS

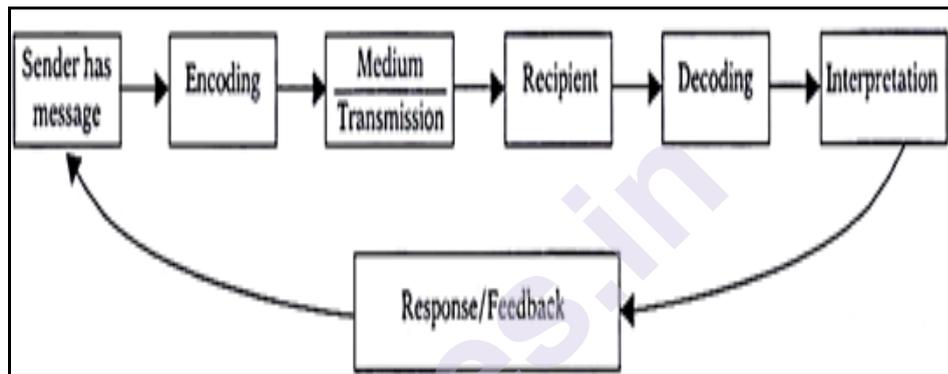
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The communication process is a dynamic framework that describes how a message travels between a sender and receiver using various communication channels. Its goal is to ensure the receiver decodes the message correctly and can provide feedback with ease and speed. Technology in the workplace has made the communication process more effective. Communication processes need good management to sustain them in the long-run. Leaders in the workplace establish the style, tone and function of communication. The communication model of Shannon and Weaver (1949), originally applied to the development of electrical systems, can be and has been successfully applied to human communication.

### THE KEY COMPONENTS OF THE COMMUNICATION PROCESS

1. **SENDER:** The person who formulated the idea and wants it delivered to the recipient.
2. **ENCODING:** The way the information is described or translated into a message

3. MESSAGE: The fact, opinion or idea that the sender wants to communicate.
4. MEDIUM: language, Sign-language, gesture
5. COMMUNICATION CHANNEL: The method of delivering the message.
6. RECEIVER: The target audience of the message.
7. DECODING: The interpretation of the message.
8. FEEDBACK: The response or action that a receiver makes, after decoding a message.



**The Communication Process**

**The Sender:** The person who formulated the idea and wants it delivered to the recipient. The process initiator, with the information like with who is talking, to whom they are talking, what, why are the important to frame communication.

**The Input:** The input in educational communication can be thought of as society transmitting its knowledge, skills, values, and standards to coming generations. The teacher supplies and manages the-input'. Subject can be another input in the form of specialization, largely predetermined by an examination syllabus.

**Coding:** Coding takes place when teachers put facts, statements, ideas, attitudes in the form which students can assimilate and thus learn from. Information can be modified, changed and re-informed by a variety of non-verbal messages. Coding is thus the process of making the desired input visible to the students and therefore teachers have the responsibility of seeing that the coding is such that the students are able both to receive the materials and to understand and decode it.

Semantics is the study of language forms, and semantic problems occur when people attribute different meanings to the same words or language forms. Jargon should be avoided, unless the receiver is well versed with it.

**The Message:** It should be clear and focused with the usage of correct symbols-words, so that sender and receivers should be on the same page.

Teachers often use film, picture study, chart, tables, visualization of an object or traditional chalkboard method.

**The Language:** Prefer to give in the local language. Multilingual approach should be preferred. Both parties should be able to understand each other's language.

**The Medium of Communication:** This should convey the message to the student accurately. Teaching in the classroom can be the live example, whereas the teacher uses teaching aid along-with the explanation. The use of technology to assist like audio-visual enhance the learning-overhead projector, video-recorder, video-disc player, computers etc.

**Decoding and Output:** The Output of message which is given, depends upon several factors along with the decoding and assimilating process. Pre-knowledge of the subject, motivation, interest, specific skills to present are few things among many that are required to have the intended outcome.

**The Receiver:** When the receiver hears, he uses his ears and sees the physical expression and gestures of the speakers, so the sender has to keep in mind the listener's wants /desires and needs, likes and dislikes when he speaks to the other person.

**The Feedback:** It should be instant, objective based, constructive in nature. Focal point of communication is the student. To improve the learning it is necessary to regulate the other resources in a proper order. Feedback is important as it redirects the shortfall into productive means by modification in the position of sender to refine his communication so that it becomes more precise and accurate.

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## 1.7 THE SCOPE OF COMMUNICATION

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The Scope of communication includes the movement of communication:

- One to one communication,
- One to many,
- Many to one and
- Many to many communication movements are possible.

Communicating in supplementary ways like - understanding, lettering, gesturing, drawing, just taking in information by seeing, feeling, or smelling; helps in building active communication. A civilized social structure has proper communication norms and protocol to adhere to. Communication is vital to our success and well-being in enlightened civilization.

**Downward Communication:** the information flows from higher level to the lower, which has become the most used channel for transmitted orders, instructions and directions. This type of communication can teach and

explain new policies. Proper downward communication has these advantages:

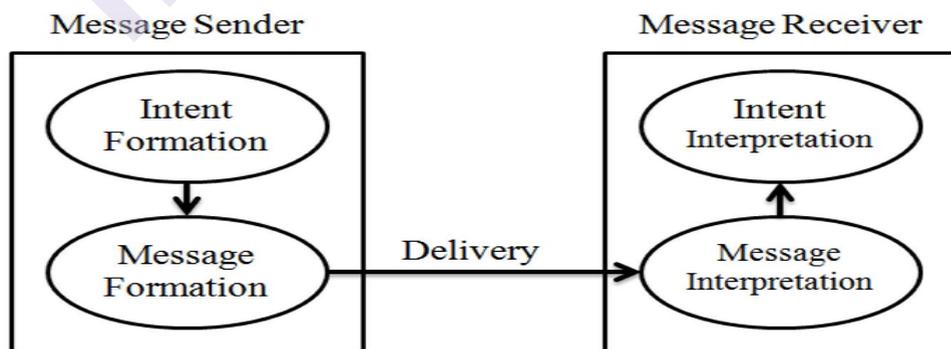
1. Provides an orderly medium for passing on policies, plans and orders.
2. It permits management to explain the reasons for the action taken.
3. It builds morale by keeping everyone informed.
4. It clarifies rumors, which the receiver has heard through informal channels.
5. It discourages the less desirable grapevine taking place.

Downward Communication is also known as one-way communication from top to bottom. It provides no opportunity for response and feedback. Hence downward communication becomes dictatorial communication.

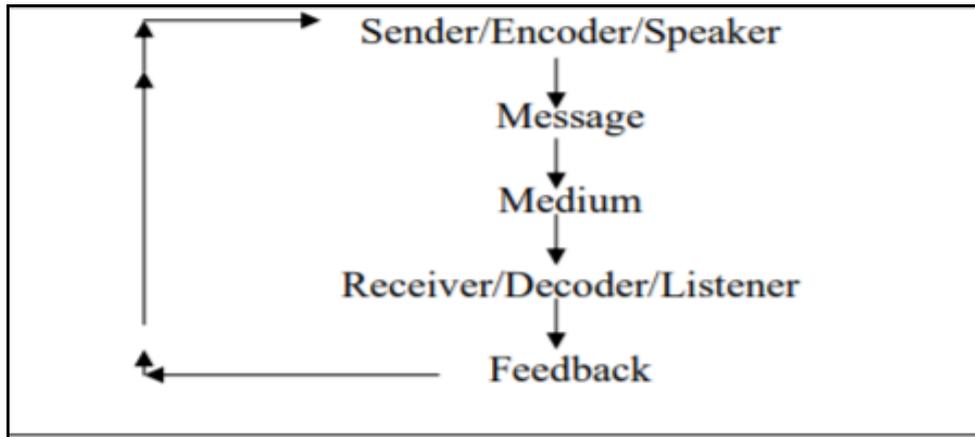
**Methods of Communication**

- One-Way**  
Memo, fax, e-mail, voice mail, letter.
- Two-Way**  
Phone call, in-person.
- Collaborative**  
Team meetings, consulting, consensus, decision making, group problem solving.

**One-way communication:** the sender communicates without expecting or getting feedback from the receiver. Feedback is absent. One-way communication takes less time than two-way communication. In certain situations, it is more effective to get work from the subordinates.



**Two-way communication:** takes place when the receiver provides feedback to the sender. For instance, giving an instruction to a subordinate and receiving its acceptance is an example of two-way communication. Receivers' self-confidence is higher in case of two-way communication as they are permitted to ask questions and seek clarification from the senders.



**Upward Communication:** This process of communication takes place when the receiver communicates with the sender. But often overlooked. It is seldom that the next level pays heads towards one level down suggestions.

Benefits of upward communication are:

1. It allows attitudes, feelings, opinions and other information to reach to the management or the sender.
2. It provides for the check on the understanding and the acceptance of down-ward communication.
3. It satisfies the basic needs of the receiver to 'belong'
4. It gives the receiver the feeling of participation in the conversation.
5. It also gives the management an incoming source for ideas and suggestions.

Barriers of upward communication are:

- Sender personality should be strong enough to make an appearance.
- Fear of listeners, fear of reprisal, criticism, fear of not getting promotion.

**Horizontal Communication:** is between peers for exchanging of ideas. It boosts the team essence. A cordial environment is created and proper functioning happens.

Benefits of horizontal communication:

1. It develops understanding
2. Valuable citizenship.
3. Cooperative learning.

Barriers of horizontal communication:

Jealousy, rivalries, fighting etc.

Difference between Horizontal and Vertical Communication		
Points of Difference	Horizontal communication	Vertical communication
Definition	Such communication flows between people at the same level.	Such communication flows between people of different levels.
Coordination	Such communication helps in coordination between various departments of an Organization.	It normally coordinates the activities of superior and subordinates.
Flow of communication	The communication flows here like a straight line.	It may flow as an upward or downward way.
Methods	Oral communication is very suitable for such communication as sender and receiver belong to same level.	Such communication generally uses written procedures and methods

## 1.8 TYPES OF COMMUNICATION [VERBAL AND NON-VERBAL]

### 1. Verbal communication:

- Oral Communication: Voice box, larynx produces the sound by creation of vibration of longitudinal waves which comprises of compression and rarefaction. It can includes Face to Face, speeches, debates, group discussions, face to face fight, presentation, poem recitation, live singing, narration, demonstration, explanation, teaching in person, video call, telephonic discussion, conference call, video, radio, television, voice over internet.
  - Loudness, pitch, quality of voice, tone, frequency in per unit time, speed, clarity in speaking influences the communication. Creating of trust, coordination is faster with the proper communication. Hiding of emotions or expression becomes difficult and maintains of diplomacy requires good command on acting. Environment, same mind set, mentality, helps to have communication.
2. **Non-verbal communication:** Eye contact, wordless message, gesture, body language, posture, tone of voice, facial expression, sign language etc like salient modes sets the modes of communication. Three important elements constitute it.
    1. Appearance of speaker
    2. Atmosphere/environment/body language
    3. Sound
  3. **Visuals:** Picture, object display, graphs, image, charts, drawings, content mapping, flowchart.
  4. **Written:** Any formal communication comprises newsletters, press releases, text messages, social media posts, records, proposals and other business documents.
  5. **Interpersonal Communication** occurs within our self-mind on the basis of feelings, biases, prejudices and beliefs. It is also possible with two individuals.

### Check your Progress

1. What are verbal and non-verbal communications? Illustrate with examples.

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2. What are the various steps in the communication cycle?

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## 1.9 PRINCIPLES OF COMMUNICATION

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Communication as a two-way channel requires certain basic principles to be observed for its effective outcomes:

1. Principle of readiness and motivation
2. Principle of competency and worth
3. Principle of sharing and interaction
4. Principle of the suitability of the communication contents
5. Principle of appropriate media and channel
6. Principle of appropriate feedback
7. Principle of facilitators and barriers of communication.

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## 1.10 BARRIERS IN COMMUNICATION

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Due to a gap in communication, the desired outcome doesn't happen.

Barriers in the communication process, usually distort the information and give rise to conflicts.

