

MODULE 3
Communication skills, Modes and Knowledge
Dissemination

Er.Amandeep Kaur , NITTTR Chandigarh

Duration : 8 Weeks

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Communication Skills, Modes and knowledge dissemination

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Hours: 20

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UNIT 3.1

Classroom Communication: An Introduction

“As long as there is communication, everything can be solved”

(Robert Trujillo)

3.1 Classroom Communication: An Introduction

Learning Outcomes

After reading this unit, you will be able to:

- Explain the concept of communication
- Enlist the various elements in communication
- Explain the relationship among various elements of communication
- Explain the various stages in classroom communication
- Enlist the purposes of four basic communication skills
- Explain principles of effective communication

3.1.1 Introduction

Communication is an integral part of any teaching learning process and its effectiveness is one of the factors, which determines to a large extent the degree to which the learning outcomes will be achieved. The primary objective of instructional communication is to achieve learning outcomes in the cognitive domain namely those concerned with developing remembering, understanding, applying, analyzing, evaluating and creating abilities. It also helps in building affective relationships with students (Mottet et al., 2006). The process of classroom communication is affected by a multiplicity of factors pertaining to teachers, students, message, instructional methods and media and learning environment (Tulsi, 2000). But, very few of us understand the nature of communication and make deliberate attempt to improve its effectiveness. Weimann and Backlund (1980) has rightly remarked that “communication skills are acquired through training and can be improved with practice and require conscious knowledge and strategic judgement”. Evidence indicates that by improving communication skills, individuals can have more effective and satisfying communication experience.

3.1.2 Communication: Concept and Process

The term communication comes from the latin words communis (common) and Commune (to share). According to Schramm “when we are trying to communicate we are trying to establish a commonness with someone”. For communication to be shared, it is not enough to transmit symbols from one individual to another. It is also necessary for the message to have some relevance for the participants. Participant should share enough common frame of reference so that message has some sense or significance.

Please try to answer the question ‘Who is a mother’. Some of your responses may be -she is loving, affectionate, first teacher, caring, understand the child without him/her saying anything, nurturing etc. Or you might have thought that she is a person who gives birth to a child. There are two meanings of the same word-one based on your experience and another the standard

meaning. Standard or dictionary meaning is referred to as denotative meaning and the meaning you attach to words based on your experience is referred to as connotative meaning. When the receiver interprets the words as intended by the sender, the message is completely or rightly understood. Communication ought to be effective. So, communication can be defined as sharing of meanings between the sender and the receiver. Communication thus, is a process by which meanings are exchanged between two or more persons through the use of some symbols that both or all of them understand.

According to Devito (1978) "Communication refers to the act, by one or more persons, of sending and receiving messages, distorted by noise within some context, with some effect and with some opportunity for feedback". Little (1987) defines it as "Human Communication is the process by which information is passed between people by means of previously agreed symbols, in order to produce a desired response".

The communication act, includes the following elements:

- **Communication Context:** Communication always takes place within a context. At times, this context may not be obvious and at times, it may stand out boldly. The context of communication has four dimensions:
 - Physical (Where the communication is taking place-the room, hallway or park?)
 - Social (Who are involved in communication? What status relationships exist between them? What roles the people play? What are the norms and the culture of the society in which they communicate?)
 - Psychological (Is the environment characterized by formality or informality, friendliness or unfriendliness etc.?)
 - Temporal (At what time of the day and history the communication takes place?)

These dimensions interact with each other; each influences and is influenced by the others to determine the nature and content of communication.

- **Source/Sender:** A person or thing or event, which provides verbal or non-verbal clues to which someone can respond. When the source is a person, it is also called a sender.
- **Receiver:** A person who interprets a message sent by a source.
- **Message:** A set of verbal or non-verbal cues sent by a source. Messages can be spoken or written words, gestures, movements etc. They cannot have meaning apart from the persons involved in sending and receiving process.

- **Symbols:** A symbol is something that represents something else. It can be verbal or non-verbal. Words are symbols, the flag is a symbol, and certain uniforms, gestures and objects are symbols.
- **Channel:** A channel is the means used to convey the stimuli. The most common channels are visual and auditory and other channels utilize tactile (touch), gustatory (taste) and olfactory (smell) senses. In simple words, channel can be audio, visual or a combination of the two.
- **Encoding:** Encoding is the process of selecting symbols to express the idea or feeling the source wishes to communicate.
- **Decoding:** It is the process by which the receiver translates the symbols provided by the source.
- **Feedback:** It is the response a receiver gives to sender as a result of sender's message. This information may be used to adapt, adjust or change subsequent messages.
- **Noise:** Noise is anything that distorts or interferes with the message. It can be external (screeching or passing cars, hum of an air-conditioner, distracting mannerism etc.) or internal (headache, fatigue, unpleasant past experience, prejudices and biases etc.)

Figure 3.1.1. Shows the relationship among various elements.

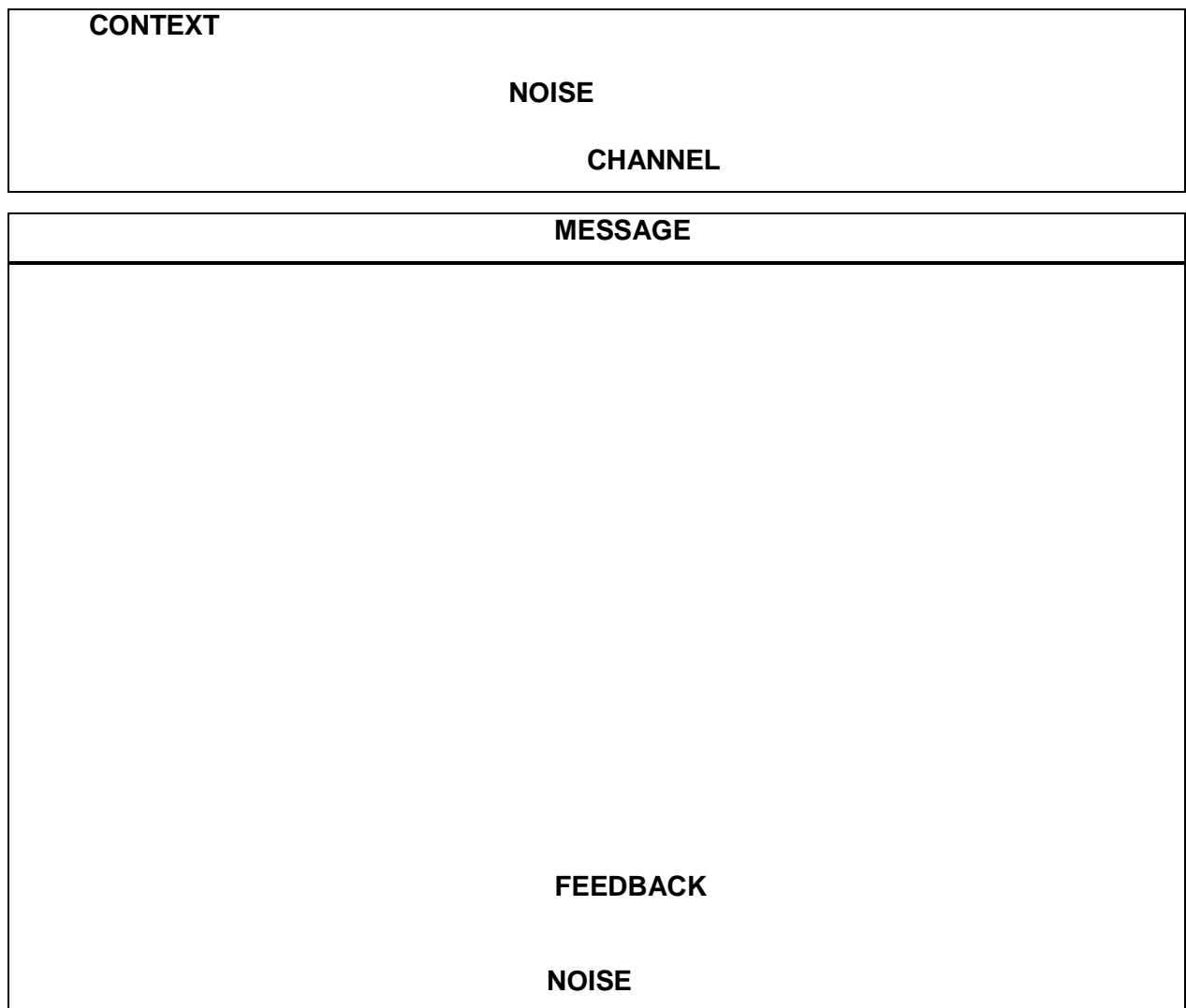


FIG 3.1.1: Elements in the process of communication

In classroom communication, these elements will include: teacher (the primary sender of messages), message, students (the primary receiver of messages), encoding, decoding, Instructional methods and media, feedback and learning environment. Role reversal takes place in class. Students when they clarify doubts, pose questions or supplement information become the senders of information and are involved in encoding and transmission of message; while the teacher becomes the receiver and is involved in decoding and provides feedback to the sender of the message.

Practice Task

1. The purpose of communication in classroom situation is to:
 - Enable students achieve the learning outcomes
 - Establish rapport with students
 - Facilitate the understanding of the subject matter
 - All of the above
2. Which of the following are the elements in the process of communication?
 - Sender
 - Message
 - Receiver
 - All of the above
3. The process of encoding refers to:
 - Selection of media
 - Selection of symbols
 - Selection of message
 - Selection of sources of information
4. Which of the following elements help the sender to adapt and modify subsequent messages?
 - Feedback
 - Message
 - Medium
 - Noise
5. Which of the following is NOT an example of audio-visual medium?
 - Book
 - Video film
 - Television
 - Motion picture
6. The nature and content of communication is affected by:
 - Psychological context
 - Psychological and Social context
 - Psychological, social and Physical context
 - Psychological, social, physical and temporal context
7. Which one of the following is an example of external noise?
 - Anxiety among students
 - Students talking to each other
 - Tiredness of teacher
 - Fear among students

8. Which one of the following is NOT an example of internal noise?

- Disturbance in medium
- High level of anxiety
- Lack of confidence
- Worry

Feedback

Item No.	Answer
1.	d
2	d
3	b
4	a
5	a
6	d
7	b
8	a

3.1.3 Stages in Classroom Communication

Typical acts of classroom communication involve five distinct stages (Cole and Chan, 1987):

- Formulation of message
- Encoding of message
- Transmission of message
- Decoding and interpretation of message
- Feedback and evaluation

- i. **Formulation of message:** The very first stage is formulation of message. The curriculum document provides the breadth and scope of various topics in the course and also specifies the learning outcomes for the course. Teacher tries to collect material from various sources including books, reference books, journals etc. and then try to sift and organize the ideas. Its purpose is to create clear and meaningful messages. Both logical and psychological sequencing of ideas is done at this stage.
- ii. **Message encoding:** Encoding refers to selecting symbols to transmit ideas to students. Symbols can be verbal or non-verbal and many a times combination of both verbal and non-verbal symbols are used by teachers. Research in the area of twenty first century students indicates that students prefer visual learning style than the verbal learning style. Teacher thus, needs to prefer pictures, diagrams, videos etc. than the verbal message
- iii. **Message transmission:** Message need to be transmitted through a channel and these days a variety of channels are available. One can use audio channel, visual channel or combination of both. Multiplicity of channels can be used to cater to individual differences in the class and to supplement the message
- iv. **Message decoding and interpretation:** Decoding refers to translating the symbols and deriving meaning out of them. Receiver tries to interpret the symbols so as to make sense out of them. He/she also tries to relate it to what he /she already knows.
- v. **Feedback and evaluation:** Based upon his/her interpretation of the message or messages, student tries to respond to the sender and thus provides feedback. Teacher based upon the feedback tries to adapt, modify and design subsequent message. As communication is an interactive process, ample opportunities need to be created for obtaining and providing feedback to students.

An interactive model of classroom communication (Cole and Chan, 1987) has a particular application for classroom teaching and learning. In most classroom interactions, role reversal

takes place. Teacher, the primary sender of the message becomes the receiver of the message when a student takes up the role of a sender. This situation arises in the classroom, when a student clarifies a doubt, poses a question or tries to supplement the information or express his/her views on the message.

Practice Task

1. The stages in classroom communication includes:

- i) Encoding of message
- ii) Transmission of message
- iii) Formulation of message
- iv) Decoding of message
- v) Feedback and evaluation

The correct sequence of stages is:

- a. (i)- (ii)- (iii)-(iv)- (v)
- b. (ii)-(iii)-(iv)-(v)-(i)
- c. (iii)-(iv)-(v)-(i)-(ii)
- d. (iii)-(i)-(ii)-(iv) –(v)

Feedback

1. The correct sequence of stages in classroom communication is: (d)

3.1.4 Communication Skills and Purposes

The four basic skills in communication are:

- Speaking
- Listening
- Reading
- Writing

These are essential skills for an effective communicator. A teacher, before going to class, reads the subject matter, writes notes, develops instructional media, writes exercises, tasks etc. for students, while in class speaks, writes on board, listens to students' questions, feedback etc. Likewise, students are involved in all the four skills-reading, writing, speaking, and listening. Each one of these skills serves important purposes in classroom communication (Table 1.1).

Table 1.1: Purposes served by Communication Skills in Classroom Communication

Skill	Purposes
Speaking	Explain, state, describe--- <ul style="list-style-type: none">- Give instructions- Ask questions- Supplement information- Provide or obtain feedback- Maintain discipline
Listening	<ul style="list-style-type: none">- Understand the content of communication- Understand the feelings- Respond and provide feedback to speaker- Motivate the speaker to continue- Build relation
Reading	<ul style="list-style-type: none">- Broaden perspective- Understand content- Refresh and update knowledge- Develop judgement, critical thinking- Understand task, activities, assignments

	<ul style="list-style-type: none"> - Evaluate tasks, activities, assignments etc.
Writing	<ul style="list-style-type: none"> - Express thoughts or feelings - Give instructions - Instructional material, assignments, tasks etc. - Provide feedback - Evaluate performance - Take notes to remember

Practice Task

State any two purposes each of the four communication skills.

Communication Skill	Purposes served
Speaking	1 2
Listening	1 2
Reading	1 2
Writing	1 2

Feedback

Compare your answers with the purposes written in Table 1.

3.1.5 Principles of Effective Classroom Communication

Effectiveness of classroom communication depends on five major factors namely teacher, student, message, instructional methods and media, and learning environment (Tulsi, 2000). These all factors interact among themselves to determine the effectiveness of classroom communication. Teachers can play an important role in increasing the effectiveness of instruction by improving themselves, the organization of message, the selection of appropriate methods and media, and creating conducive learning environment in the class.

Fig. 1.2 Factors affecting classroom communication

The principles of effective classroom communication are discussed in this section under the following four headings:

- **Principles for Teacher**
- **Principles for Message Design**
- **Principles for Selection of Instructional Methods and Media**
- **Principles for Creating Conducive Learning Environment**

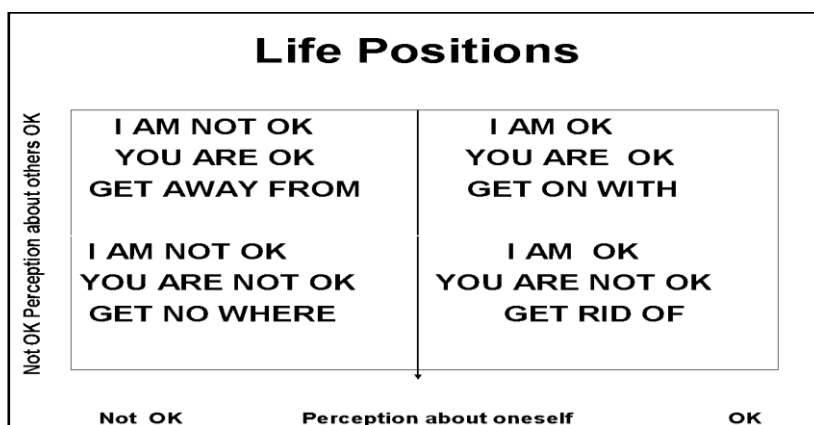
3.1.5.1 Principles for teachers

Teacher should:

- i. **Develop a realistic self-concept and the perception about the world around:** This would require critical analysis of one's own strengths and weaknesses, acceptance of the reality, efforts to realize one's potential. Teacher should view the world as worth

living. Realistic self-concept and optimistic view of world helps the teacher in being confident, open and enthusiastic and thus increase the effectiveness of communication.