- a. Emotional barriers,
- b. Cultural barriers
- c. Language barriers/cognitive barriers
- d. Gender barriers
- e. Interpersonal barriers
- f. Time/space restriction

- g. Freedom /lack of clarity of expression

**Types of Barriers within the Classroom:**

**1. Physical barriers**

- a. Classroom structure/size/ventilation/light
- b. Seating arrangement/comfort
- c. Class strength
- d. No. Of teachers
- e. Time of school
- f. Blackboard position/teacher's seating position
- g. Fennel board

**2. Psychological barriers:**

- a. Emotional outburst
- b. Cognitive level
- c. Differently able child
- d. Fatigue/boredom
- e. Dislike of subjects/teacher
- f. Poor retention/span of attention
- g. Teacher's attitude
- h. Distrust
- i. Lack of motivation

**3. Social barriers:**

- a. Language
- b. Class/community
- c. Gender biasness
- d. Inclusiveness

**4. External interference:**

- a. Noise
- b. Announcements
- c. Distractions by authorities

- d. Less class control.

**5. The Teacher as a barrier:**

- a. Personality/emotional control
- b. Diction/Pronouncement/speed/tone/pitch
- c. Attitude/Manner
- d. Language/excess verbatim
- e. Class management
- f. Lack of planning

**Check your Progress:**

1. List the barriers faced by students in communicating with teachers:

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2. Which of the following constitute a communication situation?

- An Englishman speaking in English to an illiterate Indian;
- Two young boys talking to each other in a code language, which they have evolved themselves;
- A student muttering to himself;
- A young scientist talking to the moon?

3. What are the elements of communication?

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**1.11 FACTORS PROMOTING EFFECTIVE COMMUNICATION**

Teachers are the key factor for creating a conducive environment within the classroom for better learning. They have to be aware of their classroom situations for effective communication. The use of teaching aids, sound in their content knowledge, organized, systematic, classroom

management, role model, and good conduct helps to understand the child in an effective manner.



### Guidelines for positive and effective (classroom) communication

**Ways to encourage student input:** A substantial lack of student participation or interaction in lecture formats (regardless of class size) decreases learning.

#### (A) Make time for communicating with students:

1. Encourage student questions during class. Often one student will ask a question from which many will benefit.
2. Encourage students to respond to each other by inviting them to comment on a remark a classmate has made.
3. If you do not have time to answer a question during class, make yourself available directly after class. Some professors let students out two or three minutes early in order to give them time to pack up their materials and approach with any questions they have about the class.
4. Being present a few minutes before class also gives students a chance to talk with you.
5. During the teaching period, you might consider taking a one-minute break to see if anyone has questions in regards to the material you are discussing. Try and wait 30 seconds after you have asked for questions to give students adequate time to reflect.
6. Make sure you keep at least one or two hours designated office hours a week so students know they can come and talk to you outside of class.

#### (B) Be positive when a student asks a question:

1. Listen to what students say, without undue comments.
2. Use eye contact, non-verbal cues such as a nod, and facial expression to indicate your interest.

3. Don't dismiss student comments with a vague phrase such as "uh-huh" or "okay."
4. Write insightful responses or comments on the board to emphasize the value of student contributions to your class.
5. If you are not sure what a student is asking, ask some questions which will help you clarify what the student is asking. Don't say, "I don't understand what you mean."
6. Never try to capitalize on students' confusion by ridiculing or joking about incorrect responses. "Humour" of this kind will backfire and create an inhospitable classroom climate.

## 1.12 CONCLUSION

Effective communications are influential in nature. It can be achieved by keeping it simple, crisp and goal oriented. Knowing the destination and receivers helps in executing the information in better ways. Critical thinking leads to understanding the reason for communication for a particular issue. A proper perspective and orientation of the subject can be presented and the general outline of the scope of the subject can be brought out.



## 1.13 SELF ASSESSMENT QUESTIONS

1. Define communication and explain your definition.  
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 \_\_\_\_\_  
 \_\_\_\_\_
2. "The single most significant characteristic of the human race is the ability to communicate." Discuss.  
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 \_\_\_\_\_  
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3. "Communication is the sum of all things one person does when he wants to create understanding in the mind of another. It is a bridge of meaning. It involves a systematic and continuous process of telling, listening and understanding." Discuss.

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4. Explain the need and importance of communication:

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5. How can you achieve effectiveness in classroom communication?

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**1.14 REFERENCES**

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## EFFECTIVE COMMUNICATION

### Unit Structure

- 2.0 Objectives
- 2.1 Effective Communication
- 2.2 Barriers to Effective Communication
  - 2.2.1 Intrapersonal barriers
  - 2.2.2 Interpersonal barriers
  - 2.2.3 Organisational barrier
  - 2.2.4 Barriers Created by the Transmitter and Receiver
- 2.3 Principles of Effective Communication
- 2.4 Role of the Teacher in Effective Communication
- 2.5 Conclusion
- 2.6 Study questions
- 2.7 References

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### 2.0 OBJECTIVES

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At the end of this chapter, the student will be able to:

- (a) Describe the barriers of communication
- (b) Explain the principles of effective communication
- (c) Explain the various types of communication barriers
- (d) Describe the methods of enhancing the classroom environment for effective communication
- (e) Describe the teacher's role in effective classroom communication
- (f) Explain the skills of effective communication

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### 2.1 EFFECTIVE COMMUNICATION

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Communication occurs in many forms, including verbal and non-verbal, written, visual, and listening. It can occur in person, on the internet (on forums, social media, and websites), over the phone (through apps, calls, and video), or by mail. Many of us communicate with people every day, whether in person or on the countless digital platforms available to us. How much of our communication actually reaches the intended audience or person the way we hoped? Effective communication requires us to be clear and complete in what we are trying to express.

Being an effective communicator in our professional and personal lives involves learning the skills to exchange information with clarity, empathy, and understanding. In this chapter, you will understand what effective communication is, the benefits of effective communication and various ways to improve your communication skills.

Effective Communication is **the process of exchanging ideas, thoughts, opinions, knowledge, and data so that the message is received and understood with clarity and purpose.** When we communicate effectively, both the sender and receiver feel satisfied.

### **Benefits of Effective Communication**

The benefits of communication effectiveness can be witnessed in the workplace, in an educational setting, and in your personal life. Learning how to communicate well can be a boon in each of these areas.

In your personal life, effective communication can lead to:

- Improved social, emotional, and mental health
- Deeper existing connections
- New bonds based on trust and transparency
- Better problem-solving and conflict resolution skills

In the workplace, effective communication can help you:

- Manage employees and build teams
- Grow your organization more rapidly and retain employees
- Benefit from enhanced creativity and innovation
- Build strong relationships and attract more opportunities for you or your organization

### **How to improve your communication skills**

Effective Communication, like any other skill, is one you can improve with practice, your communication skills, whether at home or on the job

#### **1. Consider your audience.**

Who are you communicating with? Make sure you are aware of your audience—those you intend to communicate with may differ from those who actually receive your messages. Knowing your audience can be key to delivering the right messages effectively. Their age, race, ethnicity, gender, marital status, income, education level, subject knowledge, and professional experience can all impact how they'll receive your message.

If you're advertising a fast food restaurant, for example, you might want to deliver your message to an audience that's likely to be

hungry. This could be a billboard on the side of a busy highway that shows a giant cheeseburger and informs drivers that the closest location is just two miles away.

Or suppose you're telling your family about your engagement. You might host a gathering after to celebrate, send them photos of the engagement in a group chat, surprise them in conversation over dinner two weeks later, or post on social media. Your chosen form of communication will depend on your family dynamics.

## 2. Practice active listening.

Active listening is the practice of giving your full attention in a communication exchange.

Some techniques include paying attention to body language, giving encouraging verbal cues, asking questions, and practicing non-judgment. Before executing your communication, be sure to consider your audience *and* practice active listening to get to the heart of their needs and desires. This way, you can improve your communication as a counselor, social worker, marketer, professor, colleague, or friend. Some examples of active listening in practice:

- If you work in marketing, you might engage in social listening to gather consumer data on social media platforms like Instagram.
- If you are a teacher, you might take advantage of end-of-semester feedback forms and act on your students' needs by hosting one-on-one meetings during office hours. Likewise, your students might choose to participate in discussions after your lecture or at least sit attentively and ask questions.
- If you are a team leader, you might read messages from your teammates, gauge that they are frustrated with the workload, and respond by resetting priorities for the next few weeks. This communicates to the team that their voices are heard.
- If you are a parent, you might have a disagreement with your child about finishing their homework, but if you probe deeper with open communication, they may confess that their teacher made a discouraging comment that left them unmotivated.

## 3. Make your message as clear as possible.

Once you have successfully identified your audience and listened to their intentions, needs, and desires, you must practise how to communicate effectively, by following the 5 C's of effective communication:

- clear communication
- correct communication

- complete communication
- concise communication and
- compassionate communication.

Prepare to communicate in a way that achieves most of these characteristics.

#### 4. Use the right medium or platform.

Using the right medium or platform to communicate matters. Effective communication requires you to consider whether you need to meet in person or if Zoom would suffice. Is your message casual enough to use WhatsApp, or would a formal email be more efficient and thorough? If you are catching up with a friend, do you two prefer to talk on the phone or via old-fashioned letters? Whatever you choose should be intuitive and appropriate for you and your current situation.

When you assess the priority level and the type of communication needed, you will consider a visual component on Instagram or a Facebook post, or a printed poster hung in cafes. For a university lecture, do students prefer to be online or meet in person? Will there be a discussion afterward, and would it be fruitful to conduct indoors, or outdoors?

By considering your audience, practicing active listening, clarifying your communication, and choosing the right medium or environment, you are well on your way to exercising communication effectiveness.

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## 2.2 BARRIERS TO EFFECTIVE COMMUNICATION

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Communication barriers are often called noise or static, which complicate the communication process. A communication barrier always impedes the communication process. These barriers are inevitable and cannot be avoided. The sender and receiver both can work to minimize them.

Communication is significant for professional and personal lives. The recent pandemic has made us understand the barriers of communication which occurred due to social distancing. We have found new ways and mediums for communication. The barriers of effective communication need to be eliminated and new ways to be leveraged for better communication.

We define a communication barrier as *anything that hampers or disables the process of communication from delivering the message to another party or receiver at the right place and time.*

Sometimes we fail to convey our message to the receiver due to interruption or intervention. In these circumstances the objective of the communication is hampered. Imagine you are engrossed in teaching a

topic in the classroom and trying to communicate the idea or knowledge to the students. At the same time, a peon enters with the holiday notice or some announcement is made on the speaker of the class. You become silent and then resume talking but students have not really grasped what you have said earlier. Later when you analyse this situation and realize that your students lost their concentration due to the interruption. Hence the communication process failed.

The breakdown situation in the communication process makes us aware of the importance of effective communication. Communication is effective only when it creates an impact on the receiver. There are numerous glitches associated with the communication, which need to be addressed, to ensure that no interruption or gap occurs in the communication.

Even with the best intentions, due to natural or unforeseen communication barriers, the written or spoken message is misunderstood. If we classify these barriers according to the process of message formation and delivery, we get them at three levels:

- Intrapersonal barriers
- Interpersonal barriers
- Organisational barriers
- Barriers Created by the Transmitter and receiver

Five steps to get the desired response after the failed communication:

1. Problem identification
2. Detecting cause
3. Finding the alternative strategies/ solutions
4. Select the best suited option
5. Follow up rigorously

### **2.2.1 Intrapersonal Communication Barriers:**

Every individual is unique due to their different experiences, background, financial status, education, societal status, preconceptions due to their personality, culture and value systems. Differing backgrounds play a significant role in how we interpret the messages we receive. The people from one family may differ genetically and experientially, from the rest of society.

**Intrapersonal barriers create hurdles from within the individual's communication** both in sending and receiving messages. Intrapersonal communication barriers refer to the elements within the individual's own self (occur inside the person), due to certain natural or induced common causes.

The good thing is that these barriers are within the individual's control. Thus, individuals may deal with them and overcome them on their own.

Intrapersonal barriers may also be caused due to broader factors such as specific socio-economic and cultural backgrounds. For eg., an individual who has been born and brought up in a closed culture will be less enthusiastic to express feelings—both happy and sad—than another individual who comes from an open culture. Similarly, an individual who has received prejudiced treatment from other people—in the family, at the workplace or society at large—is likely to develop either selective perception or a judgmental attitude.

There are different intrapersonal barriers in an individual's personality. They may be grouped under five broad categories:

1. **Physiological barriers** are caused by the individual's own personal discomfort such as sensory dysfunctions. This may occur on the part of the receiver or the sender. Physiological barriers often result from performance characteristics and limitations such as memory, concentration, mental sharpness and the functioning of the sensory organs like eyes, ears, nose, etc.
2. **Psychological barriers** are due to the emotional character and mental limitations of human beings. These barriers result in absent-mindedness, the fear of expressing one's ideas to others, excitement and emotional instability, accounting for an overwhelming number of communication problems.

**Wrong inferences** happen because we fail to distinguish between what actually exists and what we have assumed as really to exist. If a child is not attentive in the classroom, we may assume that the child is not interested in studies. But actually, the child is disturbed due to family problems. Thus, the teacher assumed the reason for least attentiveness is lack of interest. Inferences are more based on prejudices therefore gives more scope for talks and rumours. Thus, it creates a barrier in delivering the right message.

3. **Perceptual barriers** are the mental blocks that result from the individual's own perception. The problem in communicating with others occurs because we all perceive things differently. Perceived barriers are based on each individual's unique experience, cultural background, educational level, and value system. Everything we interpret is subject to this experience, good or bad. If one has had negative experiences with a friend, everything the friend does or says will be filtered through this perception. Varied perceptions: You may have come across the people who say, 'I don't understand you' or 'I never meant that'. We all know the story of seven blind people and their different description about an elephant. Every individual has their own perception and the idea communicated can be perceived differently by each individual. Hence, people's perceptions must be addressed effectively.

4. **Attitudinal barriers** are the barriers that result from the individual's own attitude and assumptions that built up over the years based on one's socio-economic and cultural background and often get reflected in one's day-to-day communication with others. Attitudinal barriers may consist in poor management, lack of consultation with employees, personality conflicts, lack of motivation, dissatisfaction at work, insufficient training, resistance to the ideas, and so forth. **Wrong assumptions** are generally made because the sender or receiver has inadequate knowledge of each other's background which sets a wrong notion in their minds. A good communicator should see himself in the shoes of the receiver for effective communication. Sometimes the speaker does not realise the background, education and experiences of the different people can be different.

**Categorical thinking** means some people think that they 'know-it-all'. Such all-knowing persons are called pansophists. They believe that they have all knowledge about a particular subject, and refuse to accept any kind of information on that topic. For example, a teacher is teaching some facts in the class and refuses to accept a student's updated information. In such a situation this kind of teacher creates a barrier in the communication, because of the 'know-it-all' attitude.

5. **Emotional barriers** are due to mental limitations created by one's own self, and may be present in either the sender or the receiver. An emotional state of mind plays an important role in the communication process.

People base their encoding or transmitting of information on their personal experiences and expectations. For example, a subordinate who expects to be rejected or belittled for making a suggestion or comment will not send one's message.

### 2.2.2 Interpersonal barriers

Communication is an interpersonal process and is based on the relationships and common frame of understanding between the sender and the receiver.

When we have shared assumptions of ideas, views, values and opinions, it is easy to communicate. However, when there are unshared perceptions, ideas, views and opinions, it becomes unlikely to achieve effective communication.

Interpersonal communication barriers occur between persons, due to certain habits or attitudes in the persons communicating with each other. Interpersonal barriers are obstacles within the self that stop us from sending and receiving information effectively. A person's low self-esteem or inability to make connections can prohibit her/him from communication with others.

The two major categories interpersonal communication barriers are:

- Inefficiency in communication skill
- Negative aspect nurturing in the climate

The most common causes of interpersonal barriers are:

1. Limited vocabulary
2. Absurdity of verbal and non-verbal messages
3. Emotional eruption
4. Selective communication
5. Cultural differences
6. Poor listening skills

**1. Limited vocabulary:** At times you fumble, start stammering and are short of words or phrases due to inadequate vocabulary. During your communication, the connotative and denotative meaning of the words should be clear for effective communication. The varied and substantial vocabulary can create an ineffable impression on your listeners.

**2. Absurdity of verbal and non-verbal messages**

You always get mesmerised and have a long impact on the speaker who speaks well with appropriate body language and facial expression. This can be a major hindrance in communication. Misinterpreted non-verbal communication acts as another barrier to effective information gathering.

**3. Emotional eruption**

Overwhelming emotions can be one of the reasons for failing to communicate. Envision you are a principal of a school and there is a rumour that you are indulged in some fraudulent activities. Even though the rumours are baseless you may get upset. Suppose you are in a meeting to convey the message. In spite of being a good communicator, it is possible that one shows anger and fails to establish a good communication.

**4. Selective communication**

Many times if your superior calls a general meeting and she talks about different departments you may tend to pay attention to only topics related to your department. This kind of communication is called selective communication. Here the sender is not at fault. The receiver is the one who breaks the communication.

**5. Cultural variation**

Every geographical region has a different culture, custom and faith. Even every organisation or institution has a unique work culture.

This culture gives identity to different communities. For an effective and successful communication knowledge of cultural background is must that will avoid any misconceptions or convey of wrong message.

## 6. Poor listening skills

This is one of the common hindrances of effective communication. Speaking is a passive activity. Whereas listening needs attention to interpret the message. The receiver has to consider verbal and non-verbal expressions for effective communication. Any misunderstanding and conflict can be avoided if the receiver pays attention to the speaker. The various distractions and hindrances of listening can be emotional disturbance, aggression and wandering attention.

### 2.2.3 Organisational barriers

Communication barriers are not only limited to individuals or groups of people. It may exist in the entire organisation. Every organisation develops their own communication techniques, channel and climate. Organisational communication may be defined by the philosophy, mission and vision of the top management of the organisation. In an organisation there are many points of transfer and the chance of distort, delay and loss of message increases too.

The main organisational barriers are described below.

#### 1. Many transfers station (chinese whispers)

In various organisational workshops a game is played where a gathering stands in a queue. The first individual starts the message in one contestant's ear and the message is passed ear to ear. The last contestant reveals the message. The original message is distorted completely. This occurred because of many stations of transfer. In the organisation the transfer stations are multiple. The message is filtered at every transfer station. The reasons can be poor listening, lack of concentration or may be disinterest.

#### 2. Fear factor

In an organisation subordinates' feelings of dread to talk is obvious. There is always a fear of insult or scolding by the superior. The superior should establish a fear free climate for powerful communications. An open and favourable climate among the subordinates permits them to impart fair communication and set forth their viewpoint that will help the organisation to develop or grow. The active participation of the employees paves the way for more ideas, resources, or solutions.

### 3. Negative aspects

In an organisation many groups are formed according to the task. The group members with the same attitude, values and educational background come together for the accomplishment of projects. It is possible that the communication barrier may hinder the working of such groups. For example, in a school there are various clubs. The members and non-members may have conflicting ideas that pave the way for negative tendencies in the organisation. Good managers can handle the group skilfully to create a sound organisational climate. The manager may assign the work of assisting interns or conduct orientations or workshops for the new recruits.

### 4. Use of inappropriate media

The institution uses a number of media for communication telephone, boards, charts, e-mails, films and slides, computer presentation, teleconferencing and video conferencing. One should be aware of the advantages and disadvantages of specific media that may hinder communication. While selecting the media you should consider the following factors.

1. Time
2. Cost
3. Type of message
4. Intended audience

#### 2.2.4 Barriers Created by the Transmitter and Receiver

##### (A) Barriers Created by the Transmitter

Initiators of communication at any level within a department frequently commit one or more the following communication errors, and create some barriers to the effective transmission of their message:

1. **Misuse of Language:** Misuse of language includes the tendency to use vocabulary and idioms familiar only to the transmitter. The use of highly technical words or expressions can cause so much confusion or poor grammar or sentence structure.
2. **Improper Connotation:** Some transmitters use words with high emotional connotation, which may be misunderstood by the receiver. Consider, for example, the connotation of the word “mob” uses haphazardly what is merely a “crowd”.
3. **Poor Speech:** In verbal communication, poor speaking habits can erect a formidable barrier. Instead of speaking clearly and distinctly, many sergeants and disputes mumble or slur their instruction so badly that they literally cannot be understood.

Receivers often perpetuate this barrier by hesitating to ask for a clarification or repetition of the instruction.

4. **Bad Attitude:** Statement not only expresses a meaning but also reflects the attitude of the speaker or initiator of a message. When they transmit messages, many teachers use language or a tone of choice that reflects arrogance or tact. This can override the content of the message, with the result that the message itself fails to have the intended impact on the recipient.
5. **Language:** Language is the primary way of communicating thoughts and ideas. If the teacher and the students do not speak the same language, this can be a major communication barrier. If the teacher speaks English, and the students are mostly English as second language students, then there will be communication problems, since the students may not understand everything, the teacher says. The same problem could occur in a class where the teacher speaks what people think of as proper English, but the students are mostly intercultural students who speak slang or a different dialect of English.
6. **Expression:** Communication is never exact. The initiator tries to put his idea into words, and then the recipient has to decode those words to understand the idea. When the teacher or student does not have the ability to choose the proper words to describe the ideas, they want to convey, this will create a communication barrier. An example of this could be a teacher who is a professional mathematician but an ineffective math teacher because the only way she can convey ideas is to use math jargon that the students cannot understand.

**(B) Barriers Created by the receiver:**

Receivers of communication likewise commit a number of common errors which can block the communication process and render it ineffective:

1. **Anxiety:** One of the major emotional causes of communication barriers is student's anxiety. If a student is anxious and unsure, they are less likely to speak up in class. This is true even in situations where a student does not understand what the teacher is saying and needs clarification. Anxiety stops students from participating in-group discussions because they do not want to be made the centre of attention, and they are afraid of other people's opinions of them. Getting rid of anxiety is one of the chief ways of helping to facilitate two-way communication. Making sure that students know they can voice their views is important, and encouraging them to do so is a good start. If the school policy allows it, students could call the teacher by their first name to help ease any tension. Teachers should be tactful as students forced to speak and

become the centre of attention may only draw into themselves more.

2. **Semantic Problems:** These are problems regarding the interpretation of meaning by the receiver as compared to the intended meaning of the sender.
3. **Human Intransigence:** many receivers—especially at the lower levels of education seem to have a code of opposition to orders. When the volume of such Communication order is high and their content trivial, there is communication problem.
4. **Failure to Listen:** A receiver’s failure to listen usually stems from simple intransigence but may be heightened by personal problems or poor relation with the initiator. Some students have difficulty receiving effective communication from teachers they “don’t” care much for.
5. **Psychological Preparation:** The person who receives communication, tends to interpret the messages received in light of the experiences, present needs, and future expectations.
6. **Physical Problems:** Another barrier of classroom communication is physical problems such as speech and voice defects, anxiety -tension, feeling of inferiority which affect speech that interfere with the expressive bodily action or which tend to call forth unfavourable reactions on the part of the listeners.
7. **Fear of Criticism:** Many recipients avoid making a substantive reply to communications from a higher level lest they be criticized for the position they take.
8. **Defensiveness:** Perhaps the most basic barrier to effective communication is defensiveness; an excessive concern with protecting oneself from being hurt. People usually react defensively when they feel threatened.

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## 2.3 PRINCIPLES OF EFFECTIVE COMMUNICATION

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The principles of communication are critical as they comprise factors, which are necessary in making the communication processes worthwhile and efficient. The members of any organisation or educational institution should have a clear understanding of these principles. These principles of communication must be applied by all teaching and administrative members:

### 1. Reliability

Effective relationships are built on faith, respect and trust that both parties are applying the same principles. If you say something to

someone in confidence, you need to trust them to keep that confidence. When somebody asks you the question, you answer because you trust that your answer is being heard. Your opinion matters when you trust that your opinion is believed to be as valid as the next person's. The speaker should always feel safe to speak honestly. For example, if a student asks a question, a teacher needs to show trust. Only then will the student believe that the question is being received as it intended, and will not be judged as ill-informed or stupid.