- ii. **Operate from I am OK, You are OK life position:** The best life position to operate is I AM OK, YOU ARE OK (Eric Berne) or the win-win situation for both the individuals. When an individual operates from this life position, one is able to give due regard to the other individual and is able to maintain cordial relations with others and thus communication remains effective.



Individuals operating from I AM OK, You Are Not OK life position, may adopt an authoritarian stance and individuals operating from I Am Not OK, You Are OK, become too docile or individuals operating from I Am Not OK, You Are Not OK, may think that both are helpless. In case, the other individual shares the same perceptions, communication will continue otherwise under these circumstances, communication breakdown will take place. But in case, an individual has any hidden agenda, communication breakdown will occur and spoil the relationships.

- iii. **Develop proficiency in the subject matter:** Desire to acquire knowledge is must for the teacher. In the words of Mahatma Gandhi

"Live as if you were to die tomorrow

Learn as if you were to live forever"

Teacher should make every effort to remain current in his/her subject area. This can be achieved through independent reading, participation in short -term courses, attending classes of proficient teachers/ experts, discussing subject related issues and problems with other colleagues or seniors or on blogs, attending Massive Open Online Courses etc. This will help in boosting the confidence of the teacher.

- iv. **Understand the learners:** Communication needs to be pitched to the level of students. Teacher should accept the fact that no two individuals are alike and thus cannot be treated in the same manner. He/she has to cater to the needs of individual student. Teacher should try to collect as much information about the learners' characteristics as

he/she can. Information needs to be collected about the previous knowledge, learning styles, cognitive styles, motivation, interests, personality etc.

- v. **Develop effective communication skills- both verbal and non-verbal:** Communication skills can be acquired through training and practice. A teacher can record his own audio and analyze the same for identifying the strengths and weaknesses in the spoken language. Video recording in the classroom situation can help the teacher to analyze both verbal and non-verbal behaviour. He/she should remain open to the feedback from colleagues, superiors and students. A teacher can thus improve communication skills by attending training in communication skills, listening to news and experts, imitating role model, practicing communication skills and remaining open to feedback from others.
- vi. **Have knowledge of pedagogy and andragogy:** Knowledge of pedagogy and/or andragogy is required of all teachers. It helps the teachers to plan, organize, deliver and evaluate instruction based upon the sound principles of teaching learning and thereby promote learning among students.
- vii. **Flexibility in approach:** Teacher should have enough flexibility in his/her approach so as to adapt or modify instruction on the basis of the feedback from students.
- viii. **Be free from biases and prejudices:** Teacher should treat students as equals and not give any preferences to students on the basis of gender, caste, creed or colour.

3.1.5.2 Principles for message design

The message should:

- i. **Have clearly specified learning outcomes:** Learning outcomes should be clearly stated and should satisfy the criterion of being SMART i.e. learning outcome should be:
 - Specific
 - Measurable
 - Achievable
 - Realistic
 - Time Framed
- ii. **Be relevant to the outcomes:** Content selected should be adequate enough to ensure attainment of learning outcomes and there should not be any irrelevant information.
- iii. **Be properly sequenced:** Sequencing of content matter should be done keeping in view the logical and psychological principles of learning. The hierarchy in-built in the subject should be maintained and it should be seen that content is organized from:
 - Simple to complex

- Easy to difficult
 - Concrete to abstract
 - Known to unknown
 - Observation to reasoning
- iv. **Use language comprehensible to the learners:** The language of the message should be simple and comprehensible to the learners. Technical jargon should be avoided.
 - v. **Use appropriate symbols:** Symbols used in the message should be technically correct and standardized.\
 - vi. **Integrate relevant exercises, tasks etc.:** Include a number of exercises and tasks in the message for giving adequate practice to the learners and ensuring understanding of applicability of the learnt concepts, principles, procedures etc. The exercises selected should be of varying difficulty level and involve the learners meaningfully.
 - vii. **Make generous use of examples and non-examples:** Examples from the daily life and world of work should be used to facilitate understanding of the applicability of content in different settings and thus ensuring greater transferability of the learnt materials.

3.1.5.3 Principles for selection of instructional methods and media:

Teacher should:

- i. **Select relevant and appropriate methods and media:** The methods and media should be relevant to the learning outcomes, content, context and should be appropriate to the level of learners. Active learning strategies (Think-pair share, Triad group, Peer Review Jig saw etc.) need to be preferred. Instructional methods that can be used are given in Table 3.1.2.

Table 3.1.2: Instructional Methods

Large Group Methods of Instruction	Small Group Methods of Instruction	Individualized Methods of Instruction
Lecture	Group discussion Brainstorming Seminar Project work Case study Role play Demonstration Tutorials	Case study Project work Computer assisted instruction Tutorials

The various media available to the teacher are given in Table 3.1.3.

Table 3.1.3: Types of Instructional Media

Type of Media	Examples
Print	Textbooks, laboratory manuals,
Graphic	workbook, student guide, teachers' guide
Still pictures, Photographs, slides etc.	etc
Audio	Charts, posters, graphs, diagrams etc.
Motion pictures	Still pictures, slides, filmstrips
Video- films	Audio cassettes, radio
Computers	16mm, 35mm, 70mm motion pictures
Specimens, models	Video- films
Realia	Multi-media packages etc.
	Specimens, 2D&3D Models
	Real objects, machinery, equipment etc.

The teacher, in order to cater to the individual differences among learners and avoid monotony, should use a variety of methods and media. The quality of media in terms of its visibility, legibility, finish, colours, printing, etc. should be judged before its use.

- ii. **Integrate media in teaching- learning:** Media should not be used in isolation. Say for example a video- film is used in class to describe the manufacturing processes; it should either be followed by a discussion or some quick assessment of students'

understanding. Or students can be given a list of questions and they try to find answers to those questions from the video.

3.1.5.4 Principles for creating conducive learning environment

- i. **Class size:** Classes should not be overcrowded. The class size should not be more than forty in order to generate interaction between teacher and student and among students. It really becomes difficult for the teacher to manage a large class and pay attention to each learner as well ensure involvement of each learner.
- ii. **Ensure proper seating arrangement in the class:** Minimum essential distance should be maintained between the teacher and the students and among students. Each student should be able to interact with the teacher and other students. Furniture should be comfortable and in proper condition. In addition, there should be proper light and ventilation arrangements in the class.
- iii. **Build rapport with the students:** Teacher should know each and every student in the class by name and be friendly with students. He should try to give due respect to the individuality of student. He should have positive attitude towards students.
- iv. **Encourage co-operation and collaboration among students:** Teacher can assign group activities and pair bright students with average or poor students to promote cooperation and collaboration.
- v. **Provide Feedback:** In the class, teacher should ask questions frequently and provide opportunities to students to raise questions and put forth their point of views. This will help the teacher in modifying and adapting his instructional approach as per the needs of learners.
- vi. **Encourage experimentation:** Teacher should encourage experimentation of new ideas and techniques by the students. Creativity should be encouraged rather than curbed. Problems having more than one solution need to be posed in the class. This will help in free flow of information in the class.
- vii. **Provide reinforcement:** Teacher should reinforce the desired communication behaviour of learners through praise, appreciation, rewards, social recognition etc.
- viii. **Provide non-threatening environment:** Teacher should encourage students to share their views and should be receptive to varied opinions. There should not be fear of punishment Prior information regarding schedule of activities, tests, assignments etc. should be provided to learners in order to avoid any unnecessary anxiety on the part of learners.

The principles discussed above, if taken into consideration by the teachers, can considerably improve the classroom communication and thus effectiveness of instruction in classroom.

Practice Task

1. Lack of subject knowledge is a:
 - a. Teacher related factor
 - b. Student related factor
 - c. Message related factor
 - d. Media related factor
 - e. Environment related factor
2. Which of the following message related factors can affect effectiveness of classroom communication?
 - a. Information overload
 - b. Relevance
 - c. Accuracy of symbols
 - d. All of the above
3. Which is NOT the principle of sequencing content of communication?
 - a. Concrete to abstract
 - b. Easy to difficult
 - c. Known to unknown
 - d. Reasoning to observation
 - e. Simple to complex
4. Teacher can cater to individual differences in class by use of:
 - a. Audio aids
 - b. Visual aids
 - c. Audio-visual aids
 - d. Multiplicity of aids

Feedback

S. No	Answer
1	a
2	d
3	d
4	d

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UNIT 3.2

Listening & Speaking

“Teaching is Listening, Learning is talking”

(Deborah Meier)

3.2.1 Listening

3.2.2 Speaking

3.2.1 LISTENING

Learning Outcomes

After reading this Unit, you will be able to

- Explain the Concept of Listening
- Differentiate between hearing and listening
- Explain various purpose of Listening in Classrooms
- Explain the process of Listening
- Apply the principles of Effective Listening
- Explain the factors that promote active listening in classrooms

3.2.1.1 Concept of Listening

There are four basic skills involved in becoming effective Communicator and these include speaking, Listening, Reading and writing. A teacher in classroom spends most of the time on listening and speaking. A research in the area of communication found that we spent most of our time on listening. In this unit we are going to understand the principles of effective listening.

Listening is the process of receiving, constructing meaning and responding to a spoken or a non-verbal message (International Reading Association,1995).

Listening in classroom happens when students are able to understand what is being said. Most of the teachers replace lectures with group discussions; learning activities, games and a multitude of other approaches to learning via interactive technology, but still lecture thrive as a mode of communication that majorly involve listening skill. After listening the lecture attentively, the mind starts making sense and start addressing the problem.

3.2.1.2 Difference between Hearing and listening

Most of the time, we are surrounded by sounds and our brain automatically responds to all the sounds without any effort known as Hearing. On the other hand, listening is when we are able to recognize the different sound. The purpose of listening is to interpret the pattern of the sounds, understand the meaning expressed by the speaker and it requires attention, focused effort and motivation of the listener. We do not always listen at our best but yes there are ways by which we can train ourselves for effective listening.

PRACTICE TASK

1. Define Listening.
2. Differentiate between hearing and Listening.

FEEDBACK

1. Listening is the process of receiving, constructing meaning and responding to a spoken or a non-verbal message.
2. Hearing is a passive process whereas listening is an active process. Hearing is when the sound falls on our ear drum that is something which is happening all the time and in fact, not one sound but several sounds will be falling on our ear drums at one time. For effective listening, we need to analyse sounds. Listening is about understanding them, inferring meaning out of them, interpreting them and then responding to them.

3.2.1.3 Purposes of Listening

The purpose of listening is not only grasping the surface meaning of the message that prompted the person to speak. The effective listener has to ask questions to listen actively and make sure that he/she comprehend its meaning correctly. Students while listening in classroom note the tone, inflection of voice and non-verbal expression. The purposes served by listening in classroom are as follows.

- i. **Understand the content of communication:** Students are always interested in what the teacher is saying, why he/she is saying and the major purpose why they listen is to understand the information delivered.

In classroom when the students are trained to listen effectively, they will focus on the information presented in classroom. They are not only able to identify the words used in a lecture but also are able to understand their complex meaning. Due to active listening only, they are able to remember the information and take notes.

- ii. **Understand the feeling**

“When I listen and understand, I give the best gift I can to someone”.

When interaction happens there are two different messages that flow in classroom. One is the content of the lesson what is literally said and other part is the feeling or emotions behind the words. Being a good listener we require both intellectual and emotional involvement. When the students’ social and emotional needs are being met, they feel confident, grateful, inspired and peaceful.

While listening, the feedback is given to the speaker by which he/she is able to know whether the message is being understood or not.

- iii. **Motivate the speaker to continue:** In classroom students are already motivated to some degree. They are predetermined and they know there is a need to come and listen or learn from the teacher because it helps them to achieve their goals. Once student makes eye contact with the speaker, ask questions for clarification, engage in useful discussion; it motivates the teacher to continue.

iv. **Build Relation:**

“The most basic of all human needs is the need to understand and be understood. The best way to understand people is to listen to them”

Ralph Nichols

In classroom a relationship of trust developed among teacher and students can be due to empathetic listening only.

3.2.1.4 Process of Listening

The process of listening is well explained in HURIER Model. In this model, the listening process is divided into number of stages. These are:

- i. **H** – Hearing
- ii. **U** – Understanding
- iii. **R** – Remembering
- iv. **I** – Interpretation
- v. **E** – Evaluating
- vi. **R** - Responding

(Brownell, J. 1996)

(For Further Details please refer to the Video on “Principles of Effective Listening” by Dr. Archana Singh)

PRACTICE TASK

1. Explain briefly the term HURIER.

FEEDBACK

1. HURIER is an Acronym used to define the different stages in the process of listening.

The term HURIER presented as:

H = Hearing

U = Understanding

R = Receiving

I = Interpreting

E = Evaluating

R = Responding

3.2.1.5 Types of listening

The different types of listening in Classrooms can be categorized as follow:

- i. **Active Listening:** Active listening requires the listeners to provide feedback by way of restating and paraphrasing what they have heard in their own words. The goal of repetition is to confirm what the listener has heard and to confirm understanding of both the parties e.g. when the teacher asks questions during the lecture and students are able to respond this means they are actively involved in the process of learning.
- ii. **Critical Listening:** Critical listening involves reasoning and a systematic way of thinking. Most of us take messages just by considering the face value, even if we do not agree with the message. Students are exposed to many kind of messages. Some of the messages convey academic information, institutional rules, instructions and warning. While all the messages are not for the students but they have to hear to those messages and then evaluate the usability of the messages.

The purposes served by critical listening are

- Able to relate new ideas with the older ones
- Be open to new ideas
- Uncovering assumptions given by the speaker
- Rely on Reason and common share
- Take notes

iii. Empathetic Listening

“Empathetic listening provides emotional support for the speaker similar as when a psychiatrist listens to a patient or when a sympathetic ear to a friend in distress.”

(Stephen, Lucas,1998)

The primary goal of empathetic listening is to help the speaker in some way. Sometimes the help is personal at other times, the help meets the institutional goals In a classroom, it is not always easy to empathise with your students' viewpoints due to personality clashes or character differences. The status gap between teacher and students can also become an obstacle for empathetic listening.

The teacher need to be attentive and alert but no need to be involve emotionally with them. The teacher is a role model and students are looking for the guidance. Hence the teacher must listen them patiently and try to understand their viewpoint, which enhance

students' self-respect and natural friendliness towards the teacher which promotes communication.

PRACTICE TASK

1. Explain different types of Listening.

FEEDBACK

1. The different types of listening in Classrooms can be categorized as follow:

i. Active Listening

Active listening requires the listeners to provide feedback by way of restating and paraphrasing what they have heard in their own words. The goal of repetition is to confirm what the listener has heard and to confirm understanding for both the parties for e.g. when the teacher asks questions during the lecture and students are able to respond means they are actively involved in the process of learning.

ii. Critical Listening

Critical listening involves reasoning and a systematic way thinking. Most of us take messages just by considering the face value, even if we are not agreed with the message.

The purposes served by critical listening are

- Able to relate new ideas to the older ones
- Be open to new ideas
- Uncovering assumptions given by the speaker
- Rely on Reason and common share
- Take notes

iii. Empathetic Listening

Empathetic listening provides emotional support for the speaker, as when a psychiatrist listens to a patient or when a sympathetic ear to a friend in distress.

In a classroom, it is not always easy to empathise with your students' viewpoints due to personality clashes, character differences. The status gap between teacher and students also become obstacle for empathetic listening.

The teacher is to provide positive atmosphere in classroom with verbal as well as nonverbal behaviour. A meaningful silence throughout teaching gives an opportunity to the students to think and reflect. The teacher needs to be non-judgmental and at the same time respect their privacy. This will create trust which promotes communication.

The teacher need to be attentive and alert but no need to be involve emotionally with them. The teacher is a role model and students are looking for the guidance. Teacher must listen them patiently and try to understand their viewpoint, which enhance students' self-respect and natural friendliness towards the teacher.

3.2.1.6 Principles of effective listening

Somebody who is not paying attention neither remember nor respond and somebody who's doing all these three things is a better listener. Different principles of Effective Listening are as follows:

i. **Stop Talking**

“If we were supposed to talk more than we listen, we would have two tongues and one ear”

(Mark Taiwan)

Stop Talking and give full attention, whether or not you like the speaker, whether or not you like the subject, just pay attention, that's the first thing that you can do. If you pay attention, you have already crossed the first two stages that is of hearing and of understanding.

For effective listening, it is important to maintain eye contact with the speaker. Otherwise, it gives a signal that you are not interested in the topic or not with the speaker.