The reliability of the communication increases with the trust factor. The speaker should feel that he is not being judged for his opinions or for who he is. People should ask for clarification of the words and should not jump into conclusions or make their own interpretations. Open communication with no prejudice, allows better interaction. The listener is honest and respectful, even though they don't like what they are hearing. Trust is, therefore, the foundation for all the principles.

## **2. Active Listening**

Active listening means being focussed entirely on the person speaking, and not disturbing or starting your own response before someone has finished their sentence. This "inner chatter" that goes on in our heads is a barrier to hearing. The moment we start thinking about our response, we stop listening actively. This is disgraceful towards the person who is speaking, but also, we might hear only half of the message and assume how the message finishes. If we have already come to a conclusion, we have ceased to listen. Active listening is difficult and needs patience and practice. Most people want to talk rather than listen. Use your ears and mouth in that proportion i.e., listen twice as much as you speak!

## **3. Non-judgemental**

Judging others is not a good basis for building relationships. It's human nature to be judgemental based on prejudices or assumptions. It is easy to say that we should be non-judgemental, but an extremely difficult principle to live by. As human beings we seem to be programmed to judge other people. The problems begin when we start judging people on what they say and do. It can be very difficult for some people to stop judging others and, again, it takes a lot of practice.

## **4. Value Differences**

Value the different contributions that people you interact with bring to your relationships. Their opinions may be different but not better or worse. In an organisation if the environment is trusting, whereby people know that their contributions will be valued, feel free to communicate. Create an environment for active engagement and fruitful relationships where people are not being judged, and are

respectfully listened to and appreciated; so their inputs remain confidential.

## **5. Consistent Communications**

Be truthful in your communications. The person who keeps looking at their watch whilst saying that they have plenty of time to sit and listen to your concerns is unconsciously conveying to you that they are anxious about the time. They are saying one thing, but their body language is very clearly saying something else. This is known as leakage and occurs when the words you use are not congruent with your body language. It is very important that we are authentic in our communication. If we are not, the truth may well leak out and be picked up. People “believe” the body language; they are not “fooled” by the words.

## **6. Prompt and Reliable Feedback**

Feedback ensures that the receiver has understood the message you were trying to convey. The facial expression and body language of the listener helps to give feedback. The eye contact and continuous response shows the interest of the receiver to carry the conversation forward.

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## **2.4 ROLE OF THE TEACHER IN EFFECTIVE COMMUNICATION**

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The effectiveness of the teaching learning process depends on the efficient class communication. Teachers play a vital role in creating a conducive environment in the classroom. The successful communication results in a better understanding of the content. A teacher can build a cooperative and appealing environment through effective communication.

### **1. Create a safe learning environment**

The cordial and supportive environment between teacher and student has a positive impact on class engagement, participation, and the students’ achievements. This is because, when students feel a sense of belongingness and safety, they are more comfortable expressing their own thoughts and ideas in class discussions, attempting challenges. There is no hesitation in asking when they need help. This is proven that higher levels of engagement and participation leads to better developed knowledge and greater achievement. A supportive learning environment is built using effective communication. Teacher-student interactions allow them to know each other well, and assure safety from judgement or humiliation in the classroom. Learn students’ names early in the year, and use them often. An open-door policy for students encourages them to come and talk to teachers about any issues, and be empathic and caring when you interact with them at all times.

## 2. **Group engagement**

Cooperative teaching learning strategies should be adopted in the classroom. Enhance team work and group activities to break the ice between student to student or student to teacher. Group discussions, brainstorming sessions or working in small or big groups motivates us to think and share ideas which contribute to making the classroom environment more comfortable. These activities also give them a good opportunity to ask questions and get feedback on their work. This leads to effective communication, better understanding of the lesson, and academic benefits. A teacher could also try to improve communication skills through teamwork with their colleagues.

## 3. **Non-verbal communication**

Communication is not only verbal, but also non-verbal. There should be consistency between your verbal communication and body language. The facial expressions should be positive and go along with your verbal communication. For instance, you are sharing good news with students but your facial expressions are exactly opposite. Ensure that the signals you are giving out through your body language are positive, confident, and engaging. Direct eye contact is important when presenting to the whole class, as it motivates everyone to pay attention, which helps them to learn, as well as making them feel involved. For more eye contact, a teacher may have to learn lesson content more thoroughly in advance, so that you don't have to look away to read your notes.

## 4. **Developing listening skill**

Listening skills can be developed through paying attention. Over 60% communication fails due to poor listening and creates misunderstanding. Practising good listening in the classroom can benefit you in two ways. Firstly, you will be a model for others, who will improve their own listening skills, and thus retain information better. By using active listening, you can correct misunderstandings and extend learning, resulting in a better education for your students. Active listening involves listening carefully to what others say. This gives them a sense of faith that they are being heard and understood. Respecting their ideas, and challenging or questioning them is the best approach to use to foster understanding in the classroom, and is an excellent example of effective communication.

## 5. **Response**

The communication will not be successful if the response is not prompt and appropriate. Feedback is also an important component of communication in the classroom. There have been many studies focusing on feedback in recent years. It has been shown that positive feedback builds students' confidence, making them more likely to believe that they can succeed. Feedback from both the parties helps to create a supportive environment and increase academic success.

Negative feedback is used more often in the classroom than positive feedback, and many researchers have argued that this should not be the case.

## **6. Sense of humour**

Using humour while teaching creates a light movement in the classroom and students pay more attention as they find the talk interesting. This encourages self-motivation, learning and positive relationships between students and teachers. It allows them to establish a rapport with the class, and keep them focused in the lesson. For example, you might tell jokes or funny anecdotes, give light-hearted personal examples, or laugh at students' own jokes. However, you should ensure that you don't use negative humour – where you demean or embarrass students or humour that is either irrelevant to the lesson, disturbing, violent, sexual, or forced. Only continue to use humour that has received a positive response from the class (such as laughing).

## **7. Technical skills**

Using up-to-date teaching aids such as computers, videos, and online resources is another way to keep students engaged and reinforce their understanding. It can also increase the effectiveness of your communication with students with different learning styles, who may benefit more from online resources than more old-fashioned ones. Try to work some of these aids into your lessons on a regular basis.

## **8. Clarity**

Good communication ensures a good teaching learning process and is about understanding and being understood. For this reason, you should always be clear and unambiguous while adapting words to your audience. Think about this while writing lesson plans (ensure that you break complex ideas down into simple, logical parts for your audience to understand), but also while you interact with the children after presenting the lesson. For example, you may wish to check that your teaching was clear by asking your students questions, or requesting summaries of the lesson in their own words. When you ask your students questions, use appropriate scaffolding to ensure that they understand exactly what you are asking. If you teach in a primary school, your students' language abilities won't yet be fully developed.

Closed questions (eliciting right/wrong responses), forced alternatives (such as 'like or dislike it?'), and sentence starters (e.g., 'a noun is...') are most effective for communicating with younger children. For older children, open-ended questions (such as 'how do you think...' or 'tell me about...') allow them to extend their thinking and develop their problem-solving skills.

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## 2.5 CONCLUSIONS

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Many factors can lead to communication barriers in a classroom. Communication is an important part of teaching because the student has to be able to understand the message that the teacher is trying to convey. Students also have to be able to communicate effectively with each other. There are a number of factors in the classroom that can act as barriers to effective communication. Following basic communication principles will help to ensure that we have heard and been heard without misinterpretation. We must listen actively, with respect and without judgement and not make assumptions. We must check the understanding of our listener about what we have said, and clarify our own understanding of what we are hearing. We should always be authentic in our communication, mindful that our non-verbal cues have a far greater impact on our communications than the words we speak. Being true to these principles will provide a firm foundation for trusting relationships and effective communication.

Within the teaching profession, communication skills are applied in the teachers' classroom management, pedagogy and interaction with the class. In addition, teaching speaking skills is important in teacher education.

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## 2.6 SELF ASSESSMENT QUESTIONS

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1. Explain any three principles of communication.

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2. How can a teacher use non-verbal factors for effective communication?

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3. How would you respond to a failed communication?

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4. What is the difference between interpersonal and intrapersonal barriers of effective communication?

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5. How can organisational communication barriers hamper classroom communication? Explain with examples.

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## COMMUNICATION MODES

### Unit Structure

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Modes of Communication
- 3.3 Speaking/ Listening
- 3.4 Narration, Explanation
- 3.5 Discussion, Questioning
- 3.6 Illustration (Verbal and Non-Verbal)
- 3.7 Conclusion
- 3.8 Study questions
- 3.9 References

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### 3.0 OBJECTIVES

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At the end of this chapter, the student will be able to:

- (a) Describe different modes of communication that are used in the field of education
- (b) Explain the communication mode of Speaking / Listening.
- (c) Explain the communication mode of Narration.
- (d) Explain the communication mode of Explanation.
- (e) Explain the communication mode of Discussion.
- (f) Explain the communication mode of Questioning.
- (g) Explain the communication mode of Illustrations (Verbal and Non-Verbal).
- (h) Differentiate between Explanation and Narration
- (i) Differentiate between Discussion and Questioning
- (j) Explain the advantages and disadvantage of various modes of communication
- (k) Classify various illustrations into verbal and non-verbal
- (l) Compare the various modes of communications

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### 3.1 INTRODUCTION

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Communication is paramount in all fields including in education and it is very important in making all educational processes a success.

Communication occurs when information progresses from a sender to a recipient using a medium.

Communication is evident between teacher to student, student to teacher, student to student, teacher to teacher, teacher to parent, parent to teacher, teacher to admin or admin to parent, etc. Effective and efficient communication helps parents and educational authorities to share and contribute to important and relevant information required for growth and development of children.

Media that are used for communication:

1. Visual communication through the use of body language and gestures).
2. Communicating with sounds (using human language)
3. Communication using touch.

The whole world is wrapped within the web of an overpowering communication environment. Examples of daily communications are a mobile conversation or watching television or gossiping with your friends or a family discussion or maybe sharing factual based information with your office members.

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## 3.2 MODES OF COMMUNICATION

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Any communication process would require a sender, a medium, a message, and a receiver. Message transmission also involves some emotions and various cultural significance associated with it. In order to convey a message or information different modes of communication are used.

Different modes of Communication:

1. Speaking, Listening
2. Narration, Explanation
3. Discussion, Questioning
4. Illustrations (Verbal and nonverbal.)

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## 3.3 SPEAKING/ LISTENING

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**LISTENING** is a basic learning skill, known as a responsive ability, or a latent skill, as it expects us to utilize our ears and our minds to understand; as it is being told or addressed to us. Listening is the capacity to acquire and translate the significance in the communication process. Listening is important and the most useful and powerful skill needed for effectively understanding and correlating the essentials and fundamentals. Without the ability to listen adequately, the understanding is essentially impaired. Without listening the correlation separates out and the understanding fades out without much of a stretch and the learner gets confused.

**SPEAKING** is the medium of communication where learning orally is involved. To talk or to speak, we make sounds using different parts of our body, including the lungs, vocal tract, vocal lines, tongue, teeth and lips. Speaking or talking means to communicate, or express one's feelings and thoughts in a spoken language.

## **SPEAKING AND LISTENING**

Speaking and listening must be considered as activities that form the communication process, complete each other and cannot be separated. Speaking and listening in the classroom serve both social and educational purposes. That is, speaking and listening is central in forming relationships, and acting as tools for learning. Listening and speaking skills are fundamental determinants of an individual's academic success. Listening forms the basis for speaking and is about showing the cognitive side, whereas speaking is about behaviour/performance. For successful communication, it is inevitable to combine listening and speaking education. Listening while providing control of the learning process stimulates students to speak and helps to improve their speaking skills, and their self-control during verbal communication

To have a productive conversation students require to listen deeply, reflect on what is said, express ideas clearly, sustain attention, ask insightful questions, debate respectfully, and develop an understanding of information taken in. These crucial listening and speaking skills need to be taught and practiced which will help students have fruitful conversations both in school and outside of school. Teaching and practicing academic conversation skills helps prevent and minimize problems that can arise during collective work and enable students to be more ingrained in their interactions and learning.

## **ADVANTAGES OF GOOD SPEAKING LISTENING ENVIRONMENTS**

### **1. Enhance Communication Skills**

Classroom conversations are an integral part of the educational setting. Students interact with the teacher and themselves when they project their thoughts, questions and ideas. Students in tune with class conversations are active in the discussions. When students speak in front of a group in the classroom, it prepares them for future efforts in public speaking.

- 2. Save Time on Task:** Students who listen carefully in class can directly begin assignments. They do not waste time asking a lot of questions before starting their work. When a student is not listening attentively, he could make unnecessary mistakes that require him to redo parts of the assignment. This leads them into these carrying mistakes homework, causing the student to devote even more time. This makes them realize the effect that listening has on time management.

**3. Better Academic Understanding** is developed in students who listen attentively to gain a good understanding of the content the teacher presents and can identify the fundamental concepts. Their effort of concentration ultimately results in storage of information in their memory. This helps the student when he needs to recall and build upon prior knowledge, especially in a subject such as math, which is based upon previous skill attainment. Good listeners have a better ability to connect to new ideas and content.

**4. Enrich Interpersonal Connections**

A student needs to earn the respect and confidence of his institutional members be it his teachers or a guest lecturer. When the student is attentive, the speaker feels valued and is more open to the student's suggestions and input. Teachers react enthusiastically when their students make an effort to actively listen in class. Students also have respect and awe for peers who listen intently to their comments and questions.

**5. Polished Listening Skills**

Teachers usually incorporate listening prompts and activities throughout the day. They might use phrases such as "All eyes on me" in order to gain students' attention. Students learn that eye contact is an important part of the listening process. When students follow a teacher's suggestions, they develop strong listening skills that are carried over for life.

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### 3.4 NARRATION AND EXPLANATION

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**NARRATION** is a communication mode where the teacher exposes students to content, and the students then tell back or narrate that content to the class or one another. This process of exposure and narration gives the student the opportunity to actively participate with the content they are learning. As students narrate, their minds digest the material and feed on it. The content presented to the students can be anything from a passage of a book (whether on history, science or art), to a beautiful painting, to a mathematical process demonstrated on a white board.

While students are asked to narrate the content in full, it is not a summary and that narration should occur right after the exposure. An example of this would be reading out a chapter from Harry Potter to the class and then pausing in the reading after a passage and then calling on a student to tell back the story as best they can. This practice is so powerful because it compels the student to engage fully in the story as it is being read, in order to be prepared to tell it back. The student pays rapt attention to the content because she is expected to know it. While telling or listening to another student tell, students solidify and consolidate their memories so that they know the story.

When we casually read through any material only once without the process of narration, our memories aren't given a chance to form, and so, much of

the knowledge we could have gained goes in one ear and out of the other. Narration secures knowledge in our memory, and thus is a useful skill for learning almost any type of content, whether story, process, picture or logical argument.

## THE PROCESS OF NARRATION

- 1. Understanding the Setting** of a narrative text boosts the other aspects of the story. Setting directs where and when the story takes place. For example, in the story of Cinderella, the protagonist or main character lives long ago. Cinderella lives with her step-mother where her duty was to clean floors and do laundry and in the end of the story, she rides off with prince charming to his magnificent castle. The contrast between where she started out and where she ended up is so strong, we often refer to successful people as having lived a "Cinderella story." Students can compare and contrast the settings of different stories.
- 2. Character Analysis** by students who learn to investigate characters by studying narrative text. In stories, there are many details that give hints about the personality, socioeconomic standing and emotional state of the character. Students should look at words and images describing the character's clothing and facial expressions. To draw conclusions about the character students must examine what the character says and how he reacts to others. While solving problems in the story the character's actions are powerful clues about his personality.
- 3. Construction of Narrative Plot**

Students can learn how to predict conclusions that make sense according to what has already happened by studying the plot of a narrative text. They learn how an author uses a sequence of events to set the stage for plot developments and builds excitement with rising action until the climax or high point forces a plot resolution. As the plot unfolds, the reader learns about the characters and their qualities. In the case of Cinderella, her kind gesture and patient nature is paid off at the end of the story, while the wicked stepmother gets what she deserves.
- 4. Identifying the Theme**

After learning about the setting, characters and plot, the next step is to discuss the underlying message of the story, or theme. There are many themes that can be used like mystery or romance that can be used. Cinderella is based on the capriciousness of fate type of theme. It is a reversal-of-fortune story with a happy ending. To conclude the lessons of narrative text, teachers can ask their students how the Cinderella story might give people hope and inspiration in their lives.

## ADVANTAGES OF NARRATION

1. Narrative increases the enthusiasm of children to communicate thoughts and feelings
2. Narrative secures information by creating the framework in which students can place the new knowledge and therefore improve their retention and understanding.
3. Narrative increases the verbal excellence
4. Narrative gives students a first-hand experience of emotions that they can relate to and thus remember more easily
5. Narrative encourages active participation of students resulting into cooperation between students and their ability to listen to one another.

## DISADVANTAGES OF NARRATION

### 1. Increased Insight

Narrative texts provide a richer and more detailed glimpse into the narrator's experiences through inner dialogue and explanation. While an outside perspective would only allow the reader to assume or interpret a character's emotions, a first-person account allows the reader to emotionally connect to the character.

### 2. Opinion Over Fact

If the narrative is based on nonfiction text, the information conveyed may not always be verified, since it is related from a single person's perspective. The reader only learns what the narrator communicates, the information reported may not always be accurate within context. If the event is interpreted from the narrator's perspective based on personal experience, that interpretation would be different from another narrator with different life experiences.

### 3. Distinctive Voice

The language of narrative texts is expressive and descriptive. The narrative text paints pictures and sets the scene, allowing the reader to experience the story from a specific and personal point of view. It contains vivid observations and emotional experiences, such as sounds, smells, tastes and inner feelings that would otherwise go unnoticed by a third party. Narrative texts are written in the specific voice of one of the characters, fully showcasing their traits like personality, physicality, culture, emotional responses to different situations. A character's language and thoughts can come through in a distinct way to different people based on their personal experiences allowing the reader to connect with the character rather than as a passive or a casual observer.

**EXPLANATION** can be defined as an activity to bring about an understanding in someone about a concept or a principle. It is an activity to fill up a gap in students' understanding. In the classroom, an explanation is a set of interrelated statements made by the teacher related to a phenomenon, an idea, or a concept in order to bring about or increase understanding in the students about it.

### **COMPONENTS OF EXPLANATION/ NARRATION**

1. Use language that is accurate.
2. Pronounce clearly
3. Have fluency while explaining
4. Use voice modulation
5. Highlight on main points by stressing on them
6. Use gestures and body language
7. Be audible enough and clear
8. Time management is very important
9. Explanation should be effective and efficient enough
10. Use proper language and have purity in it with no grammatical errors.

### **ADVANTAGES OF EXPLANATION**

1. Explanation saves time as Instead of spending a lot of time for a few things, one can use little time for many things and a lot of information transfer can occur over vivid topics.
2. Through explanation a teacher can make the understanding of any concept easy. The complex things can be simplified for the students for better understanding.
3. Explanation allows students to take notes in the classroom which keeps children stimulated throughout the lecture.
4. Through Explanation students gain a greater understanding so they can transfer their knowledge to new situations.
5. Explanation helps students understand the underlying relationship between any idea or information

### **DISADVANTAGES OF EXPLANATION:**

1. Lack of trained teachers: A teacher must be efficient enough to use explanations efficiently. Not all teachers can explain effectively.
2. If the teachers lack mastery over language and content-matter then they fail to explain effectively.

3. In explanation there is no time limit as to how much a topic needs time, but stretching the explanation for a particular topic may make students bored.
4. It is important for teachers to have knowledge of children psychology. If the teacher starts the explanation without having prior knowledge of students' understanding capacity, the concept of explanation stands meaningless.

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### 3.5 DISCUSSION, QUESTIONING

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**DISCUSSIONS** are strategies that are designed in order to stimulate cognitive thinking, challenge attitudes and beliefs, and enhance skills. It is usually an oral form of interaction between two people during learning in the classroom that is the teacher and the student, it could be between learners and learners as well where the role of the teacher is that of a facilitator. Discussions assimilate varied characteristics of learner-centred instruction where the learners are at the centre of the learning process, the role of the teacher is that of a guide the goal is deep understanding of the topic where the emphasis is on social interaction.

1. **A Panel Discussion** is a type of discussion in which a selected group of students act as a panel whereas the students in the remaining class act as the audience. Initially the members of the panel informally have a discussion over the selected questions. A panel leader is chosen among the members and he/she summarizes the discussion or questions that they have finalized and opens discussion to the audience relevant to the topic.
2. **Debate Discussion** is a technique of discussion that is appropriate for any topic involving a controversial issue. The class is divided into two groups for and against or pro/con of the topic. Each speaker from the group has a limited amount of time to speak for their side. The main objective of this type of activity is to construct reasonable arguments that address the material and consider the arguments of the other side as well.
3. **Role Playing** is a technique used in order to develop clearer insights into stakeholder positions and to understand the forces that hinder or facilitate positive interactions. Selected group members are assigned role where they assume the roles say for example role of a lawyer, teacher, engineer, etc. and act out a scenario that is pre-created by the instructor say for example a classroom scene or a court meeting related to some topic related to the curriculum, etc. The whole group then analyses together the roles and characteristics of the various players.

#### ADVANTAGES OF DISCUSSIONS

1. Lectures that are mixed with discussion help in maintaining students focus as the students discuss the answers. They develop a new perspective on the topic that is being taught. Good questions and

answers can help students to think deeply and make connections rather than superficially understanding the topic.

2. Discussion helps the instructor with effective feedback as students answer the questions that are proposed by the instructor. With the responses received the instructor can reflect how far the students have understood. If the students answer the questions correctly then the instructor gets some feedback that the students have understood and if they answer incorrectly then the instructor can help the students to correct those answers.
3. Discussion also helps in promoting preparation. If the teacher regularly engages the students in discussion, then the students are more likely to be attentive and become prepared in the classroom itself such as asking questions about the assigned readings, for doing recap through discussion.
4. discussion also helps in developing speaking skills among students. In any professional setting speaking is very important and plays a key role. Teachers by discussion, motivate students to speak confidently in front of their classmates. Public speaking skill is also developed due to discussion.
5. Discussion helps in maintaining the classroom environment. Those students who are not paying attention in the class and teacher constantly keep asking questions to discuss then it makes him or her focus, as a result students become more attentive to actually hear what is happening in the lecture and during the discussion time fear the teacher might ask them.
6. Discussion is a learner-centred approach, hence this type of group work is hardly forgotten and is retained for a longer time period.
7. Discussion helps the learner to consider different viewpoints on a topic which are perceived by different individuals. It also helps in bringing different features to the class and makes more sense to the topic that is being taught. The discussion method brings experiences to the classroom more effectively and can be far better than other teaching methods.
8. The discussion method is proven as an excellent strategy that helps in enhancing learners' motivation, helps in fostering intellectual ability and the ability to articulate and different positions considered different perspectives on a particular topic and enlist and evaluate evidence.
9. Discussion as a methodology of teaching allows learners to explore a topic more deeply rather than superficially understanding it or simply reading about it or listening to the lecture about that topic to discuss. small aspects are understood in the details and can also be explored in a much deeper sense and small points will not be ignored. comments

engage learners at developing higher level of cognitive activity which will help them enhance and comprehend the topic under discussion

10. The main aim of discussion is that its emphasis on learning rather than teaching and learning is made more interesting where higher level of thinking is also promoted.

### CHALLENGES TO DISCUSSIONS

1. Shy and quiet students do not involve themselves in discussion processes.
2. Nervous or inarticulate students must write their thoughts before class discussion, sometimes even before class begins; which is time consuming
3. Some talkative students may contribute more than required in and thus dominate the discussion. This results in others not getting a chance to share their view point.
4. Sometimes students do not respect the views of their peers because of which they may not listen attentively or participate willingly which results in a bitter environment.