- ii. **Pay attention to the message delivered not on the physical look, Artifacts** (dress, jewellery, accessories etc.).
- iii. **Pay attention to what is being said:** It requires deliberate effort on the part of the listener. Listen to the tone. Volume and tone both add to what someone is saying. A good speaker will use both volume of voice and tone to their advantage to keep an audience attentive. In Classroom, tone and volume of voice also helps in certain situations.
- iv. **Do not colour your perceptions with your biases and prejudices** (Try to be impartial): The meaning of the message would change. Do not become irritated and do not let the person's habits or mannerism distract you from what the speaker is really saying. Everybody has a different way of speaking – some people are for example more nervous or shy than others, some have regional accents or make excessive arm movements. Focus on what is being said and try to ignore styles of delivery.

The purpose of listening is to understand the meaning of the message. A good listener always reacts slowly and thoughtfully whether he/she is agreeing or not.

v. **Empathize**

“Only the wearer knows where the shoe pinches”

Put yourself in the place of the speaker. Listen for what is being said and try to understand the feelings behind what is being said in other words, listen for both the content and feelings behind the content.

- vi. **When the Content is difficult :** We stop absorbing the information which really contain difficult content. Effective listeners accept it as a challenge, condition themselves accordingly and grasping the meaning of what is being said.
- vii. **Understand the fundamental aspects of the speech and use the differential between the speed of thinking and the speed of speaking. Listen for the total message:** We all talk at a speed four times lesser than we speak (Speed of Speaking is about 400 words per minute). Brain has a lot of time to wander off which is a psychological problem. Sometimes because of past experience, some egos or personal eccentricities, we become avoiders and do not listen to the whole message that is being said. Students who are effective listeners summarizing notes for the lecture, designing mind map for the content covered, trying to construct meaning, associate relationships, and also evaluate the lecture.
- viii. **Ask question and seek clarification, if you are unable to understand or you have a doubt.**
- ix. **Choose to find the subject useful.**
- x. **Learn to avoid emotional words that trigger negative responses.**
- xi. **Do not interrupt the speaker in between the sentence:** Sometimes speaker takes time to formulate what to say and how to say it. Be patience and never interrupt or finish a sentence for someone.
- xii. **Do not create distraction for others too.**
- xiii. **Adjust attentiveness:** By considering these principles one can become effective listener. The teacher can also promote Listening by using various Verbal and Non Verbal means.

PRACTICE TASK

1. Explain the principles of effective listening.

FEEDBACK

Principles of effective listening

Somebody who is not paying attention neither remember nor respond and somebody who's doing all these three things is a better listener. Different principles of Effective Listening are as follows:

- i. Stop Talking
- ii. Pay attention to the message delivered not on the physical look, Artifacts (dress, jewellery, accessories etc.).
- iii. Pay attention to what is being said.
- iv. Do not colour your perceptions with your biases and prejudices (Try to be impartial).
- v. Empathize
- vi. When the Content is difficult
- vii. Understand the fundamental aspects of the speech and use the differential between the speed of thinking and the speed of speaking. Listen for the total message
- viii. Ask question and seek clarification, if you are unable to understand or you have a doubt.
- ix. Choose to find the subject useful.
- x. Learn to avoid emotional words that trigger negative responses.
- xi. Do not interrupt the speaker in between the sentence.
- xii. Do not create distraction for others too.
- xiii. Adjust attentiveness.

3.2.1.7 Development of listening among students

In classroom, teacher needs to provide students with an introduction and any necessary prior knowledge about what they are going to listen during the lecture. The teacher must have some appropriate examples that fits with the subject matter. The teacher can develop the habit of listening by:

i. Asking question

Sometimes students are pretending that they are listening. To check their attentiveness and level of understanding, the teacher needs to ask questions, ask them to summarize, ask for their opinion and even ask indirect or open ended question to develop higher order thinking.

ii. Give assignments

Effective listening can also be promoted by linking it with assignment say for example, allow the students to use class notes in a class test. In written examination the teacher can also ask question that require students to apply, what they have learned during lectures.

iii. Encourage them to take notes

During lecture, the students must take notes. Research illustrates that students who merely listen will remember a fraction of information shared. However, the students who take notes will remember more and have record of what was said.

iv. Engage them in useful discussion

The teacher must clearly explain and elaborate if required the muddiest points of a lecture, also encourage them with positive feedback. Another way to improve their listening is to engage them in listening an informative video, expert lecture, an opinion or entertainment for a purpose.

v. Use student centred instructional strategies such as think pair share, jigsaw, and fishbowl method of discussion also promotes listening. In classroom good listening increases understanding and knowledge of content, use of logic and persuasions also increase.

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Additional Resources

- Purdy, M. (1997) What is listening? In M. Purdy and D. Borisoff (eds.) *Listening in Everyday Life. A Personal and Professional Approach*. Lanham, MD: University Press of America.

Watch Videos

- Communication Skills, listening by Dr. Paramjit Kaur Tulsi, NITTTR Chandigarh, published on You Tube on Feb 17, 2014. Available at <https://www.youtube.com/watch?v=fZbLITYxDlc&t=2554s>

3.2.2 SPEAKING

‘People speak with the vocal organs but communicate with the whole body’.

(Abercrombie, 1968)

Learning Outcome

After reading the Unit, you will be able to:

- Explain the importance of speaking
- Explain the concept of speaking
- Enlist three factors that impact the effectiveness of speaking
- Apply the principles of effective speaking

3.2.2.1 Introduction

Arindham Choudhary has rightly remarked, **“You can never succeed with people without mutual trust and understanding. Effective communication skills could just be the difference between success and you”**. Communication has assumed great importance in life. People who are effective communicator lead a smooth life, enjoy good interpersonal relations and are more successful in career. In teaching-learning situation, communication plays an important role. Every activity of a teacher involves an element of communication. Teachers make use of all the four communication skills. Before going to the class, they prepare for the class and are involved in reading and writing and while in class, they are involved in speaking, listening and writing. And at times, in class they may be involved in reading also.

Speaking and listening are parts of oral communication and go hand in hand. If a teacher uses expository learning strategies such as lectures, he/she is speaking most of the time and if active learning strategies are used, students are involved in speaking more than listening. Research in the field of communication indicates that higher the effectiveness of communication, greater is the chance that instructional objectives or learning outcomes will be achieved.

3.2.2.2 Speaking

Speaking involves use of a language, and use of a language involves knowledge of its vocabulary, grammar, pronunciation and expression. The effectiveness of speaking depends upon the following three factors:

- Verbal content
- Tonal quality
- Non-verbal behaviour

Table 3.2.1 shows the impact of these three factors on the effectiveness of speaking.

Verbal content	7%
Tone of the voice/ Tonal quality	38%
Non-verbal Behaviour	55%

Table 3.2.1: Impact of factors on effectiveness of speaking

In other words, it can be said that what you say, how you say it and what non-verbal behaviour accompanies what you say determines the effectiveness of your speaking. The impact of non-verbal behaviour and tonal quality is more than the impact of verbal content. One can say that verbal content is only the tip of the iceberg; the remaining iceberg is non-verbal communication. Thus, teachers need to pay attention to their speaking skills to ensure students understand the subject/course and are able to achieve the learning outcomes.

3.3.2.3 Principles of Effective Speaking

When a person speaks, his or her whole personality comes into play. Receiver not only interprets the words but also interprets tonal quality, and person's facial expression, gestures, body posture etc. and give meaning to the intended message. More the congruence between verbal and nonverbal communication, greater is the effectiveness of communication. Non-verbal communication can be broadly classified into:

- Kinesics (facial expression, gestures, body postures, eye contact)
- Paralanguage (mode, volume, pitch, rhythm, articulation, pronunciation)
- Artifacts (clothing, jewellery, cosmetics, tattoos, piercing, hairstyle)
- Chronemics (time)
- Proxemics (space)

The following principles, when taken into consideration, can improve the effectiveness of speaking in a classroom situation.

I. Know thy Subject and the objectives

Knowing one's subject is a precondition to effective communication. If you have thorough understanding of the subject, the flow and continuity will be there in communication. You will be able to give adequate explanation, relate subject to daily life and to other subjects, and clarify doubts of students. If you are clear

about what your students will be able to do at the end of instruction, you will be in a position to select and organize the content in an appropriate manner and will be in a position to explain and support with relevant examples in the class.

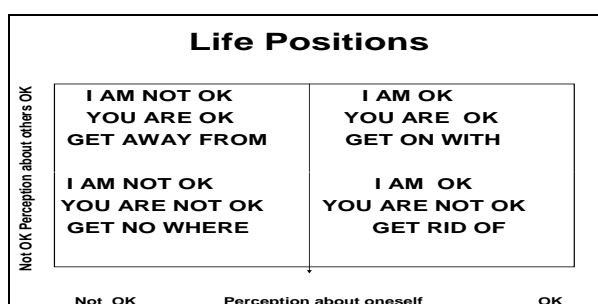
II. Know thy Learners

Effective Communication needs to be pitched to the level of the students. It is thus essential to know age, interest, background, previous attainments, learning styles of the students. If you understand your students, you will be in a position to select appropriate content, language, examples, media etc. and facilitate understanding on the part of your students. For example, if your students are not proficient in English, may be you can use mixed language to make them understand so that they can express themselves.

III. Organize the Message

Message ought to be well organized. Depending on the subject matter, choose appropriate sequencing of subject matter. It can be topical sequencing, journalistic sequencing, or chronological sequencing or concept maps can be developed. Topical sequencing refers to arrangement of content under headings and subheadings. Journalistic sequencing can be used when the content is amenable to answering questions such as what happened, where it happened, when it happened, why it happened, what were the consequences of happening etc. Chronological sequencing refers to following a timeline. Dealing with historical development requires chronological sequencing of content. Always try to organize the content matter from simple to complex, easy to difficulty, concrete to abstract, known to unknown and from observation to reasoning to enable the students to understand the message.

IV. Operate from I am OK, You are OK Life Position



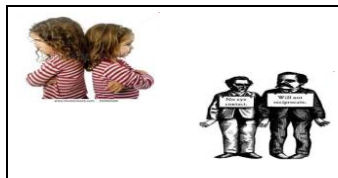
- V. The best life position to operate is I AM OK, YOU ARE OK or the win-win situation for both the individuals. When one operates from this life position, one is able to use appropriate words, tonal quality, and give due regard to the other individual and thus is able to maintain cordial relations with others. But in case, an individual operates from any of the other three positions or in other words has

any hidden agenda, communication breakdown will occur and spoil the relationships. Individuals having hidden agenda may adopt an authoritarian stance or become too docile or may think that both are helpless. In case, the other individual shares the same perceptions, communication will continue otherwise under these circumstances, communication breakdown will take place

VI. Maintain Eye Contact with Students



- VII. While speaking, maintain eye contact with your students. Eye contact should be distributed in the class. Sometimes address the frontbenchers, other time; address students sitting in the middle rows and sometimes address students sitting in the last rows in the class. When you maintain eye contact, it is motivating for the students and they pay attention to what is being said. Avoidance of eye contact may result in lack of attention, discipline problems or boredom. If you maintain eye contact with class, you can obtain tonnes of non-verbal feedback.



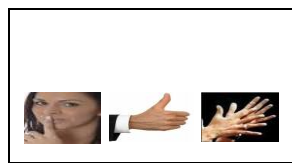
VIII. Facial Expression

Face is the index of mind and you express feelings through your facial expression. Remain calm and relaxed and have a pleasant smile on your face. But in case, you are angry then your facial expression should exhibit anger rather than a smile. Otherwise, the purpose will be defeated.



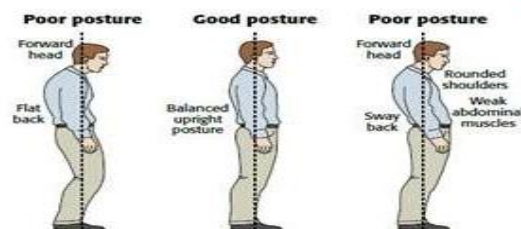
IX. Gestures

Gestures lend support to verbal content. When you say very small, large or big or you want to say right or left, you automatically use appropriate gestures. When you indicate direction, you point out finger in that direction. So use appropriate gestures in class.

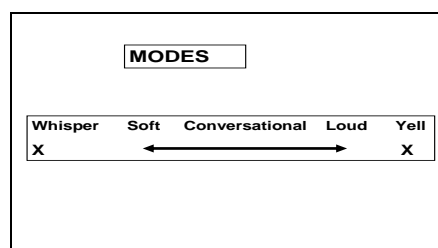


X. Posture

Your posture depicts enthusiasm or laziness. Adopt erect posture which is indicative of dynamism.



XI. Use Conversational Mode



XII. You can use whispering, can be soft, can use conversational mode or be loud or you can use yelling. But, both whispering and yelling are to be avoided. In case,

you use whispering, you are unnecessarily arousing anxiety or curiosity among other students in class. And if you yell, you have no control over language or your facial expression. As a teacher, try to remain within being soft to loud. When a student is in problem or facing a difficulty, be soft. When there are large numbers of students or they are distant, you can be loud.

XIII. Be Audible

Audio signals will be interpreted only when they reach the audience. Make sure that you are audible to all the students in the class. If you are unable to reach all the students, use public address system.

XIV. Pronunciation and Articulation

Pronunciation and articulation go hand in hand. Better the articulation better is the pronunciation. Many of the commonly used words are wrongly pronounced. Some of the wrongly pronounced words are: generally, secretariat, flower, restaurant, year, oven and chosen. Our mother tongue has an impact on the pronunciation of English. But, practice leads to perfection. The more you practice speaking English; the better will be the pronunciation.

XV. Check your rate of delivery

A human ear can discern about 200 words per minute. The rate of delivery in the classroom should remain within 90 to 110 words per minute. If you are dealing with simple easy material, the rate of delivery can be little faster and if you are dealing with complex difficult material, the rate of delivery can be slower.

XVI. Vary Your Pitch

Try to bring in variation in your pitch to arouse and sustain interest. Otherwise, there will creep in monotony and boredom.

XVII. Use Pauses at Appropriate Places

Use pauses at appropriate places to convey the meaning you intend to convey. If pause is wrongly used, the meaning of the sentence may change.

XVIII. Dress

It is rightly said, 'When you meet a person, you judge him by his clothes. When you leave a person, you judge him by his heart'. 'First impression is the last impression'. When you dress according to the situation, you feel more confident. So dress formally when going for a class.

XIX. Always keep the accessories (mobile phone, key chains, cosmetics, jewellery etc.) limited. They become factors of distraction in communication

XX. Silence

Teacher can use silence to his/her advantage. Silence may allow the teacher to reorganize his thoughts. Silence may give time to students to reflect on what has been said. It may signal agreement or disagreement. It may signal that some serious matter is coming up.

XXI. Avoid Verbal Virus

Some of us are in the habit of using a word or a phrase very frequently in our speech though it has no meaning. For example, right, you see, you know, actually, you understand, yes, OK etc. These are filler words and have no meaning. These words when used frequently distract the audience. So, try to eliminate these words from your repertoire.

XXII. Appropriate use of time (Chronemics)

Chronemics refers to the time dimension in communication. At what time of the day or history, communication is taking place. Whatever is being communicated, is it relevant to the context. For example, teaching students steam engines in detail, when you talk about bullet trains may not be perceived as meaningful. Or talking about black and white TV in the era of coloured TVs may be treated as out-dated. All theory classes are normally scheduled in the morning and practical classes are scheduled in the afternoon. The simple reason is that students need to pay deliberate attention in lecture classes and they get actively involved in learning by doing in practical classes.

XXIII. Appropriate use of Space (Proximity)

You might have come across the statement 'Please maintain a distance' or 'come closer'. Going too near or too far from the receiver can adversely affect the communication. An appropriate distance needs to be maintained. When talking to a single student in a face-to-face situation, a minimum distance say of arms length is to be maintained. The larger the group, the distance between you and your students would increase. Another point is, if intimacy between the two individuals increases, the distance decreases. In case, you want to communicate to only one student, you will go nearer to that student.

XXIV. Free Yourself from Biases and Prejudices

When you interact with others having biases or prejudices on the basis of caste, creed, colour, sex, religion or socio-economic background, you unnecessarily indulge in undue criticism, negative feedback or show unfavorable attitude towards others. This has an adverse effect on your relationships. Prejudices and biases lead to ineffective communication between the teacher and the student. While speaking to students, treat them on equal footing. Leave your prejudices and biases if any outside the classroom. One should try to interact with people keeping aside one's biases and prejudices to deal with them objectively and in a fair manner.

XXV. Provide time for Assimilation, Obtain and Provide Feedback

You should give time to student to grasp the message and then assure yourself of student's understanding by posing questions, assigning small tasks or problem solving activities to students. Obtaining and providing feedback is essential to improve effectiveness of communication. Feedback should be immediate, specific, task related, accurate and corrective.