**QUESTIONING** is an attempt to evaluate the knowledge of students in regard to the subject. Questioning is one of the oldest methods, asked by the students to the teacher or vice-versa. It inculcates reasoning power and brings knowledge to the conscious level. During the question-answer session if the teacher does not know the answer, he should admit it and ask the students to find it in the textbook or ask the student to research it. Students should be asked questions that compel them to think and apply reasoning. A student cannot answer a question fully; he should be encouraged to at least attempt to answer partially and then other students can answer the other half. If the teacher doesn't, either he asks the students to find it in the text-book or offers to find out the answer himself. No teacher can answer all the questions which can be asked in yes or no. The students should be asked such questions which compel them to think the matter over. If the students cannot answer the question fully, his partial answer should be accepted and another student may be asked to improve upon it.

### CLASSIFICATION OF QUESTIONS:

1. Mental process
2. Purpose
3. Structure and answers
  1. On the basis of mental processes questions can be further classified:
    - a) **Memory Questions** are those questions to which the learner answers based on their memory. Such questions do not promote thinking nor have any



## ADVANTAGES OF QUESTIONING

Using effective questioning in your classroom brings a host of benefits, as it:

1. Helps students to engage with their work and also with each other.
2. Helps students to think out loud, creatively and out-of-the-box.
3. Enhances learning through active discussion with teacher as well as friends
4. Help students to feel confident about their ideas.
5. Improves speaking and listening skills of students where the one who is questioning is working on speaking skills and the students who are participating improve their listening skills.
6. Builds critical and creative thinking skills.
7. Helps develop respect for other people's opinions and thinking.
8. Motivates students to clarify their doubts and understanding.

## LIMITATIONS OF QUESTIONING

1. Questioning requires a lot of skill to use this method on the part of teacher
2. Questioning may sometimes hinder the atmosphere of the class.
3. Questioning is time consuming
4. Only one person can speak at a time thus making it highly inefficient. Working in pairs is far more productive.
5. Questioning can be boring as it places high demands on concentration
6. The teacher is in control of the process but it places demands on the teacher's energy and oral skills. If the teacher lacks skills, then the quality of input will be low.
7. It becomes difficult to manage the class as sometimes some classes may not be well-behaved during question-answer.

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### 3.6 ILLUSTRATIONS: VERBAL AND NON-VERBAL

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Visualizing or observing is another important mode of communication that is often used to communicate non-verbally. Facial expressions of people, body language that is being used, gesture and postures are visualized, analysed and then observed. Symbols, graphics, images, signs and structure are also considered as a mode of communication that is through observation. Educationists and psychologists confirmed that visual communication is more effective for learners who retain knowledge for a longer duration of time.

In order to understand this mode of communication it is important to know what is meant by illustration. **Illustration is that material with the help of which the content that has to be taught or explained is made more interesting, understandable and clear.** Illustrations include everything that is appealing to the senses and affects the imagination power of the learner, stimulates their interest and curiosity in that particular topic and hence makes a piece of description or reasoning clear and apt. Illustration helps in assisting the minds of learners to understand large and small concepts easily.

**TYPES OF ILLUSTRATION:** Illustrations can be verbal or non-verbal.

1. Verbal illustration includes the following: Analogies or comparisons that are used in order to clarify a concept, anecdotes or stories to drive a point or to explain a concept, word pictures to derive hidden or underlying meanings.
2. Non-Verbal Illustrations may include Specimens like those used in biology to explain structure of veins, arteries, etc or concrete materials. It may include Models or Maps for geography, charts and graphs for statistics. Diagrams, pictures, road maps, concept maps, mind maps, etc.

**OBJECTIVES OF USING ILLUSTRATIONS:**

1. To stimulate curiosity and interest among learners.
2. For triggering imagination
3. For explaining and justifying abstract concepts. Example the galaxy, solar system etc.
4. For making a concept interesting, clear, understand and memorize. Example concept maps and mind maps.

**USING ILLUSTRATIONS AS A COMMUNICATION MODE:**

1. The illustration used in the classroom should be such that the students of that age should understand, it should be easy, correct, clear and to the point.
2. The illustration that is demonstrated should be interesting and alive. It should keep the learning flow systematic and should be mellifluous.
3. The illustration should always be related to the lesson and the content that is being taught.
4. It should concentrate on the core or essence of the lesson.
5. The point should be pre-decided where the illustration is to be used by the teacher.
6. One learning session should not involve too many illustrations otherwise the charm of the learning fades away.

7. The variety factor should be kept in mind while using illustration. Creativity, variety and vividness should be the core factors.
8. The maxim of known to unknown should be used ideally while using illustrations which helps in generating interest and arrest attention of students.

### 3.7 CONCLUSION

When communicating with others, we often focus on what we should say. However, effective communication is less about talking and more about listening. Listening well means not just understanding the words or the information being communicated, but also understanding the emotions the speaker is trying to convey.

There's a big difference between engaged listening and simply hearing. When you really listen—when you're engaged with what's being said—you'll hear the subtle intonations in someone's voice that tell you how that person is feeling and the emotions they're trying to communicate. When you're an engaged listener, not only will you better understand the other person, you'll also make that person feel heard and understood, which can help build a stronger, deeper connection between you.

By communicating in this way, you'll also experience a process that lowers stress and supports physical and emotional well-being. If the person you're talking to is calm, for example, listening in an engaged way will help to calm you, too. Similarly, if the person is agitated, you can help calm them by listening in an attentive way and making the person feel understood.

### 3.8 SELF ASSESSMENT QUESTIONS

1. Explain the various modes of communication described in this unit

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2. Describe the process of narration in brief

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3. What are the advantages and disadvantages of explanation technique?

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4. List the various components of narration

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5. Describe the characteristics of a 'good' discussion

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6. State the advantages and disadvantages of narration

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7. What is the difference between essay type and objective type question?

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8. Define the following i) explanation ii) questioning iii) illustration

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9. What are the different types of illustrations? Explain them in brief.

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# INFORMATION AND COMMUNICATION TECHNOLOGY

## Unit Structure

- 4.0 Objectives
- 4.1 Introduction
- 4.2 Meaning and Characteristics
  - 4.2.1 Meaning
  - 4.2.2 Definitions
  - 4.2.3 Characteristics of ICT in Education
- 4.3 Impact of ICT on Education
  - 4.3.1 Positive Impact
  - 4.3.2 Negative Impact
- 4.4 Challenges in using ICT in education
- 4.5 Conclusion
- 4.6 Study questions
- 4.7 References

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## 4.0 OBJECTIVES

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At the end of this chapter, the student will be able to:

- (a) Describe the need of ICT in education
- (b) Define the meaning of ICT in education
- (c) Explain the intervention of ICT in education
- (d) Explain the positive impacts of ICT in education
- (e) Explain the negative impacts of ICT in education
- (f) Describe the challenges in using ICT in Education

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## 4.1 INTRODUCTION

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"Globalization and technological changes have created a new global economy powered by technology, fueled by information and driven by knowledge". The emergence of this new global economy has serious implications for the nature and purpose of educational institutions.

As the access to information continues to grow rapidly, schools cannot be content with the limited knowledge to be transmitted in a fixed period of time. They have to become compatible with the ever expanding knowledge and also be equipped with the technology to deal with this knowledge.

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## 4.2 MEANING AND CHARACTERISTICS OF ICTS

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### 4.2.1 Meaning of Information and Communication Technologies

Information and Communication Technologies (ICTs), include radio and television, as well as newer digital technologies such as computers and the Internet, have been proved as potentially powerful tools for educational change and reform. When used appropriately, different ICTs can help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by helping make teaching and learning into an active process connected to real life.

### 4.2.2 Definitions of Information and Communication Technologies

"ICT stands for information and communication technologies and is defined as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information."

"ICT implies the technology which consists of electronic devices and associated human interactive materials that enable the user to employ them for a wide range of teaching-learning processes in addition to personal use."

These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony.

"ICT is that technology which uses the information to meet human needs or purposes including processing and exchanging."

"Information and communications technology (ICT) in education is the processing of information and its communications facilities and features that variously support teaching, learning and a range of activities in education."

All these definitions combine Communication Technology and Information Technology, that has a thin line between them but cannot do away without each other. When these technologies are applied in the field of education, it is termed as ICT in education.

The term too can be used as the connotation to the term Educational; technology because it also uses any hardware and software approaches that can yield better learning outcomes. In the era of Computer technology the term ICT mainly focuses on the infrastructure, devices and sources of computer technology and thus it is imperative to discuss the use of ICT in education by focusing mainly on Computer based technology.

### 4.2.3 Characteristics of ICT in Education

ICT in education is any hardware and software technology that contributes to educational information processing. In the present era, ICT mainly comprises Computer technology with its hardware, like, personal computers, the infrastructure required to set up an Internet facility and also 38 software like, CD ROM including various programme packages, E-learning strategies, etc.

ICT in education is any Information Technology that focuses on the acquisition, storage, manipulation, management, transmission or reception of data required for the educational purpose. For example, the information about students' records, their admissions, updates of their auricular and co-curricular activities. ICT in education is any technology that deals with the exchange of information or in other words communication in the teaching learning process.

Uses of Electronic learning technology like, video calling, powerpoint presentations, interactive boards, educational videos, are Communication Technology which is the part of ICT. ICT in education is any educational technology that is applied in the educational process. It encompasses Hardware approach like use of machines and materials, Software approach like use of methodologies and strategies of teaching learning and Systems approach that uses the management technology that deals with the systematic organization of the hardware and the software. Different software packages for the use in different departments of education; e.g. library software, administration software, software related to managing the entire teaching learning process.

ICT in education is the support material in the hands of the human resource involved in the educational process in order to enhance the quality of education. ICT in education comprises application of science of On-line, Offline Learning with the help of computer technology.

Thus, the characteristics of ICT in Education are:

1. ICT in Education offers a wide variety of services. Free educational videos on platforms like Youtube; Facebook groups for class communication and discussion wrt material available on social media; Classroom management aids like Google Classroom for a complete virtual classroom experience.
2. ICT in Education is reliable and provides interactive learning experiences. Tools available in Google like Google Docs, Slides etc which prompt corrections; free AI tools which help in referencing, finding text online.
3. ICT in Education is flexible and provides comfortable learning. Many of the tools available are free viz Google Classroom, eDictionary, Google Docs, etc.
4. ICT in Education motivates students to learn. The AV aids in the form of videos encourage students to learn. It gives teachers a lot of scope for creativity in the form of study boards, interactive presentations and open assessment
5. ICT in Education facilitates communication and promotes creativity. This promotes a research attitude where the teacher facilitates learning and makes material available for the students to research on the topics.
6. ICT in Education also provides access to the digital library where information can be retrieved and stored beyond textbooks.

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## 4.3 THE IMPACT OF ICT ON EDUCATION

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Information and Communication Technologies (ICT) influence every discipline and affect every aspect of education from teaching-learning to assessment and evaluation. It improves the effectiveness of education. It aids literacy movements. It enhances scope of education by facilitating mobile learning and inclusive education. It facilitates research and scholarly communication.

The impact of ICT and its potential for the education field is manifold. It positively affects all the stakeholders of the education field. The current papers discuss the same along with the various challenges posed by ICT. The challenges include economical issues, educational and technical factors. Appropriate content, Design and workability of ICT also play a crucial role in adoption of ICT in the education field. The paper delineates in brief the challenges and probable solutions.

### 4.3.1 The Positive Impact of ICT on Education

For education, the purpose of ICT is generally to familiarize students and teachers with the use and workings of computers, related social and ethical issues. It is generally believed that ICT can empower both teachers and learners. It promotes change to education in the 21st century. ICT not only transforms teaching but also the learning processes. The transformation gets to increase learning gains for students that provide learners an opportunity to develop creativity, communication skills, and other thinking skills.

ICT is very useful to society, especially to students in colleges. According to ICT adviser Harriet Price, an ICT-rich educational experience brings benefits to the students. She says that technology is an important part of student's everyday lives. She makes sure that the necessary software and hardware is available for students to use, while also helping them develop their own ICT skills. As we know, ICT makes schools "smart". That means everyone gets different information and knowledge from ICT. For example, when we have difficulty in the study, this is the way to search the definition online immediately. Computers are also provided in every area of different countries in the schools, colleges or labs. It helps students to get the chance to do assignments or group projects by saving a lot of time. It also increases students' knowledge at the same time. Besides, students who have laptops themselves can bring their machines with them. ICT makes everyone comfortable by using it.

ICT is provided for the students to have quick and easy ways in doing research. It has a great impact for students to have an easier way for research and information compared to the earlier period. For example, for our assignment in the past, we had to go to the library to collect information. It is not only a waste of our time but also there is a limit to the information we can get. And now, ICT is saving our time in doing the work and there is no limit to the information.

On the other hand, we can have our self-test before the exam. Besides buying the books for exercise, we can get the question from the Internet. It makes students more comfortable to have a test. ICT is also like a learning center that could help to share ideas and understanding to the students. It teaches us grammar and improves our English by ourselves. For example, when we are working in pairs and yet by using ICT that students can experience collaborative learning. ICT represented as the local champions. It supports local needs for the learners which mean social information can be found easily.

From a teaching point of view, teachers used these devices to deliver to a whole class, and could use the digital content effectively that was available to them. Teachers also reported that ICT offered them enhanced resources to support learning through teaching. The levels of interaction, the immediacy and the ability to refresh work, were all indicated as ways in which ICT could enhance the range of teaching approaches taken. In some colleges, teachers were expecting more of the students to use ICT- whether this was due to the higher pace in lessons, work being done more quickly.

#### **4.3.2 The Negative Impact of ICT on Education**

On the other hand, there is some negative effect of ICT on education. In college, computers are not enough for teachers to make the best use of ICT in the classroom. Based on the research of Sandhoitz, it will take a lot of time in the classroom even up to a year with the support of experienced teams. Teachers depend on the information that is searched from the web. Information from the web or internet may not be facts. Teachers who depend more on ICT do not perform well as a teacher, as they may not check through the details of the work that they searched from the web.

Students, however, feel lazy to attend the class if they can easily get the study material from the web. It will change their behavior to become more irresponsible. Let's say that the teacher gives an assignment to the students, they may not understand if they never attend that class. The technological reliability was important and yet the students could respond negatively to a resource, both of teaching and technology. Across the school or colleges, students might not value ICT that spent too much time on presentation needs and copying without reading and understanding.

At the same time, students will search the information from the web and be caught by "cutting and pasting". Through this type of behavior, the reliability of the students will be affected. By then the students will access the internet for other things, for example, facebook, Instagram, Twitter and others. While the teacher has the lesson in front, they will not pay more attention to the lecturer.

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### **4.4 CHALLENGES IN USING ICT IN EDUCATION**

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In order to compete in a global competitive environment, a highly skilled and educated workforce with aptitude and skill sets in application of ICT is inevitable for every nation.

In the age of innovation and productivity, most nations are focusing on ways to improve knowledge generation and sharing; and creation and flow of new technologies. In this scenario, it has been duly recognized that implementation and adoption of ICT in a nation at all levels, would certainly contribute and enhance its productivity, efficiency and growth. ICT is inevitable for all sectors and all segments across regions.

ICTs offer the potential to share information across traditional barriers, to give a voice to traditionally unheard peoples, to provide valuable information that enhances economic, health and educational activities. The role of ICT cannot be undermined keeping in view its pertinent uses. ICT is useful in education; for digital literacy and developing all kinds of resources; in infrastructure development; in logistics management; in healthcare; for livelihood generation and empowerment of masses; for e-governance; in administration and finance; specialized business and industrial uses; agricultural uses; in research and development and for economic growth and poverty alleviation. ICT has a direct role to play in the education sector. It can bring many benefits to schools, educational institutions as well as to the community.

ICT is important in schools and educational institutions as it assists in carrying out their activities and functions such as record keeping, research work, instructional uses, presentations, financial analysis, examination results management, communication, supervision, MIS, teaching learning activities, and general school management functions.

#### **ICT benefits schools in several ways:**

- (i) enhancing learning in the classroom;
- (ii) improving school management and related tasks;
- (iii) improving accountability, efficiency and effectiveness in school activities;
- (iv) introducing usage of PowerPoint presentations and the internet.

Literature reveals that when well-utilized, ICT in schools has the potential to improve the teaching learning process in many ways. ICT is learner centric and hence brings about active involvement of students in the learning process. Students get motivated when learning activities are challenging, authentic, multi-sensorial and multi-disciplinary. Schools tend to witness a higher attendance, motivation levels, academic accomplishments and effective communication as an outcome of ICT programs and projects. Teachers gain as a result of ICT initiatives. They find ICT to be useful for teaching as well as for personal and professional work. Application of ICT in teaching makes teaching more innovative, interesting, interactive, easy and effective. It complements the traditional teaching learning process.

While imparting knowledge with the aid of ICT, educators find that students are more receptive and responsive. Also, ICT can help to impart more information and knowledge to students in a shorter time, enabling maximum utilization of resources and time.

Although ICT has the potential to improve the education system of a country to a great extent, it is not the case in developing countries. There are multiple issues and challenges confronting the implementation of ICT education in schools and educational institutions in these countries and the problems are much more magnified in case of schools located in remote villages and rural areas. For rural schools in specific, the introduction of ICT faces hindrances in the form of internal and external barriers.

### **The INTERNAL barriers to ICT implementation (in schools)**

1. **Lack of trained teachers:** A major obstacle in the use of ICT in the education system is the lack of knowledge and skills. There is a dearth of dynamic teachers formally trained in ICT. Moreover, there is hardly any quality training imparted on a regular basis to teachers involved in ICT education.
2. **Unfavorable organizational culture and poor attitude and beliefs:** Often in developing nations, the educational organizations and school management fail to perceive the importance and seriousness of the role of ICT in education enhancement. Also, the teachers' attitudes and beliefs are outdated and orthodox. They are unaware and rigid and not willing to adapt to the change. They harbor false beliefs that ICT is meant primarily for the youngsters and are skeptical about the effectiveness and utility of ICTs in school education.
3. **Shortage of time:** In schools, teachers are usually burdened with multiple tasks other than teaching. Moreover, they have to teach all types of subjects along with ICT. They do not have time to design, develop and incorporate technology into teaching and learning.
4. **Time for Teachers:** the teacher needs time to collaborate with other teachers as well as learn how to use hardware and software and at the same time keep oneself updated with the latest technology.
5. **Insufficient funds for ICT infrastructure:** Appropriate and latest hardware and software facility availability determines the effective and efficient usage of technology. In developing countries, technology implementation into education systems is a difficult task as it requires a large amount of funds, infrastructure and support facilities.
6. **Challenges of language and content:** A large proportion of the educational software produced in the world market is in English. Majority of online content is available in English. In developing countries, English language proficiency is not high, especially outside the urban areas which becomes a serious barrier to maximizing the educational benefits of ICT.
7. **The gap between demand and supply of education:** a revolution in information and communication technologies has reduced national boundaries to meaningless lines drawn on maps. In this scenario, education has been identified as one of the services which need to be opened up for free flow of trade between countries. India is developing as a knowledge economy and it cannot function without

the support of ICT. The gap between demand and supply of education has necessitated the government and institutions to formulate policies for more beneficial use of ICT.

**8. Crucial EXTERNAL barriers in ICT implementation in rural schools:**

- (a) **Shortage of equipment:** There is a lack of computers and computer-related resources such as printers, projectors, scanners, etc. in government schools in rural areas. The ratio of computers per student is insufficient. The option of private schools is very few or missing in these regions. There is a mismatch between the complementing resources and inappropriate combination of ICT resources resulting in reduced diffusion of technology as well as poor ICT understanding in these educational institutions. Unreliability of equipment- Even the basic ICT equipment and computers possessed by rural schools are unreliable and undependable. The schools lack up-to-date hardware and software availability. Old and obsolete equipment are major hindrances to ICT adoption and application.
- (b) **Lack of technical support:** Rural schools face issues related to technical know-how, absence of ICT service centers, shortage of trained technical personnel. Whether provided by in-school staff or external service providers, or both, technical support specialists are essential to the continued viability of ICT use in a given school. Without on-site technical support, much time and money may be lost due to technical breakdowns. One of the major obstacles to optimizing computer use in schools has been the lack of timely technical support.
- (c) **Resource related issues and internet:** Rural schools usually face trouble with respect to the availability of ICT related resources such as supporting infrastructure, uninterrupted electricity, supplementary resources like multimedia, projectors, scanners, smart boards, and so on. Despite being an integral component of ICT, the internet is lacking in most rural schools. Most schools cannot afford the high fees charged by internet providers and even where there is internet, slow or erratic connectivity destroys the very essence and impact of ICT.
- (d) **Social and cultural factors inherent to rural schools,**
- (e) **a lack of initiative by community leaders,**
- (f) **Corruption and burglary.**

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## 4.5 CONCLUSION

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To describe the use of technology in education means the use of equipment to imply the concept of technology of education means improving the effectiveness of learning. It is the application of ICT. in education. It helps the learner to make himself free from mere information receiving and to devote his time for planning, arranging and evaluating learning experiences. ICT viz Information communication Technology is the technology which uses the information to meet human needs or purposes including processing and exchanging. It helps to improve the efficiency and effectiveness at all levels and in both formal & informal settings. ICT is the need of the how inorder to cope and compete with the advancing world of Technology.

We also saw the characteristics of ICT in Education which included:

1. It offers a wide variety of services.
2. It is reliable and provides interactive learning experiences.
3. It is flexible and provides comfortable learning.
4. It motivates students to learn.
5. It facilitates communication and promotes creativity.
6. It also provides access to the digital library where information can be retrieved and stored beyond textbooks.

The impact of ICT in education which included negative and positive impacts especially pertaining to lack of trained teachers and equipment.

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## 4.6 SELF ASSESSMENT QUESTIONS

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1. Discuss the positive impact of ICT in education.

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2. How can we reduce the negative impacts of ICT in Education?

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3. Discuss, with relevant examples, characteristics of ICT in Education.

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4. Elaborate on the meaning of ICT in education with relevant examples.

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5. State your opinion on: India is reaching the rural packets with ICT in Education.

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6. Elaborate on the challenges faced by schools in using ICT for education.

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## PRACTICAL WORK IN ICT IN EDUCATION

### Unit Structure

- 5.0 Objectives
- 5.1 Introduction
- 5.2 The Effectiveness of ICT in Education
- 5.3 Assignment 1
- 5.4 Emerging Trends in ICT in Education
- 5.5 ICT for research: online repositories & Libraries
- 5.6 Assignment 2
- 5.7 Conclusion
- 5.8 Study questions:
- 5.9 References

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### 5.0 OBJECTIVES

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At the end of this chapter, the student will be able to:

- (a) Describe the real life applications of ICTs in Education.
- (b) Develop tools based upon ICTs in Education.
- (c) Describe the effective ways of using ICTs in Education.
- (d) Explain the emerging Trends of ICTs in Education

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### 5.1 INTRODUCTION

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Information and communication technology, ICT enables the use of innovative educational resources and the renewal of learning methods, establishing a more active collaboration of students and the simultaneous acquisition of technological knowledge like usage of Internet, wireless networks, cell phones, tablets etc. ICT has become an essential part of our everyday life. ICT plays a vital role in improving functional effectiveness of educational systems.

ICT comprises technologies for capturing, transmitting and disseminating information. It powers our access to information, enables new forms of communication and serves many online services in the spheres of communication, culture, entertainment and education. It is also a force that has changed many aspects of the way we live. It also helps teachers support or scaffold the development of historical thinking and understanding at all levels. ICT is considered as the vehicle for change i.e. activity centered from traditional centered. It motivates the learner by quick acquisition of

knowledge. ICT helps educators in being efficient administrators, facilitators and evaluators. E-books play an important means in accessing the books remotely.



ICT is not only the tool for development of scientific attitude but also the change in the social process. It helps in effective construction of educational principles for quality teaching-learning by development and implementation of methods and techniques. ICT helps in organizing the resources to achieve the goals of education. Curriculum planning, designing, implementation and execution is more user friendly. Use of ICT helps in having a more productive and powerful approach in education. ICT can be used for task analysis, modules development, MOOC creation, LMS development, Mathematics and Cybernetics etc.