3.3.2.4 Improving Your Speaking skills

You can follow any of the two strategies to improve your speaking skills. These strategies are:

OR

The more you practice speaking, the better will be your speaking skills.

Practice Task

1. Facial expression is an example of:
 - a) Chronemics
 - b) Kinesics
 - c) Paralanguage
 - d) Proxemics
2. Which one of the following is an example of paralanguage?
 - a) Eye contact
 - b) Body Posture
 - c) Gestures
 - d) Rate of delivery
3. Gestures should be:
 - a) Culturally relevant
 - b) Support the content
 - c) Natural
 - d) All of the above
4. While teaching complex content matter, the rate of delivery should be:
 - a) Fast
 - b) Normal
 - c) Slow
 - d) Very slow
5. When a student is unable to respond to the question a teacher has posed, which one of the following modes of communication should be preferred by the teacher.
 - a) Conversational
 - b) Soft
 - c) Whispering
 - d) Yelling
6. Which of the following modes of communication need to be avoided in social situation?
 - a) Loud and conversational
 - b) Soft and Loud
 - c) Soft and conversational
 - d) Whispering & yelling
7. The rate of delivery in classroom should be between:
 - a) 70-90 w.p.m
 - b) 90-110 w.p.m
 - c) 110-120 w.p.m

- d) 120-140 w.p.m
8. In order to ensure understanding by the students, teacher can make use of:
- a) Pause
 - b) Questions
 - c) Tasks
 - d) All of the above
9. While talking to a large group, minimum distance to be maintained is:
- a) 0-2 ft.
 - b) 2-4 ft.
 - c) 4-8 ft.
 - d) 8-12 ft.
10. Practical classes can be scheduled in the afternoon because students are:
- a) Active
 - b) Actively involved
 - c) Tired
 - d) Less interested in theory
11. Too much use of irrelevant words or filler words in speech should be avoided as they act as:
- a) Activators
 - b) Distractors
 - c) Motivators
 - d) Pacifiers

Feedback

Question/Item	Answer
1	b
2	d
3	d
4	c
5	b
6	d
7	b
8	d
9	d
10	b
11	b

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- Effective Speaking. <https://www.skillsyouneed.com/IPS/effective-speaking.html>

Video

- Oral Communication Video Recorded Lecture by Dr. P.K Tulsi, Professor Education and Educational Management Department, NITTTR, Chandigarh Published on You Tube on May 5, 2013.

UNIT 3.3

Reading & Writing

“Either write something worth reading ÖR do something worth writing”

(Ben Franklin)

3.3.1 Reading

3.3.2 Writing

3.3.3 Non-Technical Writing

3.3.1 READING

Learning Outcomes

After reading this Unit, you will be able to

- Explain the concept of reading
- Describe various purposes of reading in the classroom
- Enlist various types of reading
- Describe different stages of reading
- Explain different strategies for reading
- Explain various techniques and practices of encouraging reading in the classroom

3.3.1.1 Concept of Reading

“First, however, I think it is imperative that I define what I mean by reading. I should like to suggest that reading, in the adult sense, means comprehension and understanding of fairly complex concepts and ideas by means of a single reading, or without the need for compulsive, habitual, or excessive rereading. By any standard, I believe that reading means much more than mere pronunciation of words or of what is referred to as “word calling”.

(Anderson, John R., 1959)

Reading is an important component of communication skills. It is the means of stimulating a response in a written communication model. All spheres of life personal, professional, and academic, rely upon reading to disseminate information and knowledge.

Scientific research has established that reading is a complex process that requires proficiency in five foundational reading skills, which collectively determine the ability to read. These five competencies are:

i. Phonemic Awareness

Phonemic awareness is the ability to hear and utilise the sounds in spoken words. It also includes the understanding that spoken words are composed of sequences of speech sounds, for example, /dr/ /a/ /g/ is “drag”.

ii. Phonics

Phonics involves comprehending the association between letters and individual speech sounds (phonemes).

iii. Fluency

Fluency involves reading words quickly and accurately, and with correct phrasing and intonation, so that reading sounds like spoken language. Fluent readers read effortlessly, enabling them to focus on comprehending what they read.

iv. Vocabulary

A strong oral vocabulary is vital for the development of reading fluency and comprehension. It also exerts a positive influence on one's ability to speak and write.

v. Comprehension

Comprehension means to derive meaning from what one has read by associating it with what one already knows, and further contemplating about what has just been read, until it is assimilated. This is the envisioned outcome of reading instruction.

Science has also determined that systematic and explicit instruction is the most effective approach in teaching the above-mentioned foundational skills. Systematic instruction refers to a carefully planned sequential approach, where skills and concepts are taught in a very specific order. Explicit instruction implies the presentation and imparting of these skills in a direct way to the learners. Students are given clear objectives and exhaustive practice opportunities to master each new skill. Repeated review is also an essential part of this process.

3.3.1.2 Purpose of Reading in the Classroom

There are many purposes that a reader intends to fulfil from reading. In most cases, the type of reading carried out by a reader is dependent upon the goal it intends to meet. The following can be enumerated as various purposes of reading:

- getting information,
- gaining knowledge,
- developing a perspective,
- deriving pleasure, and
- learning the language.

The knowledge that is imparted in a classroom is not only through the oral medium, that is, lectures delivered by the teacher, but also through written notes and textbooks. In order to derive maximum benefit from classroom discourses, the students should be adept at combining the notes with the lectures.

A technical student must possess strong reading skills to be able to conduct literature review for conducting research experiments, and writing research papers, thesis, lab reports, technical

reports, and responses to questions in a written evaluation. Furthermore, enhanced reading skills enable a student to read and understand the review of her/his work given in the form of comments by the teacher or an editor/reviewer of a thesis.

Additionally, reading efficiently helps a student to keep herself/himself up to date with the latest findings and knowledge in the field of study, around the world, without actually travelling from her/his place to the place of the latest knowledge.

PRACTICE TASK

1. What are the five foundational reading skills/competencies?
2. Describe the purpose of reading in the classroom.

FEEDBACK

1. The five reading skills/competencies are:

- Phonemic Awareness
- Phonics
- Fluency
- Vocabulary
- Comprehension

2. The following can be enumerated as various purposes of reading:

- Getting information
- Gaining knowledge
- Developing a perspective
- Deriving pleasure
- Learning the language

3.3.1.3 Types of Reading

Consequently, a reader chooses to read a text in the following manner:

1. **Skimming:** Skimming is a reading technique in which a reader quickly reads a piece of text to develop a clear idea about the text. A reader generally looks at the title, introduction, sub-heading, diagrams, and figures to garner partial but accurate, understanding about a composition. She/he then quickly reads the text to ascertain the gist of it. Skimming is usually used to read newspapers, messages, and emails. In order to enhance a reader's competency in skimming, an instructor can give time-bound reading exercises.
2. **Scanning:** Scanning is the practice of reading a composition quickly to find a specific information like a phrase, diagram, or table of statistics. It helps to add depth to one's knowledge and information about a topic or concept. A reader can practice scanning by looking out for key-words, often repeated words or phrases, definitions, examples, figures, and highlighted text.
3. **Extensive Reading:** Extensive reading involves a reader reading a wide variety of books. It is usually practiced as a general reading habit for pleasure. The benefits of extensive reading should not be overlooked, especially when it is devoid of any specific goals. Extensive reading helps to overcome a reader's hesitation and dislike for reading. A learner can be encouraged to read compositions of his/her choice to hone his/her reading skills and also overcome the aversion to reading. This can then be applied to reading in a formal sphere.
4. **Intensive Reading:** Intensive Reading is a practice in which readers read a piece of text with specific tasks and goals in mind. Intensive reading requires high concentration and well-developed comprehension for the language and the theme of the content. In order to sustain intensive reading for larger texts, immense practice is required. Learners should be encouraged to take up easier exercises of intensive reading, gradually scaling up to more difficult ones.
5. **Critical Reading:** Critical reading is critical analysis of what one reads. This type of reading does not have to be negative in nature, but it depends heavily upon weighing each argument, fact, and course of action suggested by the writer, on the possible merits and demerits of each. Critical reading is the precursor to critical writing.
6. **Analytical Reading:** Analytical reading is a specialised branch of reading. It involves reading in an impersonal manner so as to avoid personal misinterpretation. This allows the reader to infer the writer's intent and purpose of writing. Classroom assignments like book-reports, papers, and review of essays are tools for developing and honing

analytical reading. Some standardised examinations like scholastic aptitude tests evaluate analytical reading skills.

7. Plodding: Plodding refers to the act of slow and unenthusiastic reading. Such a reading does not lead to the fulfilment of any goal. It also induces a dislike for reading.
8. Word by Word Reading: This type of reading is practiced by a reader when she/he is unfamiliar with the language and/or the content of the composition. The reader takes time to read, pronounce, and associate words with their meanings. Such a reading may be practiced by readers in the initial stages of learning a language or a subject.

3.3.1.4 Stages of Reading

There are various stages of reading and an understanding of these stages can help a student to identify the reason for issues in reading and overcome them. The following can be outlined as the different stages of reading:

1. Decoding: This involves the conversion of writer's words into meanings understood by the reader.
2. Comprehension: This is the next level of understanding wherein larger blocks of text are understood, and ideas and information in the composition are comprehended.
3. Evaluation: This stage involves analysis of the text that has been read as either being useful or useless. The text is checked for accuracy, value, and authenticity. It is classified as being worthy of retention or discard.
4. Application and Retention: The information that has been accepted as useful is retained. It is also applied to practical concepts and used for personal gain.
5. Fluency: This is the final stage of reading wherein a reader develops a systematic process of reading new text, classifying and retaining information garnered from reading, and applying it for use. The reader acquires comfort and proficiency in reading, and peruses different genres and types of compositions to enhance knowledge and information.

PRACTICE TASK

1. Enlist different types of reading.
2. Describe various stages of reading.

FEEDBACK

1.The different types of reading are:

- Skimming
- Scanning
- Extensive Reading
- Intensive Reading
- Critical Reading
- Analytical Reading
- Plodding
- Word by Word Reading

2.The following can be outlined as the different stages of reading:

- Decoding: This involves the conversion of writer's words into meanings understood by the reader.
- Comprehension: This is the next level of understanding wherein larger blocks of text are understood, and ideas and information in the composition are comprehended.
- Evaluation: This stage involves analysis of the text that has been read as either being useful or useless. The text is checked for accuracy, value, and authenticity. It is classified as being worthy of retention or discard.
- Application and Retention: The information that has been accepted as useful is retained. It is also applied to practical concepts and used for personal gain.

Fluency: This is the final stage of reading wherein a reader develops a systematic process of reading new text, classifying and retaining information garnered from reading, and applying it for use. The reader acquires comfort and proficiency in reading, and peruses different genres and types of compositions to enhance knowledge and information.

3.3.1.5 Strategies for Effective Reading

There are three known strategies for reading. These are discussed hereunder:

1. Mapping: Most of the readers or students are visual learners. It is apt for them to extract information from a written text in a graphic form for ease of understanding and retention. While mapping, a reader uses a map or a diagram to show the central idea or theme of the text. One can draw lines away from the main idea to show subordinate or secondary ideas in the text. One should also present other important terms and phrases from the text, on the diagram.
2. KWL Charts: The purpose of a KWL chart is to define specific goals from one's reading. It comprises of three columns on a sheet of paper. The first column is filled up with information that a reader KNOWS about a particular text or composition. The next column outlines WHAT the reader intends to learn from the reading of the text. Finally, the last column contains all the information that the reader has LEARNT from the reading of the text. It is advisable to present information in the columns as a list.
3. SQ3R: It is a strategy of reading wherein five steps are involved to ascertain the information gained during the process of reading. Before one begins to read a piece of text, one should SURVEY it. A reader can read titles, headings, sub-headings, captions under diagrams and tables, introductory and concluding paragraphs, and summary. While one is surveying the text, one should ask QUESTIONS about the intent of the writers, turn headings into questions, and ponder over the questions at the end of the text, if any. One should then begin READING the text and try to find answers to questions that one raised initially. A reader should then RECITE what she/he has just read. RECALLING a recently read text helps to assimilate the learning from reading. Finally, a reader should REVIEW her/his progress from the reading process. Referring to the notes in the margins and notebook to ascertain the level of learning.

3.3.1.6 Techniques and Practices for Encouraging Reading in Classroom

The students should be encouraged to accept and make a text that they are reading, as their own. There are many methods to achieve this aim, but the intention should be to have a dialogue with the reading material. Hence, they should be coaxed to underline, make notes in the margins, put post-it flags, among other things, while reading a piece.

The teacher should read small blocks of a difficult or new text, at a time. It should then be followed by highlighting new words, jargon, exploring their meanings, giving a visual representation to the new vocabulary, and then finally a discussion on what has been read.

Once a sufficient piece of the reading material has been thus read, the teacher can then encourage the students to summarise what has been read till then. The discussion should allow the inclusion of various interpretations of the same pieces of text, and the reasons for accepting or rejecting a particular interpretation.

Learners usually apply the 'schema' theory while reading a piece of text. This theory states that readers make use of their prior knowledge of a particular concept to the new text that they are reading about the topic. This theory comprises of top to bottom and bottom to top approach to reading. Hence, when students read in the natural flow, i.e., top to bottom they will use their previous knowledge and anticipate and predict the text. However, when they read from bottom to top, they are hindered from anticipating, thereby being compelled to read the actual words and discern complete meanings.

Furthermore, reading skills should not be practiced in isolation. The teacher must attach other activities and skills with the reading activity to make it efficacious. One can give assignments like making a presentation based on reading, writing an essay, article, or report based on a reading exercise. This assigns more value to the activity of reading and makes it purpose driven.

The students should also be encouraged and guided to read from various sources. Thus, in addition to the academic text books, the learners can be directed to read about the same concepts through award-winning blog-posts, magazines and journals, and research articles. This adds variety to their reading and reading through variety.

Finally, the comfort and readiness of a teacher to read goes a long way in making the learners comfortable and adept at reading. The teacher can set a good example for the students by reading to the students, at every opportunity available. The students will also pick up a thing or two about reading when the teacher shares her/his own challenges and their overcoming, with the students.

PRACTICE TASK

1. Explain the main strategies that are put to use for reading.
2. Describe the various practices through which reading can be encouraged in the classroom and among the students.

FEEDBACK

1. The three known strategies for reading are :

- Mapping: Most of the readers or students are visual learners. It is apt for them to extract information from a written text in a graphic form for ease of understanding and retention. While mapping, a reader uses a map or a diagram to show the central idea or theme of the text
- KWL Charts: The purpose of a KWL chart is to define specific goals from one's reading. It comprises of three columns on a sheet of paper. The first column is filled up with information that a reader KNOWS about a particular text or composition. The next column outlines WHAT the reader intends to learn from the reading of the text. Finally, the last column contains all the information that the reader has LEARNT from the reading of the text.
- SQR3: It is a strategy of reading wherein five steps are involved to ascertain the information gained during the process of reading. Before one begins to read a piece of text, one should SURVEY it. A reader can read titles, headings, sub-headings, captions under diagrams and tables, introductory and concluding paragraphs, and summary. While one is surveying the text, one should ask QUESTIONS about the intent of the writers, turn headings into questions, and ponder over the questions at the end of the text, if any. One should then begin READING the text and try to find answers to questions that one raised initially. A reader should then RECITE what she/he has just read. RECALLING a recently read text helps to assimilate the learning from reading. Finally, a reader should REVIEW her/his progress from the reading process.

2. The students should be encouraged to accept and make a text that they are reading, as their own. They should be coaxed to underline, make notes in the margins, put post-it flags, among other things, while reading a piece. The teacher should read small blocks of a difficult or new text, at a time. It should then be followed by highlighting new words, jargon, exploring their meanings, giving a visual representation to the new vocabulary, and then finally a discussion on what has been read. Once a sufficient piece of the reading material has been thus read, the teacher can then encourage the students to summarise what has been read till then.

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Furthermore, reading skills should not be practiced in isolation. The teacher must attach other activities and skills with the reading activity to make it efficacious. One can give assignments like making a presentation based on reading, writing an essay, article, or report based on a reading exercise.

The students should also be encouraged and guided to read from various sources. This adds variety to their reading and reading through variety.

Finally, the teacher can set a good example for the students by reading to the students, at every opportunity available.

3.3.1.7 Helpful Tips for Effective Reading

- Get your eyes checked. Often, very slow reading is related to uncorrected eye defects.
- Get rid of the habit of pronouncing word, if you have, as you read. If you sound out words in your throat or whisper them, your reading rate is slowed considerably.
- Find out what you want to know, and for that you need to cut through and assess what is to be skipped from reading.
- Your reading rate should vary according to your reading purpose.
- It is always important to stress on qualitative not quantitative reading.
- Cultivate a positive attitude towards reading.
- Don't give up reading in the first 10–15 minutes itself.
- While reading, new ideas and concepts will come to your mind and the same may be added in the margin.
- Fix some amount of time daily, exclusively for reading, and over a period of time it will become a practice.
- Always keep a pen/ pencil handy while reading.
- Read the whole paragraph before highlighting or underlining a statement.
- Engage your senses by reading out loud occasionally.
- Mark a check on the margins for important portions while reading.
- Explain what you read.
- Pay attention to the table of content in order to make a choice of things to be read.
- Pay attention to the summary words like therefore, as a result, in conclusion.
- Use highlighters or underline/circle key phrases in a book.
- Mark words that you do not know to enhance your vocabulary.
- Learn and revise the ways to read effectively.

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Videos

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3.3.2 WRITING

Learning Objectives

After reading this unit, you will be able to

- Explain the concept of writing
- Describe various purpose of writing in the classroom
- Explain the process of writing in the classroom
- Explain principles of effective writing
- Enlist types of writing activities in the classroom
- Apply strategies to develop writing in the classroom

3.3.2.1 Concept of Writing

Definition of writing: Michigan State University defines writing skills as, 'Writing is a form of communication that allows students to put their feelings and ideas on paper, to organize their knowledge and beliefs into convincing arguments, and to convey meaning through well-constructed text. In its most advanced form, written expression can be as vivid as a work of art.'

Writing Skills are an essential part of communication skills, thereby becoming a mark of a well-developed personality. In today's age of globalisation, the conduct of daily business in organisations both big and small, has made the documentation of all communication a necessity. Well-enhanced writing skills have thus become an essential component of the portfolio of all employees. Many sale deals, important collaborations, and schemes of loans and grants, do not see the light of the day because of ineffective and faulty communication. Writing skills acquire a greater significance for academia as its knowledge and experience are evaluated through the written word like thesis, reports, and essays. Hence, it is vital to write correctly and articulately.

3.3.2.2 Purpose of Writing

The purpose of every writing should be to communicate and communicate without any discrepancy. The reader of the text should understand the text in the exact manner as intended by the writer. This onus lies with the writer, and it becomes even more difficult if the writer of the text is unavailable to complement the written word with the oral word and the expressions of nonverbal communication.

A technical student is required to write many academic compositions during their learning phase. These compositions can include essays, research papers, technical reports, and even answers in an assessment. Furthermore, as soon as these students pass out of their institutions, they begin search for a job. It is at this time that they need to know how to write an effective résumé and a correct email/letter. Additionally, as a part of the roles and responsibilities of their job, these students who are then fresh recruits will have to possess strong business/official correspondence skills. Thus, the relevance of possessing well-developed writing skills for technical students is immense.

PRACTICE TASK

1. Define writing.
2. Explain the relevance of writing skills for technical students.

FEEDBACK

1. Writing is a form of communication that allows students to put their feelings and ideas on paper, to organise their knowledge and beliefs into convincing arguments, and to convey meaning through well-constructed text. In its most advanced form, written expression can be as vivid as a work of art.
2. A technical student is required to write many academic compositions during their learning phase. These compositions can include essays, research papers, technical reports, and even answers in an assessment. Furthermore, as soon as these students pass out of their institutions, they begin search for a job. It is at this time that they need to know how to write an effective résumé and a correct email/letter. Additionally, as a part of the roles and responsibilities of their job, these students who are then fresh recruits will have to possess strong business/official correspondence skills. Thus, the relevance of possessing well-developed writing skills for technical students is immense.

3.3.2.3 Process of Writing in Classroom

This process can be divided into three parts, namely: Pre-writing, Focusing of Ideas and Writing, and Reviewing and feedback.

i. Pre-writing Stage

In this stage the students can be encouraged to deliberate upon and discuss as many aspects of the concept or theory to be written about, as possible for them. The students can also make mind-maps and concept-maps to express in a concise manner, all the knowledge that they possess on a particular topic. Mind-maps which are pictorial representation of various elements of a concept and their inter-relationships, is the first amalgamation of knowledge on a topic. After discussions among each other and the teacher, and research on the topic, the students can then make much more elaborate diagrammatic explanations in the form of concept-maps. Hence, mind-maps usually state all the information that students possess at the initial stage of learning, and concept-maps depict all the knowledge collected and assimilated by students after a thorough research and survey. These techniques can also be employed in writing a technical report or a research paper.

ii. Focusing of Ideas and Writing

In this stage the students are encouraged to write as quickly and as much as possible for them. They pay little heed to syntax, grammar, and vocabulary. The intention in this stage is to retain and give concrete shape and form to the ideas in the mind about a topic. The focus here is on the content; if it is coherent, complete, concrete, correct, and considerate towards the reader. The teacher should participate as a sounding-board with the students during this stage. S/he should read small portions of compositions, as they are being written down and make suggestions regarding the content.

iii. Reviewing and Feedback

After having written the first draft of any composition like a report, the students should take a break from it, say, for a couple of days if time permits them. They should then return to it and read and review it with a fresh mind. Review should also be sought from peers, new or ignorant readers of the concept/theory, and experts. The teacher should finally review the composition and give a feedback on it. It has been observed when reasons accompany a suggested change, the acceptance of the modification is higher, and also the student becomes aware of the error and does not repeat it as many times as previously.

Hence, teaching or instruction on a topic can be considered complete by a teacher when a written exercise pertaining to the topic has been conducted in the classroom by the teacher.

This imparts better awareness and knowledge of the concept/theory to the students, thereby improving their performance in written evaluation of the topic.

A helpful way of giving feedback to the compositions of the students is by employing the five W's and one H approach. The teacher can ask the students 'what' is the purpose of their composition, 'who' will read it, 'why' have they written or included something in a piece of text, 'where and when' address the determining factors for the readership. The question of 'how' can bring out the answer to the vital question of method/ medium of communication in a written composition.

While writing a feedback, it is useful for the teacher to keep in mind the following important curtsies of communication:

- Be empathetic, sensitive, and appreciative of the composition, even if it is not up to the mark
- Bring examples from other sources of text as to what is acceptable and relevant when pointing out errors
- Put questions to students as one would in a conversation, in order to clarify doubts about the content
- Respond only to the task and not the other aspects of it that are not in the purview of evaluation, for example: respond on the technical report about a phenomenon and not the phenomenon itself, while evaluating writing skills

It can thus be concluded that writing is not everybody's cup of tea, but success in an academic course and professional life both, depends to a great extent upon the writing skills of an individual. Hence, the teacher should inculcate and nurture strong writing skills in its students, in addition to knowledge of the core subject. The more the students or any learner, involves her/himself in reading and writing for pleasure, the better is the progress in writing skills.

3.3.2.4 Principles of Effective Writing

A written document carries greater authority and thus higher responsibility. Therefore, it is essential to hone to perfection one's writing skills. The steps involved in strengthening writing skills are:

- A thorough knowledge of the grammar of the language
- A rich bank of vocabulary
- Reading voraciously
- Regular practice

- Review of one's work

One should maintain a regular routine of practicing grammar exercises to avoid adulteration of the language due to wrong usage in one's area of operation. A skilled writer also requires the correct and apt word at the right place. A rich vocabulary cannot be developed after reading a dictionary. A dictionary should be used as a reference book to know the meanings of the words read in a context. The best way to enhance vocabulary is to read a wide variety of books and absorb from them new words, phrases, and expressions. Semantics within a context is helpful in grasping the different forms of usage of a word. Another technique to sharpen writing skills is to take up every opportunity to write, write anything and everything. This allows one to overcome the inhibition about one's writing. The more one practices, the better one becomes. It is also a valuable practice to get one's work reviewed by an expert and by an average member of the readership. The feedback allows for the scope for improvement in content and technique of writing.

A few helpful tips for improving one's writing skills are:

- One should prepare a rough draft of the document, as the first step.
- One should pay adequate attention to the form of the document, the audience, the purpose, and the style of writing.
- Rules of grammar and syntax should be followed.
- One should be careful about spellings. Words that are often confused as they are homophones like there and their, should be spelt correctly. Even spell-check software overlooks such mistakes.
- It is advisable to project an enriched vocabulary, but one should be careful to avoid verbosity. The language should be plain but correct. Certain phrases and words like prepositional phrases, idioms, adjectives, and adverbs should be used sparingly.
- One should avoid using colloquial words and phrases in formal documents.
- Active voice conveys a better and clearer thought process as compared to passive voice. Furthermore, sentences written in active voice are crisper and shorter. Hence, active voice should be preferred to write sentences.
- One's language should be gender neutral. This helps to avoid unnecessary and inappropriate prejudice against the writer by the readers.
- One should write as often as possible. It is also advisable to use correct spellings and grammar even while writing messages on social networking sites and mobile-phone applications. A practice can easily become a habit.
- Speakers whose first language is English, generally tend to use contractions while writing. This practice may be considered inappropriate for non-native English users. The popular

opinion is that contractions like 'don't' are more apt for informal communication. These should be avoided in formal communication.

- One should pay special attention to the uses of the apostrophe. A small stroke placed incorrectly can change the entire meaning.
- One must include and act upon the feedback one receives on one's writing from experts, peers, and subordinates. This makes one's writing correct and comprehensible for a larger audience.
- One must practice rules of grammar on a regular basis, as there are many sources for adulteration of language.
- Reading work related to one's area of study or occupation keeps one updated with the latest developments in the field and the jargon associated with it. It is also a good practice to read informal texts like blog-posts, on one's technical subjects of work or
- interest, to learn how a common person writes about and understands complex concepts.
- Reading different texts enhances and widens one's sensibility about a language.

It is pertinent to add that writing is a skill that becomes better with practice. One must write a few hundred words every day to improve one's writing.

PRACTICE TASK

1. What is the process of writing in the classroom?
2. Explain the principles of effective writing.

FEEDBACK

1. This process can be divided into three parts, namely: Pre-writing, Focusing of Ideas and Writing, and Reviewing and Feedback.

During pre-writing stage the students can be encouraged to deliberate upon and discuss as many aspects of the concept or theory to be written about, as possible for them. While focusing of ideas and writing stage, the students are encouraged to write as quickly and as much as possible for them. They pay little heed to syntax, grammar and vocabulary. After having written the first draft of any composition like a report, the students should take a break from it, say, for a couple of days if time permits them. They should then return to it and read and review it with a fresh mind. Review should also be sought from peers, new or ignorant readers of the concept/theory, and experts. The teacher should finally review the composition and give a feedback on it. Thus, these are the main stages in the process of writing in a classroom.

2. One should maintain a regular routine of practicing grammar exercises to avoid adulteration of the language due to wrong usage in one's area of operation. A skilled writer also requires the correct and apt word at the right place. A rich vocabulary cannot be developed after reading a dictionary. A dictionary should be used as a reference book to know the meanings of the words read in a context. The best way to enhance vocabulary is to read a wide variety of books and absorb from them new words, phrases, and expressions. Semantics within a context is helpful in grasping the different forms of usage of a word. Another technique to sharpen writing skills is to take up every opportunity to write, write anything and everything.

This allows one to overcome the inhibition about one's writing. The more one practices, the better one becomes. It is also a valuable practice to get one's work reviewed by an expert and by an average member of the readership. The feedback allows for the scope for improvement in content and technique of writing.

3.3.2.5 Different types of writing activities in classroom

i. Taking notes – The students should be encouraged to write swiftly while taking down notes. They should be directed to take down notes in rough fist either as a short-hand (if they know the language) or in their own short language. They should then be asked to transfer the notes at a later time to a fair notebook. This allows for reinforcement of classroom learning.

ii. Writing handout – Students should be advised to pick a key-word around which the hand-out should be written. They should then list out all the words related to this topic that they have heard in the class and read in their text-books. In adherence to these main words the students should write a hand-out which is brief. It should answer the 5 W questions – What, Why, Who, When, and Where- and 1 H question- How.

iii. Writing a laboratory experiment – A laboratory experiment in written is a shorter version of writing a technical report. It just does not have a table of contents as a technical report has. A laboratory experiment comprises of parts in the following order: Title, Introduction, Main Body, Conclusions, Recommendations, Appendices. It is much briefer than a technical report, however, all the other principles of writing a technical report are applicable. Hence, refer to the content on technical report.

iv. Writing an email – Writing an email requires consideration of the recipient for choice of the level of language, courtesy to the receiver, correctness, concreteness through facts and figures, conciseness for easy understanding, clarity for high responsiveness, to achieve completeness in the email.

v. Writing technical report – A technical report has the following parts in the order: Title, Summary, Introduction, Body, Conclusion, Recommendation, Appendices.

vi. Writing a project proposal – a project proposal is an elaborate composition that justifies the research statement on the basis of its uniqueness and novelty. It forms the basis of a relevant research project. Hence, it should adhere to all norms of propriety, concreteness, correctness, and clarity in the written form. The writer/researcher should be able to convey her/his conviction, passion, and justifiability in proposing a research project through this document.

vii. Writing research paper /article - it is a very elaborate exercise and is dealt in detail in further reading resources listed at the end of the notes. Research paper is essential to highlight the new research to which a researcher dedicated a number of years of her/his life. It is also

very vital for other researchers in the field. A research paper follows the established form and structure.

viii. Answering a test in writing - evaluation of a student's understanding of a concept is conducted through the written response to questions in a test. Answers should be relevant to the question, to the point, inclusive of all the key-words, and cohesive.

3.3.2.6 Developing writing in classrooms

The teachers face a challenging task of improving the writing skills of their students while imparting knowledge about the core subjects.

Writing is a solo activity, and as such not very attractive for young students. Writing is a longer process as compared to speaking or listening, hence it is avoided by both the students and the teachers. Many of our course-books do not require or include classroom writing as a means of learning a particular topic. However, almost all of our evaluation is based on marking a written piece of text by the student. It is for this reason that students should be encouraged to write in the class itself.

Writing in a group after a brain-storming session on a topic, helps to overcome and cull the hesitation that many students have for writing. This practice also addresses the inability of many students to write, as they do not write on a daily basis. The following technique can be of help in inculcating sound writing skills in students, through classroom activity.

An effective method to introduce writing skills in the class and enhance them, is when the teacher removes herself/himself from the end-user or recipient stage of the communication or writing model, and gets involved in the process of the communication or writing itself.

The students benefit more and the teacher as well, when the teacher acts as a catalyst in the procedure of writing a report, an essay, or an answer, sought as an assignment. The teacher in this case, does not respond to the written composition of the students like an evaluator but as a reader.

PRACTICE TASK

1. How can a teacher work on writing skills of students in the classroom?

FEEDBACK

1. An effective method to introduce writing skills in the class and enhance them, is when the teacher removes herself/himself from the end-user or recipient stage of the communication or writing model, and gets involved in the process of the communication or writing itself.

The students benefit more and the teacher as well, when the teacher acts as a catalyst in the procedure of writing a report, an essay, or an answer, sought as an assignment. The teacher in this case, does not respond to the written composition of the students like an evaluator but as a reader.

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Additional Resources

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- Coxhead Averil ,” Academic Word List”, Victoria University of Wellington, Web link <https://www.victoria.ac.nz/lals/resources/academicwordlist>

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- Jindal Suditi,” Ready to Write – II”, Published on You tube on Sep 3, 2018
Web link https://www.youtube.com/channel/UCDIWOTakOdnf12PmKcRxc-w?view_as=subscriber
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3.3.3 NONTECHNICAL COMMUNICATION

Learning Objectives

After reading this unit, you will be able to

- Describe various forms of nontechnical writings at institute level

3.3.3.1 INTRODUCTION

As a faculty in technical institution, we are not only involved in the process of technical writing, there are certain administrative responsibilities also, we need to perform. Faculty while handling the positions in various committees constituted at institute level is involved in taking notes, preparing drafts, writing memorandums, organizing meetings, writing executive summary of various events that are common in use. This unit will provide you all the brief overview of all these types of writing.

3.3.3.2 Memorandum (Memos)

The word memorandum is derived from Latin language which in its initial full form – memorandumest - means it is to be remembered and in short form called as Memo. A memo is a short piece of text, whose main function is to record important information and is used for internal communication in an organization. Memos are not formal as letters. Now a day in organization instead of Memos, the email is used. If emails are being used, the initial section with sender, receiver, data and subject line is integral to the email format.