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## 5.2 THE EFFECTIVENESS OF ICT IN EDUCATION

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ICT in education helps in defining the aims and objectives of learning and planning a better learning environment. Exploring and structuring the content in suitable context is possible. Participatory approach will be enhanced through the right use of ICT. Communication in real time with others in different demographic regions has become possible using different technology like instant messaging, voice over IP (VoIP), video-conferencing, etc. Social networking sites like websites like Facebook allow their users to become global citizens.

Both formal and non-formal educational opportunities should be accessible to all, irrespective of any discrimination like rural or urban, marginalized or ethnic etc. Access to resources becomes practically possible anytime, anywhere (transcending time and space). Asynchronous learning becomes a reality due to ICT. Broadcasting of information, teleconferencing, virtual seminars exists, all thanks to ICT. Access to far fetched and previously unreachable resources is possible now and it has opened the door to a vast repository of knowledge. WWW is the milky way of knowledge. Access to resources, mentors, experts, research and online assessment is feasible.

To make the content understandable, digital concept-maps through 'bubbl.us', 'Mindmeister' etc., can be used. Linking of all keywords becomes easy. Online forums like jamboard, help diverse voices to come out. Survey monkey, poll daddy, etc. helps in collecting data through

surveys. Even feedback can be shared through it. Anonymous online polls can be used to gather and demonstrate various perspectives. Blogs are a journal way of documenting, learning and collecting information for self analysis and reflection.

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### 5.3 ASSIGNMENT 1

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Assignment 1: Select a case study/report/essay, related to legal and ethical issues in use of ICT.

Discuss using any mode of online discussion forum.

Create a Google classroom to post your assignment.

Use Google Forms to collect the data.

Practical Report FORMAT:

- Cover page: Title, Affiliation
- Introduction : Case Study, needs, significance
- Review of literature
- Data collection: Google forms / Discussion Forum
- Data documentation: Google Docs
- Data Analysis: Online statistical tools
- Presentation : PPTs
- Conclusion: Concept Maps

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### 5.4 EMERGING TREND OF ICT IN EDUCATION

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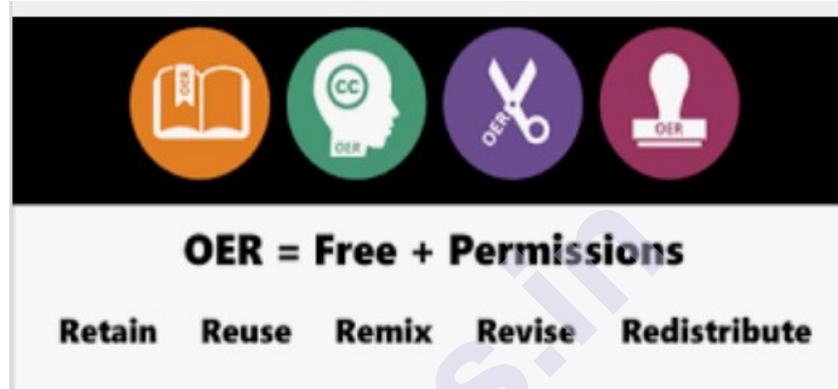
ICT has enhanced the efficiency of education. Communication through different modes like mobile learning, use of social media (portfolio, blog, video conferencing, video call) is possible.



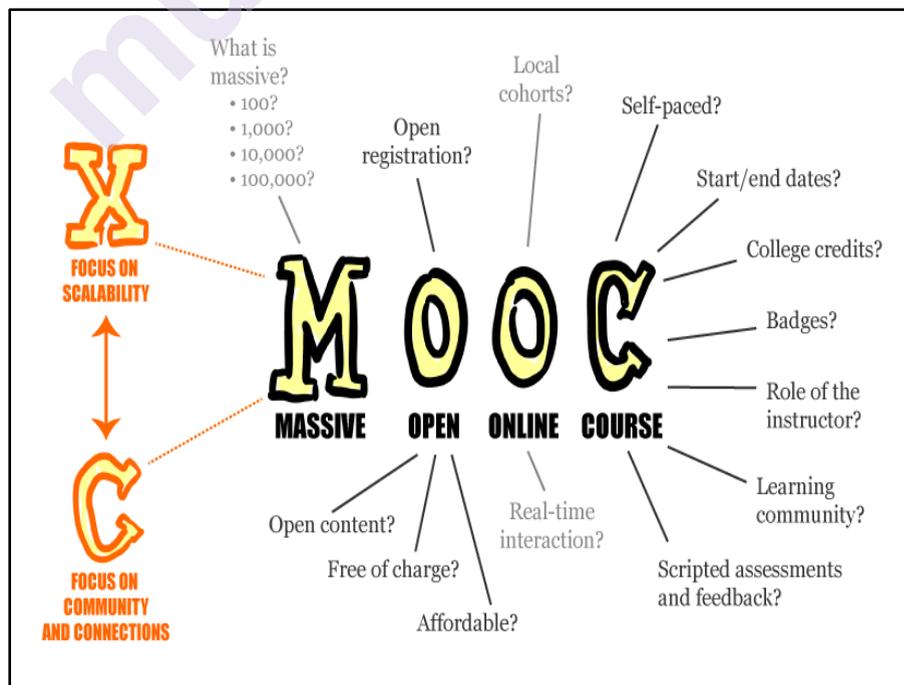
Social Media are increasingly used in multiple ways to enhance learning. Blogs improve classroom communication.

Open Educational Resources (OERs) are a reality. The world is witnessing the trend and transformation in education due to the collaboration of different sources. Its benefits are immense and getting acknowledged.

Open educational Resources are free in access. OERs can be used for teaching, learning and research materials in any medium including digital. OERs are stored in the public domain and are absolutely free. OERs improve the quality of education, allows users to have self-paced learning and helps in advancing knowledge and widening participation. Excellent learning materials can be accessed and it promotes lifelong learning by bridging the gap.



MOOCs (Massive Open Online Courses) are designed for large numbers of participants and can be accessed from anywhere and by anyone. MOOCs training is now getting attention for teachers and for students. Diverse topics can be included and it requires self motivation to move forward. The main components are video-based studies that offer interaction either through peer view and group collaboration or automated feedback through objectives and online assessments.



## Check your Progress

1. Compare between online and offline assessment tools.

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2. Social networking sites are useful for learners. With one example, justify your explanation.

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3. Visit the SWAYAM site and share your personal views.

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## 5.5 ICT FOR RESEARCH: ONLINE REPOSITORIES & LIBRARIES

Information and communication technology is a prime concern as well as a top national objective in many countries. The contribution of ICT in higher educational fields is unquestionable. The steady increase in bandwidth and computing power available have made it possible to conduct complex calculations on large data sets, use of online full text databases and online libraries/forums to access diverse information in depth. Rapid development of Information and Communication Technology (ICT), with the help of the Internet, is one of the most interesting phenomena that has characterized the Information Age.

ICT empowers access to information, enables new forms of communication, and serves many online services in the sphere of commerce, culture, entertainment and education. ICTs in research is the use of online full text databases and online research libraries/virtual libraries which are the direct outcome of the growth in telecommunication network and technology. It gives us online access to hundreds of thousands of books from major publishing houses, research reports and peer reviewed articles in journals.

### **Top e-Learning Resources For Effective Learning Today**

1. Coursera. Boasting more than 1000 courses from the best universities in the world, Coursera is a mecca for digital learners.
2. edX.
3. YouTube.
4. Lynda.
5. Udemy.
6. Alison.
7. Khan Academy.
8. MIT OpenCourseware.

### **The top list of academic research databases**

1. Scopus is one of the two big commercial, bibliographic databases that cover scholarly literature from almost any discipline.
2. Web of Science.
3. PubMed.
4. ERIC.
5. IEEE Xplore.
6. ScienceDirect.
7. Directory of Open Access Journals (DOAJ).
8. JSTOR.

### **Online Library Repositories in Indian Education**

# **NMEICT**

**National Mission on Education Through ICT**

National Digital Library of India (NDLI) is a virtual repository of learning resources which is not just a repository with search/browse facilities. Educational materials are available for all subject areas like Technology, Social Science, Literature, Law, Medical, etc. The Library integrates contents from Institutional Digital Repositories of large number of

Indian Educational and Research institutions. All types of resources, such as Books, Audio Books/Lectures, Video lectures, Lecture Presentations/Notes, Simulations, Question Papers, Solutions, etc. are available.

To make learning resources through a single-window available to the learners community, National Mission on Education through Information and Communication Technology (NMEICT) has sponsored the National Digital Library of India (NDLI) project and arranged funding through the Ministry of Education.



This portal is a rich repository of good practices that focuses on positive stories, developments and innovations initiated across all States and UTs of India that are driving performance improvements in the area of School Education. These innovative practices are documented in the form of case studies, videos, testimonials and images. Content is easily searchable by State, Union Territory or by the Samagra Shiksha components that they fall under.

### **Shodhganga: a reservoir of Indian Theses**

Theses and dissertations are known to be a rich and unique source of information, often the only source of research work that does not find its way into various publication channels. Theses and dissertations remain an untapped and under-utilized asset, leading to unnecessary duplication and repetition that, in effect, is the antithesis of research and wastage of huge resources, both human and financial.

The UGC Notification (Minimum Standards & Procedure for Award of M.Phil. / Ph.D Degree, Regulation, 2009) dated 1st June 2009 mandates submission of electronic versions of theses and dissertations by the researchers in universities with an aim to facilitate open access to Indian theses and dissertations to the academic community world-wide. Online availability of electronic theses through centrally-maintained digital repositories, not only ensure easy access and archiving of Indian doctoral theses but will also help in raising the standard and quality of research. This would overcome serious problems of duplication of research and poor quality resulting from the "poor visibility" and the "unseen" factor in research output. As per the Regulation, the responsibility of hosting, maintaining and making the digital repository of Indian Electronic Theses and Dissertation (called "**Shodhganga**"), accessible to all institutions and universities, is assigned to the INFLIBNET Centre.

## 5.6 ASSIGNMENT 2



1. Visit the Shodhganga site, select a suitable research of your interest, Search Dependent and Independent variables of your choice to frame a title on the topic “ Educational Concerns in Modern Time”.
2. Do five literature reviews.
3. Write an Abstract of your proposed research.
4. Write your reflection on Google Doc.

### Self Assessment Questions

1. Develop and manage a Social Networking site/Blog/Chat forum for college based on ICT courses. Write your reflections.

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2. What is Educational Technology? State the various fields of education in which it is being applied in India. Describe its use in any one field.

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## 5.7 CONCLUSION

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Communication is an essential factor of knowledge construction. It is a key for opening the gates of knowledge and information to a knowledge seeker. ICT helps the educator in a quite effective way for communicating with a group of students in a classroom situation or masses in the informal/ non-formal communication situation for the proper realization of his teaching/Communication objectives. It reduces all types of confusion due to verbal-ism and provides an adequate impression on learners. Clarity of concepts. The education system is often large and dispersed. ICT has become the integral part of all facets of education. It helps in life long learning, better time management and being organized. Digital ethics and hygiene must be taught and reinforced at every level of computer use-from the novice user just learning to navigate a computer and the Internet, to an information professional whose job requires significant use of online resources. Globalization of higher Education is basically a reality with the help of technology. ICT has brought a revolution in communication by the accessibility of opportunities. Self paced auto instruction related to curricular and non-curricular areas of learning like E-learning / Distance learning helps in reducing the gap of education. Accuracy, precision and speed has been accelerated in knowledge gaining, synthesis and presenting. Curiosity, inventiveness and construction of knowledge is much faster and feasible. Personality development to psychological analysis helps a learner to receive timely help for progress. Formal and In-formal education has got tremendous boost. Multi-sensory media and Multi-Media facilitates the inclusive within and outside classroom.

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## 5.8 SELF ASSESSMENT QUESTIONS - ASSIGNMENT 3

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1. List the educational uses of a computer.

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2. Prepare your presentation (PPT / Video / Animation / StoryBoard / Doodle / online Concept-map) to demonstrate the use of any one LMS, for any one topic from your syllabus, based upon the ADDIE Model.

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3. To get acquainted with technological tools and websites in education, go through any five educational websites/links and submit a report on it.

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## 5.9 REFERENCES

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