3.3.3.3 Noting and Drafting

i. Notes

Notes are written remarks recorded on a paper under consideration to facilitate its disposal. It should consist of precis of previous paper, the statement or analysis of the questions requiring decision, suggestions on the course of action or orders passes thereon. The name, designation and telephone number of officer signing a note should invariably be typed or stamped with a rubber stamp below the signature which should be dated. In recording the date, the month and the year should also be indicated along with the date.

ii. Drafting

A draft is the rough copy of a communication to be issued from an organization and drafting is the process of preparing this rough copy.

Draft-When to be prepared?

- Except when the line of action on a case is obvious, a draft of the communication proposed to be sent out will be sent out will be prepared after orders have been passed by the competent officer indicating the terms of the reply to be sent.
- A Branch Officer or a higher officer who has formulated his ideas on a case may himself prepare a draft and authorise its issue or submit it to the next officer for approval, as the case may be. In other cases, a draft will be prepared by the office.

Wording of a Draft

A draft should convey the exact intention of the orders passed. The language used should be clear, concise and incapable of misconstruction. Lengthy sentences, abruptness, redundancy, circumlocution, superlatives and repetitions whether of words, expressions or ideas, should be avoided. Communication of some length of complexity should generally conclude with a summary. A draft should have the needed stimulus to have the expected response from the addressee.

3.3.3.4 MEETING PROCEDURE

At institute level the faculty will often be called upon to write Notice, agenda and minutes of meeting. These forms of communication have certain established conventions and it is necessary to know them to be able to discharge academic responsibilities effectively. The meeting procedure is communicated in a following manner.

- i. Notice- Call for a meeting
- ii. Agenda
- iii. Minutes of Meeting

i. Notice- Call for a meeting

Usually the rules of procedure of every institute clearly state the notice period required for calling a meeting (both meeting for governing bodies and departmental meeting etc.). if the institute do not have prescribed rules, then the person in charge must ensure that notice reaches to all the members within a reasonable time before the meeting.

The day, date, time, place of meeting and the issues/item to be discussed, if finally decided. If the number of items to be discussed in the meeting are less then mentioned

them in the notice itself, otherwise they should be listed in a separate sheet and attached to the notice as Annexure.

ii. Agenda

Agenda is the plural of agendum. Agenda is the list of items that dealt in a meeting. It is to be drawn in consultation with the Head (At department level), Director (At institute level), and Chairman (At governing body level).

At the meeting the items are addressed in the order in which the agenda is made when the agenda is given as an annexure to a notice or circulated separately it contains the following elements.

- a) Name of the institution and the date of circulation.
- b) The day, date, time and place of meeting.
- c) The list of agenda items to be transacted.
- d) The background information, if any.
- e) Signature of the Head.

Generally, the first item on every agenda is the confirmation of the minutes of the previous meeting; and the last item any other item any other matter with the permission of the chairman.

Other items are usually arranged in their order of importance and routine matters put towards the end. Each item in numbered.

In some institution the agenda items are also enlisted along with the time. This helps the members to keep to the schedule and to cut down meaningful and irrelevant discussions.

Further, the members get an, idea of how much time they will have to spend at the meeting. It is however, difficult to always estimate precisely the amount of time needed for the disposal of an item.

iii. Minutes of Meeting

Minutes are records of discussions and decisions taken at the meeting. The minutes are generally written by the administrative (in charge)/Section which sponsor or holds the meeting.

Minutes are clear, concise, accurate and well organized. Summary minutes usually contain the main points of discussion, the conclusion reached, the recommendation made, and the course of action needs to be followed by the members and groups.

For writing the minutes of meeting, one need to

- Make notes during the meeting
- Soon after the meeting is over, prepare draft of the minutes
- Before finalization, show these minutes to the chairman of the meeting.

If during writing, any doubt is there, check it up with other members who attended that meeting.

In the minutes of meeting, the following items generally included:

- The name of the institute unit.
- The data, time and place of meeting.
- The number of the meeting if it is in series for e.g 4th Board Meeting.
- Name of the members present in the meeting, special invitee/expert/external and members.
- Record of transactions.
- Signature of the secretary and chairman of the meeting.

Often the minutes are circulating among all the members, if they do not suggest any amendment or suggestion, the minutes are approved by the chairman. If there is any amendment or suggestion after making the changed seeking the approval only the chairman will sign.

3.3.3.5 Executive Summary

The executive summary provides an overview of an information from a large document. It may be the only part of the document that audience reads, so it must always be concise, clear and presents the main points in a formal tone and written specifically for target audience by reading executive summary the reader draw conclusion and

recommendation. While writing the information must support objectives and include essential information from the body of content it summarises and the function it serves.

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UNIT 3.4

Barrier to Classroom Communication

“Communication works for those who works at this.”

(John Powell)

3.4 Barriers to Classroom Communication

Learning Outcomes

After reading this unit, you will be able to:

- Explain teacher related barriers in classroom communication
- Explain the message-related barriers in classroom communication.
- Explain the instructional methods and media related barriers in classroom communication.
- Explain the student-related barriers in classroom communication.
- Explain the learning environment related barriers to classroom communication.

3.4.1 Introduction

Effectiveness of classroom communication depends on five major factors namely teacher, students, message, instructional methods and media and learning environment. These factors, if do not possess the right kind of qualities or attributes create hindrances in the process of communication and thus decrease its effectiveness. On the basis of barriers to communication discussed by Wehrich and Koontz (2005); Cole and Chan (1987), Devito (1978) and Michael and Jones (1973), the barriers to classroom communication can be grouped under the following:

- Barriers related to teacher
- Barriers related to message
- Barriers related to instructional methods and media
- Barriers related to students
- Barriers related to learning environment

Fig. 3.4.1: Barriers to classroom communication

3.4.2 Teacher Related Barriers

Fig 3.4.2. Depicts the teacher-related barriers to classroom communication. These

Include:

Fig 3.4.2.: Teacher related barriers to classroom communication

Teacher related barriers to classroom communication include the following:

- I. **Unrealistic Self-Concept:** “The self-concept is ‘who the person is’ and encompasses the individual’s values, attitudes, and beliefs about self and the environment. It colours the perceptions and subsequent behaviour that arise from these basic attitude and beliefs about the self” (Pietrofessa et al. 1980). A teacher who is having negative self-concept will not be open, reject feedback contrary to his/her beliefs and will not be willing to change. This leads to difficulties in communication.
- II. **Inadequate Knowledge and Skills:** The communication in classroom becomes ineffective, if a teacher lacks knowledge and skills, related to the subject he/she is teaching and pedagogical skills. Both are essential for effective communication.
- III. **Inaccurate Perception of World:** If a teacher perceives the world around him not worth living or useless, he will sound pessimistic and lack enthusiasm and zeal essential for classroom communication. Such teacher will be unable to motivate learners for learning and develop unfavourable attitude among them.
- IV. **Lack of Motivation:** Lack of motivation to teach, explore, acquire more knowledge or to communicate, on the part of the teacher will restrict him to participate actively or encourage student participation in teaching-learning process and adversely affect communication.
- V. **Lack of Understanding of Learners:** A teacher who lacks knowledge about his learners will be unable to pitch his lesson as per the needs of the learners i.e. cognitive styles, learning styles, previous knowledge, motivation etc.
- VI. **Inability to Understand Individual Differences:** A teacher who fails to understand individual differences among learners will not be motivated to use variety of instructional methods and media and he/she will not be able to cater to individual differences in class. All learners may not be able to achieve learning outcomes. The effectiveness of communication decreases.
- VII. **Inappropriate Use of Verbal Communication Skills:** Generalized comments such as ‘you are not worth’ or ‘the subject is difficult’ or ‘subject is of no use’ in today’s context will have adverse effect on the communication especially that of the students. Inability to use appropriate language, pronunciation, syntax, grammar etc. acts as barriers to effective communication in classroom.
- VIII. **Inappropriate Use of Non-Verbal Communication Skills:** Inappropriate use of facial expression, eye-contact, gestures, postures, proximity, artefacts etc. act as

barriers in communication process. For example, a teacher with stern face and who maintains distance from learners will not be able to establish rapport with them and the communication will thus not be open and learners will hesitate in asking questions, clarifying doubts or providing feedback to the teacher.

- IX. **Inability to Understand Others Point of View:** If a teacher fails to accept view point of others, he/she creates a very closed environment which restrict learners from actively participating in classroom.
- X. **Biases and Prejudices:** Biases and prejudices w.r.t class, creed, gender, colour etc. adversely affect communication. A teacher who is biased may ignore a student or group of students in class or may indulge in undue criticism of students.
- XI. **Inability to Build Rapport with Students:** Lack of rapport between the students and teacher leads to restricted communication without concern for each other and feedback.
- XII. **Inappropriate Handling of Instructional Methods and Media:** If a teacher lacks competence to handle instructional methods, media and techniques, his communication will be ineffective and he will not be able to achieve the intended learning outcomes.
- XIII. **Lack of Confidence:** Lack of confidence in himself, subject or handling instructional methods, media and techniques act as barrier to effective communication. A teacher who lacks confidence in himself may become very authoritarian or restrict himself in communication or maintains distance from learners.

3.4.3 Message Related Barriers:

Message related barriers include

- I. **Lack Clarity of Learning Outcomes:** If learning outcomes are not stated in the beginning of the class, students will not know as to what is expected of them at the end of instruction or why should they learn a particular topic. The necessary expectancy level is not aroused among learners and they will not be adequately motivated to learn. Another difficulty in communication will be reflected in selection of content which may not match the learning outcomes.

Fig 3.4.3. Message related barriers to classroom communication

- III. **Inappropriate Sequencing of Content Matter:** Sequencing of content matter without taking into consideration the logical hierarchy of concepts, or principles or psychological principles of learning i.e. known to unknown, easy to difficult, simple to complex, observation to reasoning, concrete to abstract makes learning a difficult process and act as barrier to effective communication. For example, without clarifying the concept of foundation, you cannot explain the types of foundation that is deep and shallow foundation. Or without clarifying the concept of stress and strain, you cannot derive the relationship between the two.
- IV. **Inappropriate Use of Language and Symbols:** The message designed using difficult language, not comprehensible to learners, and symbols with which learners are not familiar or are technically inaccurate or are not standardized ones, create hindrance in communication process.
- V. **Irrelevant Information:** Message that contains irrelevant pieces of information fails to sustain the necessary motivation and interest of the learners and inhibit them from attending, listening and comprehending the message.

- VI. **Technical Jargon:** If a message contains technical jargon and learners are not made familiar with it beforehand, acts as a barrier to communication by reducing interest and motivation of learners.
- VII. **Heavy Emphasis on Text:** Too much dependence on text makes the message boring.
- VIII. **Lack of Supporting Material:** Supporting materials include student guides, instructional or job sheets, workbooks, set of instructions etc. If a message is not accompanied by appropriate support material to guide or to direct learners as to how to go about learning the message or does not provide opportunities to practice and monitor their own progress, it creates hindrances in the process of communication.
- IX. **Lack of Examples, Analogies and Metaphors:** Lack of use of examples from daily life and world of work, analogies and metaphors in message makes it difficult for the learner to learn it meaningfully and participate actively in classroom communication.
- X. **Lack of Exercises and Activities:** Message if not accompanied by relevant exercises or activities does not provide an opportunity to teacher to assure himself of learners' understanding and sustain learners' interest and motivation and to actively involve them in teaching-learning process thus making classroom communication ineffective.

3.4.4 Instructional Methods and Media Related Barriers

Fig 3.4.4. shows the barriers related to instructional methods, media and techniques.

Fig3.4.4. Methods and media related barriers to communication

Barriers related to instructional methods, media and techniques include the following:

- I. **Inappropriate Selection:** Instructional methods, media and techniques selected if irrelevant to learning outcomes, nature of content, context or size of the class act as barriers and make the communication ineffective.
- II. **Poor Quality of Media:** Poor quality of media creates hindrances in the process of communication. Say for example, transparencies being used by teacher are overcrowded, font size is small or contain too many colours or the quality of audio or video in video film being used is poor will cause communication difficulties.
- III. **Emphasis on Conventional Instructional Methods and Media:** Too much emphasis on lecture method and use of power points lead to boredom, monotony and lack of interest among learners, making the communication ineffective.
- IV. **Too much Dependence on Media:** Too much dependence on any one type of medium without proper synchronization leads to ineffective communication.
- V. **Lack of Integration of Media in Teaching-Learning:** Lack of integration of media in teaching-learning makes its use irrelevant and confuse learners and thus cause problems in communication. Video film shown in the beginning or end of class without explaining the rationale for its use or without any follow up activities may create confusion among learners.

3.4.5 Students/Learner Related Barriers

Students/learner related barriers are shown in Fig 4.5 and are explain below.

- I. **Unrealistic Self-Concept:** Self-concept affects participation in or withdrawal from certain academic tasks in educational institutions. Students who do not feel they will succeed, who may be self-conscious and want to avoid embarrassing failure experience will not venture into pursuits that raise doubts. Communication is adversely affected by unrealistic self-concept.
- II. **Inaccurate Perception of World:** If the learners view world to be not worth living, they will become pessimistic and lack needed zeal and enthusiasm to participate in classroom communication or will always show unfavourable attitudes.
- III. **Lack of Previous Knowledge and Skills:** Lack of previous knowledge and skills required to learn new knowledge and skills creates problems in classroom communication. Learners fails to acquire new knowledge and skills and relate it

meaningfully to what they already know as well as fail to actively participate in classroom.

Fig.3.4.5 Student/Learner Related Barriers in Classroom communication

- V. **Lack of Intelligence, Aptitude, and Interest etc.:** A minimum level of intelligence, aptitude and interest essential to be successful in a particular discipline or subject if not possessed by the learner(s) make the classroom communication ineffective.
- VI. **Lack of Motivation:** Motivation to learn new information/knowledge and skills or to communicate adversely affect communication process.
- VII. **Inability to Attend:** If learners do not pay necessary attention to the task in classroom, the communication fails.
- VIII. **Impairment/Sensory Deprivation:** Impairment or any sensory deprivation in the learner restricts his participation in classroom communication.

- IX. **Lack of Essential Skills:** Lack of essential skills such as notes taking, listening, reading, analysis, synthesis, and learning to learn skills make communication process in classroom difficult for both teacher and students.
- X. **Inability to Relate New Knowledge with Already Existing Knowledge:** Meaningful learning does not take place if a student fails to relate new knowledge with already existing in his mind. Communication thus, does not yield the desired learning outcomes and students are not able to retain new learning.
- XI. **Inappropriate Attitude, Biases and Prejudices:** If a learner possesses unfavourable attitude towards teacher, subject, class fellows/peers, institutions or life, or is biased or prejudiced will have problems in communication, relating with people and accepting others viewpoint.

3.4.6 Learning Environment Related Barriers:

Fig.3.4.6 shows the learning environment related barriers to classroom communication

Fig 3.4.6. Learning environment related barriers to classroom communication

- I. **Over Crowded Classes:** Overcrowded classes make it difficult for the teacher to pay attention to all the learners and cater to their individual needs and thus affects communication adversely.
- II. **Improper Seating Arrangements:** It leads to discomfort to the learners, problems in maintaining eye contact with teacher or peers or problems of access to teacher or other learners and thus restrict free flow of ideas among learners or between teacher and learners. Teacher may fail to check the activities or exercises being performed by students, if there is no space to reach the learner in the class.
- III. **Two little or too much Distance between Teacher and Student and among Students:** Too little or too much distance creates communication difficulties. If distance between teacher and student is too much, students have difficulty in relating to the teacher and openly participating in classroom communication. On the other hand, if distance is too little, student feels threatened that his personal space is being encroached upon and he restrains himself from interaction.
- IV. **Lack of Essential Facilities:** Lack of facilities such as proper chalkboard/board electricity points, media etc. in classroom may act as barriers in communication.
- V. **Lack of Rapport between Teacher and Student and Among Students:** It makes classroom environment closed in which students restrain themselves from participation, clarifying their doubts or expressing their own viewpoints.
- VI. **Strict Rules and Regulations or Too Much Leniency:** Both are unfavourable for effective communication. Strict rules and regulations create fear and students will not freely open up, while too much leniency creates discipline problems.
- VII. **Lack of Freedom:** Learning environment that restrict individual's freedom to participate or express his view point or experiment is not conducive for effective classroom communication.
- VIII. **Fear of Punishment/Criticism:** Learning environment characterized by fear of punishment and criticism discourages students to be frank and open and participate freely in classroom communication process.
- IX. **Lack of Experimentation:** Lack of opportunities to experiment, innovate or create again hinders the process of communication.
- X. **Anxiety Producing:** Learning environment that causes anxiety among learners hinders the process of effective communication. Students are restricted in their

communication. Sometimes they may withdraw themselves or may not participate in classroom communication.

- XI. **Lack of Feedback:** If the element of feedback is missing in the learning environment, it hinders the process of communication. Imagine a situation in which feedback regarding students' performance or students' feedback regarding instructional effectiveness is missing. The communication will either be ineffective or breakdown at one point.
- XII. **Lack of Co-operation:** Teacher-student cooperation and cooperation among students if lacking, will lead to break-down of the communication.
- XIII. **Lack of Healthy Competition:** Lack of healthy competition among students may lead to complete breakdown of communication among students or groups.

From the above, it is clear that a multiplicity of barriers can exist in the classroom communication, which can either make it ineffective or decrease its effectiveness. These barriers need to be eliminated from teaching-learning situation in order to increase the effectiveness of classroom communication.

PRACTICE TASK

Below are given 13 statements/questions. For each statement/question, four alternates are provided. Encircle the alternative which completes the statement/answers the question.

1. Unrealistic self-concept is a:
 - a. message related barrier
 - b. teacher related barrier
 - c. student related barrier
 - d. both (b) and (c)
2. Lack of previous knowledge on the part of learners leads to:
 - (a) inability to interpret new information
 - (b) relate new information with pervious learner
 - (c) difficulty in understanding new information
 - (d) all of the above
3. Inability on the part of teacher to pitch the lesson to the level of learners is the result of:
 - (a) lack of subject information
 - (b) overload of information
 - (c) inability to understand learner
 - (d) lack of proficiency in handling used
4. Incorrect perception of world adversely affects the:
 - (a) ability to understand
 - (b) ability to remember
 - (c) ability to recall
 - (d) enthusiasm and zeal
5. Inability to use analogies and metaphors makes it difficult for:
 - (a) teachers to explain
 - (b) teacher to remember
 - (c) student to learn meaningfully
 - (d) student to interact among themselves
6. Lack of clear statement of learning outcomes results in:
 - (a) lack of arousal of expectancy among student
 - (b) inappropriate selection of content
 - (c) inappropriate selection of method
 - (d) all of the above
7. Lack of practice leads to:
 - (a) inability to transfer knowledge to other situations
 - (b) inability to relate to other subjects
 - (c) lack of motivation
 - (d) lack of imagination
8. Lack of use of standard symbols results in:
 - (a) difficulty in interpretation

- (b) difficulty in explanation
- (c) difficulty in instruction
- (d) difficulty in interaction

9. Improper seating arrangement to as example of:

- (a) message related barriers
- (b) physical barrier
- (c) teacher related
- (d) student related barriers

10. Poor quality of Power Points is on account of:

- (a) small font size
- (b) too much information on one slide
- (c) irrelevant images
- (d) all of the above

11. Inability to maintain eye contact with other individual may be on account of:

- (a) lack of confidence
- (b) poor self-control
- (c) lack of self-esteem
- (d) poor self-concept

12. Which of the following is NOT a barrier to effective communication?

- (a) one-way communication
- (b) feedback
- (c) inability to maintain eye contact
- (d) poor quality media

13. Which of the following is NOT an example of psychological barrier?

- (a) anxiety
- (b) distrust
- (c) lack of motivation
- (d) technical jargon

Feedback

Question No.	Answer
1.	d
2.	d
3.	c
4.	d
5.	a
6.	d
7.	a
8.	a
9.	b
10.	d
11.	a
12.	b
13.	d

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Additional Resources

- Radhika Kapoor. Barriers to Effective Communication https://www.researchgate.net/publication/323794732_Barriers_to_Effective_Communication
- Study Material-1, Lesson 2 IMPORTANCE AND BARRIERS OF COMMUNICATION <https://sol.du.ac.in/mod/book/view.php?id=1354&chapterid=1096>

UNIT 3.5

Active Learning

“Learning is not a spectator sport. Students do not learn much just by sitting in class listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, apply it to their daily lives. They must make what they learn part of themselves.”

(Arthur W. Chickering and Zelda F. Gamson M ,1987)

3.5 ACTIVE LEARNING

Learning Outcomes

After reading this Unit, you will be able to:

- Explain the Concept of Active Learning.
- Enlist various Characteristics of Active Learning.
- Enlist elements of Active learning.
- Explain various benefits of Active Learning.
- Analyze various requirements to create Active Learning Classroom.
- Enlist various active learning strategies to achieve learning objectives at various levels of Bloom's taxonomy.
- Explain various types of Active Learning strategies.
- Identify the barriers to create Active Learning Classroom.
- Describe the strategies for reducing the barriers to active learning classrooms.

3.5.1 Concept of Active Learning

Silberman, M. in 1996 defined Active learning as a process that aims to make the students' active participants of learning and fully engage them in the process of learning

(Bonwell, C.C. & Sutherland, T.E. 1996).

Active learning strategies are those that engage students to perform activities /tasks which helps to develop higher order thinking skills. Some of the other terms that are also coined with the term active learning are students' – centered or learner centered learning, inquiry based learning, problem based or discovery learning and experiential learning. Research clearly demonstrate that skill cannot be learned by listening to it, by reading about it or not by seeing others performing it. These activities can be designed to increase the academic engagement not only in the classroom but out of the classroom also. The teacher needs to provide opportunities to practice these skills so that they become proficient.

(Hermin & Toth, 2006)

Thus by using various active learning strategies the teacher is not only construct the knowledge and understand the content fully but also focus on the development of various skills among students'. These strategies also help them (Students') to explore their own value and attitudes.

3.5.2 Major Characteristics of Active Learning

Research suggested many strategies that helps the teacher to design variety of activities/tasks. The major characteristics of Active Learning are:

- Students' involvement is more as compare to teacher centered classrooms.
- Students' motivation is increased.
- There is great emphasis placed on developing skills among students rather than only on information transmission. By using these strategies higher order thinking skills can be developed.
- The immediate feedback is provided to the students by the teacher.

3.5.3 Elements of Active Learning

Active learning strategies are ranging from very simple to more complex. Active learning is, in short, includes exercises to promote active listening, written exercises such as note taking, to more complex group exercise that develop understanding of the content, students construct their own mind maps for the content covered and confront with their self-made assumptions/misconceptions.

(Echevarria, vogt, and Short 2004)

There four basic skills of basic communication skills that can be developed among students described as follows:

- **Reading:** Active learning strategies such as case study method of teaching helps the students to comprehend written or printed material/information.
- **Writing:** Active learning strategies such as note taking enable the Students' to communicate information in written form.
- **Listening:** Active learning strategies such as Think-pair-share develop active learning skills among students and develop their understanding for messages from a variety of speakers.
- **Speaking:** Active learning strategies such as fish bowl discussion enable the students to express their ideas, task as situation demand.

(Chickering and Gamson, 1987)

PRACTICE TASK

1. Define Active Learning.
2. Enlist the different elements of Active learning.

FEEDBACK

1. Active learning is a processes that aims to make the students active participants in learning and fully engage them in the process of learning.
2. Different elements of active learning are:
 - Reading
 - Writing
 - Listening
 - Speaking

3.5.4 Benefits of Active Learning

- Some of the active learning strategies as compare to the traditional lecture method not only develop the critical thinking skills but also promote mastery over the content.
- The use of active learning strategies while teaching provide opportunities for the development of basic communication skills such as reading, writing, listening and speaking.
- Active learning strategies also help to cater the needs of students' based on their learning styles.
- Group based activities benefitted academically weak students' when they are being taught by their own peers and good students' also get deeper understanding that comes from peer teaching.
- Active learning motivates the students', increase their creativity and curiosity.

3.5.5 Requirements to Create Active Learning Classrooms

The two basic assumptions are there which derives Active learning:

- To learn one must be actively involved.
- Every individual has different style of learning. (Meyers and Jones, 1993)

The following steps needs to be consider to create an active learning classroom and is a cyclic process known as Active Learning cycle. These are:

- Attainment of initial learning
- Conception of goals
- Tricks for receiving goals
- Inquiry and expedition
- Verification and synthesis
- Evaluation of learning

In Active Learning classrooms, the teacher must

- Clearly state the learning outcomes of the activity/ task assigned and time allotted for the completion of the task.
- All the instructional material must be ready and handy.
- The selection of active learning strategy for teaching must be according to the defined learning outcomes and nature of the content.
- Always start with simple strategy such as one-page lecture summarization, note taking etc. In the initial phase of the semester, the teacher may plan to introduce these strategies to students.

- Carefully design the evaluation criterion and pass this information to the students too.

In active learning classrooms the students are doing something in a meaningful way and applied their learning in some context. Some of the active learning techniques demand seating arrangement in groups which favor group discussion and peer learning without any competition.

3.5.6 Active learning strategies to achieve learning outcomes at various levels of Bloom's taxonomy

Active Learning strategies engage the students' in variety of tasks that allow them to do analysis, synthesis, evaluate and to be actively involved (Echevarria, vogt, and Short, 2004). Many active learning strategies can be used to design of the learning outcomes (Bloom, B. 1956) that involve students' in practicing and reflecting about what they are doing are given in the table 3.5.1 below:

Table 3.5.1: Various active learning strategies for different levels of Bloom's Taxonomy

Levels of Bloom's Taxonomy	Active Learning Strategies
Remembering and understand (Knowledge and Comprehension)	One minute paper, Note taking, Muddiest point, One page lesson summarization, Demonstration ,Venn diagram
Application	Think pair share, Concept mapping, Image analysis, Role play, Simulation, Practice based exercises, ,Projects, Reciprocal questioning, Numbered head together, Visioning and Futuring
Analyse	Structured problem solving, Fish bowl discussion, Think pair share, List pros & cons, Application based exercises, Peer review
Evaluation (Synthesis)	Case studies, Projects, Simulation, Critiques, Visioning & Futuring, Problem and Project based learning, Concept map
Creation	Project based learning

PRACTICE TASK

1. Enlist the different steps involved in Active learning cycle.

FEEDBACK

1. The following steps need to be followed while designing active learning classroom:

- Attainment of initial learning
- Conception of goals
- Tricks for receiving goals
- Inquiry and expedition
- Verification and synthesis
- Evaluation of learning

3.5.7 Classification of Active Learning Strategies

The teacher must carefully select active learning strategies by considering their own comfort level and command on these strategies. The active learning strategies are divided into three different categories. These are:

- Individual techniques
- Cooperative techniques
- Collaborative techniques

The explanation of different active learning strategies is enlisted in the literature (For details kindly go through video on “Active Learning Cycle” and the references mentioned in the table 3.5. 2 below along with the strategies covered).

3.5.8 Different Active Learning Techniques

Table 3.5.2: List of various active learning strategies and their references.

REFERENCE	TECHNIQUES
Faust, J.L., & Paulson, D.R (1998) “Active Learning in College Classrooms”, Journal on Excellence in College Teaching, 9(2), PP 3-24	Clarification pauses One-minute paper Muddiest (or clearest point) Affective response Student response to a demonstration Daily or weekly journal Reading quiz Question and answer The fish bowl Quiz / Test question Work at board (Blackboard Sharing) Concept mapping Visual lists Role playing Panel discussions Debates Games

	Jigsaw group projects
P.A, Mabrouk, ed.(2007), “Active Learning : Models from the analytical sciences”, ACS, Symposium series 970, Chapter 4, PP. 34-53, Washington, DC : American Chemical Society.	Problem sets Laboratories and projects Jigsaw Peer editing Peer led team learning
“Active learning in classrooms” Prepared by Michelle Schwartz, Research Associate, For the Learning & Teaching Office, retrieved from http://www.ryerson.ca/lt/taga/index.html	Interactive Lectures Problem solving, demonstration, Proofs and Stories The case study method Short lectures framing discussion period Concept mapping Visioning and Futuring Modelling analytical skills Pro & Con grid Quotations One-minute paper Muddiest point Fish bowl Student summary of another student's answer Drill review pains Jigsaw group projects Panel discussion Role playing Debates

<p>“Center for Teaching Excellence”, VCU, Accessed on July 14, 2016 http://www.vcu.edu/cte/resources/active-learning.html</p>	<p>One-minute paper Student summary of another’s answer Focused listing Stage setting Stage setting-II Mini cases Visioning & Futuring Picture making Recalling prior material Socratic method Finger signals/flash cards Everyday phenomena Think, Pair, Share Note taking pains Team troubleshooting Name your own poison Send a problem Drill review pains Panel discussion details Role-playing exercises Philosophical chains Explaining written material Thinking aloud pain problem solving (TAPPS) Concept maps Minutes Jigsaw One sentence summaries</p>
<p>“Speaking of teaching”, Stanford University Newsletter on teaching Fall 1993, Vol. 5, No. 1, Produced by the Center for Teaching & Learning</p>	<p>A change in Lecturing Questioning and discussion Role plays and case studies</p>

PRACTICE TASK

1. Differentiate between Cooperative and Collaborative active learning strategies.

FEEDBACK

1. Difference between Cooperative and Collaborative active learning strategies are given below:

Cooperative Learning	Collaborative Learning
Structured group ideal size 3-4 student	Any situation in which group can work together
Group works toward common goal such as positive interdependence, individual accountability, heterogeneous grouping Students receive training in small group social skills.	There is the belief that students already have the necessary social skills, and that they will build on their existing skills in order to reach their goals.
Activities are structured with each student having a specific role.	Students organize and negotiate efforts themselves.
The teacher observes, listens and intervenes in a group when necessary.	The activity is not monitored by the instructor. When questions are directed towards the teacher, the teacher guides the students to the information needed.
Students submit work at the end of class for evaluation	Students retain drafts to complete further work.

3.5.9 Barriers to Active Learning

- There is always pressure to cover more and more material, so students-activities taking up classroom time-seems wasteful.
- Getting your students' involved in classroom activities also require them to regularly assess their own degree of understanding and skill at handling concept or problems in specific discipline
- Initial preparation time is more for devising active learning strategies.
- Sometimes students resist non- lecture approaches and faculty do feel that they lose the command over the students.
- Sometimes Implementation in large class size is difficult to achieve
- The lack of materials or equipment needed to support active learning can be a barrier to the use of some active learning strategies

3.5.10 Overcome Barriers to Active Learning

With respect to the commonly reported obstacles, the following should be noted:

- The use of active learning strategies reduces the amount of available lecture time that can be devoted to content coverage.
- Faculty who regularly use active learning strategies typically find other ways to ensure that students learn assigned course content (e.g., using reading and writing assignments, go through their classroom examinations, etc.)
- Recycle old lectures;" will not necessarily take any more time than that needed to create thorough and thoughtful new lectures.
- Teaching does not result in equal amount of learning; this can be seen clearly in the painful disparity between what we think we have effectively taught, and what students indicate they have learned on the examination papers that we grade. With explicit instruction in how to actively participate and learn in less-traditional modes, students soon come to favor the new approaches.
- Large classes can be divided into small group for discussion activities, writing assignments can be read and critiqued by students instead of the faculty, etc.
- Asking students to summarize in writing the material they have read or to form pairs to evaluate statements or assertions does not require any equipment.

The following are the behaviours promote student learning:

- Appropriate use of humour.
- Praising student performance.
- Engaging students outside of the classroom.
- Appropriate level of self-disclosure.
- Encouraging students to talk.
- Asking questions about student viewpoints or feelings.
- Following up on topics raised by students even if not directly related to class material.
- Referring to “our” class and what “we” are doing.

(Gorham ;1988)

Teaching cannot be reduced to formulaic methods and active learning is not merely having students who are active in class. The teaching strategies and students learning activities must be carefully selected to support students’ achievement of the lesson content.

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Additional resources

- “Center for Teaching Excellence”, VCU, Accessed on July 14, 2016
[http://www.vcu.edu/cte/resources/active learning.html](http://www.vcu.edu/cte/resources/active%20learning.html)
- “Active learning in classrooms ”Prepared by Michelle Schwartz, Research Associate, For the Learning & Teaching Office, retrieved from <http://www.ryerson.ca/lt/taga/index.html>

Videos

Kaur Amandeep ,Active Learning, Published on June 26,2017 on You Tube
<https://www.youtube.com/watch?v=IEnZi-tMsl0&t=575s>

UNIT 3.6

Role of Media in Classroom Communication

“We need technology in every classroom and in every student and teacher’s hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world.”

(David Warlick)

3.6.1 Media: Concept, types and purposes

3.6.2 Digital Media in Teaching Learning

3.6.1 Media: Concept, Types and Purposes

After reading this Unit, you will be able to:

Learning Outcomes

- Explain the concept of media
- Enlist various types of media
- Compare the characteristics, advantages and disadvantages of various media types
- Explain the factors to be considered in selection of media
- Explain the Importance of media in classroom
- Describe the uses of media in classroom

3.6.1.1 Concept of Media

Media especially information and communication technologies have radically changed the way in which people communicate and connect with each other. 21st century learners are considered to be more tech savvy and express themselves on social media through images and pictures. Media can play an important role in classroom communication by enhancing the effectiveness and in turn assessing achievements of learning outcomes. The word media is plural of word medium and represents channel of communication and it refers to anything that carries information between a source and a receiver (Dewdney & Ride, 2006, Flew, 2004, Heinich, 1996). More specifically, it has been defined as physical means of communication i.e. Printed, graphic, photographic, electronic, mechanical or other means of arresting, processing and re-constituting experience for the learners. Media in classroom is the effective way to present instructions to students’.

Communicating effectively involves use of oral, written, and nonverbal communication skills for multiple purposes and integrating technology in the process of communication. Various types of Media are used in classroom for delivering instruction, to achieve learning outcomes. The use of media in teaching learning can help the teacher in gaining attention, arousing and sustaining motivation level of students, presenting information, delivering instruction to students.

3.6.1.2 Concept and Types of Media

Kemp and Smellie (1989), classified media into the following categories:

- Printed materials (textbooks, manual, teacher’s guide, student’s guide, information brochure etc.)
- Overhead Transparencies
- Audio recordings

- Slides and Filmstrips
- Multi-image presentations
- Videotape Recordings and Videodiscs
- Interactive Learning Media

Another broad classification of media can be:

- Printed media (Books, reference material, manual, instructional sheets etc.)
- Non printed media
- Projected Media- Slides, PowerPoint presentations, videos etc.
- Non projected Media – chalks, models, relia etc.

The explanation, purposes, advantages and disadvantages of some selected instructional media are given in table 6.1.1:

Table 3.6.1.1: Media in classroom communication

Media	Purpose	Advantages	Disadvantages
PRINTED MATERIALS TEXT BOOK: Text book is normally based on a predetermined course of study or syllabus. It is characterized by its selective and systematic organization of essentials, coherence and sequence among those essentials and effort at simplification to the degree that suits the intended	To attain objectives in cognitive and affective domain To cater to individual differences To promote independent study	Provides common body of information arranged in a logical order Helps in individualization of instruction Chapter summaries, questions to be answered and associated learning activities guide for studying of information. Economical, as can be used and reused. Students without reading problems can acquire information quickly and efficiently.	Bars learners to think, to do their own organization and to arrive at their independent conclusions May promotes rote learning Not interactive

<p>HAND-OUT: Handout may contain:</p> <p>Summary of the subject matter to be dealt</p> <p>Supplementary information</p> <p>Instructions for conducting experiment, operating a machine etc.</p> <p>Assignment for learners</p> <p>Reference materials</p>	<p>To motivate Learners</p> <p>To reinforce the information</p> <p>To develop study habits</p> <p>To evaluate Learners</p>	<p>Easy to prepare</p> <p>Facilitates detailed notes-taking</p> <p>Act as guide for further reading</p> <p>Provide structure to learning</p>	<p>Require production</p> <p>Non interactive</p>
<p>WORK BOOK: It is text produced for use by an individual Learner as a study guide-cum-exercise book. It usually incorporates exercises, problems, practice material etc.</p>	<p>To evaluate Learners</p> <p>To identify gap for remedial instruction</p> <p>To provide practice to the learner</p>	<p>Provide structured Learning experience to Learners</p> <p>Encourages individual practice</p>	<p>Costly because requires production</p> <p>Non-interactive</p>
<p>MANUAL: Manual contains complete information on a group of experiments or tasks as to be learnt by the learner.</p>	<p>To prepare Learners to perform experiments or tasks</p>	<p>Provides step-by-step guidance to learners for performing an experiment or a task</p> <p>Learner can learn on his own</p>	<p>Not interactive</p>
<p>GRAPHIC MATERIAL:</p> <p>Graphics are the combination of symbols, words, pictures and drawing that summarize significant information and ideas. It consists of:</p> <p>GRAPH: A graph is a visual presentation of numerical data. Graphs can be:</p> <p>Line graphs</p> <p>Bar graphs</p> <p>Circle or pie graph</p> <p>Pictorial graph</p>	<p>It conveys information in condensed and summarized form</p> <p>To help in focusing attention</p> <p>To provide better visual perception to learners</p> <p>To evaluate learners</p> <p>Line graph is particularly useful in plotting trends and relationships</p> <p>Bar graph provide direct comparison quantitative data at specified intervals of time</p> <p>Circle graphs are useful in comparing parts of a whole</p>	<p>Easy to construct</p> <p>Easy to comprehend</p> <p>Focus attention of learners</p> <p>Economical</p>	<p>Small size</p> <p>Require accurate reading skills on the part of the learner</p>

	Simplified drawings give graph realism and interest appeal		
<p>CHARTS: A chart is a combination of pictorial, graphic, numerical or verbal materials designed to present a clear visual summary of an important process or set of relationships.</p> <p>Charts can be:</p> <ul style="list-style-type: none"> Outline and Tabular chart Time-line charts Tree or stream charts Flow or organization charts Technical Diagrams Process Diagrams 	<p>Facts, figures and statistics are used to show relationships.</p> <p>Information is summarized.</p> <p>To show continuity in process</p> <p>Development of structures is shown.</p> <p>It stimulate Imaginative thinking and increase motivation level of students.</p>	<p>Simplicity</p> <p>Economical</p> <p>Easy to prepare</p> <p>Aid to memory</p>	<p>Small size</p> <p>Problem of storage</p>
<p>POSTER: A poster is a combination (Visual) of bold design, color and message.</p>	<p>Very catch and hold the attention of students</p> <p>To reinforce a significant idea in the minds of the Learners</p> <p>To develop appropriate attitudes</p>	<p>Vivid and attractive</p> <p>Economical</p> <p>Present single idea</p> <p>Easy availability</p>	<p>Small size</p>
<p>MAPS AND GLOBES:</p> <p>MAPS: A map is a flat representation of some or all of the earth's surface</p> <p>GLOBE: It is a spherical model of the earth</p>	<p>To provide location data</p> <p>To facilitate independent study</p> <p>To provide better visual perception to students</p>	<p>Easily available</p> <p>Give an accurate and reliable information</p>	<p>Symbols used in maps and globes have little or no relationship to reality</p> <p>Requires special skills to read and interpret maps and globes</p>
<p>PICTURES: A flat picture is a still, opaque representation of a scene or object-such as photograph, drawing, painting or textbook illustration</p>	<p>To introduce and motivate students for study of new topics</p> <p>To develop ability to contrast and compare</p> <p>To develop skills of inferring continuity</p>	<p>Easy availability</p> <p>Easy to prepare</p> <p>Economical</p> <p>Make inaccessible accessible to learners</p>	<p>Small size</p> <p>Lack of depth</p> <p>Lack of motion</p>

	<p>To stimulate creative expression</p> <p>To supplement verbal information</p>		
<p>TRANSPARENCIES, SLIDES AND FILM STRIPS:</p> <p>TRANSPARENCIES: It is a piece of triacetate or plastic sheet (cellophane) of 10'x10' with image area of 7½ 'x ½ ' approximately</p>	<p>To present verbal information.</p> <p>To show progressive development of a theme</p> <p>To stimulate student attention</p> <p>Progressive disclosure of the content is possible</p>	<p>Easy to prepare</p> <p>Easy to handle</p> <p>Economical</p> <p>Under full control of teacher</p> <p>Flexibility in use</p> <p>Teacher can maintain eye contact with Learners</p>	<p>Require equipment for projection</p> <p>Their use require training in operating OHP</p> <p>Problem of storage</p>
<p>SLIDES: A slide is a film transparency contained in either a 2"x2" or 2½ "x2½" 50 x 50 mm</p>	<p>To present visual information</p> <p>To teach a skill</p> <p>Useful for individual and group instruction</p> <p>To generate discussion in the class</p>	<p>Easy to prepare</p> <p>Economical</p> <p>Flexibility in use</p>	<p>Slides are expensive</p> <p>Their preparation demands knowledge and skill in photography</p> <p>Require equipment for projection</p>
<p>FILMSTRIPS: A filmstrip is a sequence of related still pictures imprinted on a strip of transparent 35 mm film</p>	<p>For sequential development of topic</p> <p>Can be used at a desired pace</p> <p>To provide individual and group instruction</p> <p>To teach a skill</p> <p>To stimulate imagination</p>	<p>Relatively inexpensive</p> <p>Simple to operate</p> <p>Relatively trouble free</p>	<p>Sequence is fixed</p> <p>Lack of motion</p> <p>Difficult to prepare</p> <p>Require equipment for projection</p> <p>Audio tapes are to be produced for individualized instruction</p>
<p>AURAL AIDS: RADIO, TAPE, RECORDINGS ETC.</p>	<p>To communicate verbal information, interviews, discussions by eminent experts</p> <p>To provide feedback to improve language skills, discussion techniques and interview techniques</p>	<p>Simple to operate</p> <p>Facilitate independent learning</p>	<p>Applicable only when subject matter does not require personal interaction and visual presentation</p>
<p>MOTION PICTURES –</p>	<p>To attain cognitive,</p>	<p>Provide true-to life</p>	<p>Development of skill</p>

<p>FILM</p> <p>A motion picture film is simply a long strip of film containing a sequence of still photograph, each of which is called a frame. Images can be produced in numerous films sizes namely 70 mm, 35 mm, 16 mm or 8 mm</p>	<p>psychomotor and affective objectives of learning</p> <p>To help recreate real or imagined events, actions or processes that have occurred that may possibly occur or that may not be capable of occurring in real life.</p> <p>To evaluate students</p> <p>To hold attention of learner and maintain interest</p> <p>Enhance retention</p> <p>To provide individual and group instruction</p>	<p>experiences</p> <p>Depict motion and continuity</p> <p>Bring accessible to classrooms</p>	<p>require repetitive showing of film</p> <p>Require special physical facilities</p> <p>Require expensive projection equipment</p> <p>Difficult to prepare</p> <p>Require training on the part of teacher to operate associated equipment</p>
<p>VIDEO PROGRAMMES:</p> <p>Video tape system, including video cassettes, is replacing the use of films, in classrooms. Though ½ inch reel to reel equipment is popular for inexpensive and convenient local production work, the ¾ inch video cassettes has become nearly a standard for distribution and utilization of videotapes for presentation of motion picture</p>	<p>In addition to the above, enlisted uses for motion pictures, it can be used as a medium and as a teaching learning tool.</p>	<p>Provide true-to-life experiences</p> <p>Depict motion and continuity</p> <p>Bring inaccessible to classrooms</p> <p>Used for independent learning</p> <p>Easy to handle</p>	<p>Production involves expensive equipment</p> <p>Use in classroom requires special physical facilities.</p>
<p>COMPUTER SOFTWARE:</p> <p>Computer programme for instruction is a sequence of carefully constructed items which leads a student to mastery of a subject with minimum error</p>	<p>To present information, programmed materials and visual illustrations</p> <p>To evaluate learners</p> <p>To provide remedial instruction</p> <p>Learner can move at his own pace</p>	<p>Promote independent learning</p> <p>Allow self-pacing</p> <p>Easy to operate</p> <p>Allow self-pacing</p> <p>Easy to operate</p> <p>Allows learning in simulated situation without risks</p>	<p>Very expensive</p> <p>Requires lot of training and experience</p>

SPECIMENS, MODELS AND EXPERIMENTAL KITS SPECIMENS: Specimens are objectives that are representative of a group or class of similar objects	To provide opportunities for in-depth study To provide opportunities for making comparisons and generalizations	Permits direct observation and study	Small size
MODELS: A model is a recognizable three dimensional likeness or representation of a real thing	To enhance instruction To help in learning, concepts, principles, structures etc. To help in understanding inaccessible and abstract ideas	Prepared at a reasonable cost Makes inaccessible accessible to the learners	Time consuming May mislead the learner as for as size of real object, equipment etc. is concerned
EXPERIMENTAL KITS: Consists of a package that permits conducts of a number of experiments	To help in understanding various concepts and principles	Compact Promotes independent learning	- Requires resources
MOCK-UPS: A mock-up may be defined as a full scale operating model where students can work directly for specific training and analysis.	To train learners in those areas which involve risks. To enable learner, understand the problems without risking his life of assets or equipment To train learners in cooperative activities	Provide real-life experience without risk in simulated situation Active involvement of learner	Time consuming Requires lot of resources
REALIA: It means the real things objects, or processes	To enable learner to develop basic concepts, principles or procedures. Provide firsthand experience to the learner	Results in effective learning Easy availability Economical	Difficult to acquire They may be too complex, too heavy, too costly or too dangerous to use.

Sources: Boric, 2002, Kemp, 1998, Mehran, 1992, Chandra, 1989, McCartney, 1973.

PRACTICE TASK

1. Define Media
2. Name three printed media that can be easily used in classroom.

FEEDBACK

1. Media is a channel of communication, that carries information between a source and a receiver.
2. Different Printed Media are:
 - Text book
 - Handout
 - Workbook

3.6.1.3 Selection of Media

Once the teacher has specified the objectives, decided learning activities and select instructional method, the next step is to select appropriate media. Selection of media is an important decision and a number of factors are to be taken into consideration. The following factors need consideration in selection of media:

I. Nature of the Learning Task

The nature of the learning task is given by the objectives or learning outcomes.

Objectives may fall in the cognitive, affective or psychomotor domains. Learning activities involving various types of experiences are designed for achieving the objectives. Each medium has its own 'attributes' i.e. capabilities to show symbolic representation, motion, colour, simultaneous picture and sound etc. Some media lend themselves better than other for achieving the desired objectives. A media of instruction, therefore, must be selected on the basis of its potential for achieving a stated objective.

II. Mode of Teaching/Learning

The mode of teaching/learning i.e. large group interaction, small group interaction and independent study for individual student is another factor to be considered in the selection of media. For example, the use of chart may not be appropriate for presentation to a large group because of the constraints of visibility by the learners, particularly those seated in the rear of the classroom.

III. Learner Characteristics

There are variations among learners in respect of their age, cultural environment, past experiences, physical, mental and emotional make-up, goals, needs etc. Furthermore, different learners have different 'learning styles'. Learners' characteristics, therefore, merit consideration in selection of media. Learners benefit from those media which match their individual 'learning styles'. However, it might not be feasible or economical to provide enough parallel media packages for each lesson.

IV. Cost and Technology Resources

The media selected must be within the budget and technology resources available.

V. Practical Factors

Some of the practical factors to be considered in the selection of media are:

- The range of viewing and hearing distance for the use of the media.
- Ease of 'interrupting' media to permit learner response and provide feedback.
- Availability of class-room facilities such as suitable furniture, power sockets, curtains etc. to permit the use of different media.
- Teacher support for obtaining required hardware and software, setting it up in the class room and returning it after use.
- 'Back up' or 'Stand-by' facilities available in case of failure of equipment, power etc.
- Teacher competence for operating required hardware.

PRACTICE TASK

1. Explain the factors need to consider while selecting media for classroom use.

FEEDBACK

1. Different Factors that effect that need to be consider while using media in classroom are:

- The range of viewing and hearing distance for the use of the media.
- Ease of `interrupting` media to permit learner response and provide feedback.
- Availability of class-room facilities such as suitable furniture, power sockets, curtains etc. to permit the use of different media.
- Teacher support for obtaining required hardware and software, setting it up in the class room and returning it after use.
- `Back up` or `Stand-by` facilities available in case of failure of equipment, power etc.
- Teacher competence for operating required hardware.

3.6.1.4 Purposes served by Media in Classroom

In classroom media can be used by teacher and student both. Teacher can encourage the students to read print material, show them any educational video and clip which help the students to understand the content. In classrooms media can also be generated by the students. Now a day's the students can create videos, write blogs, and are active participants of various social networking sites such as twitter, Instagram, WhatsApp which they are also using for academic purpose. Various purposes served by media in classroom are:

- Gain attention of learners.
- Arouse and sustain motivation of learners.
- Enhance involvement of learners in classroom activities or development of learner.
- Reinforce learner.
- Enhance interaction among learners.

(Locatis, C.N. & Atkinson 1996, Heinichet.al,1996, Mohan et.al,2001)

PRACTICE TASK

1. Explain the significance of media in classroom.

FEEDBACK

1. Some of the advantages of using media in classrooms are as follows:
 - Media enhance the effectiveness of communication if it is properly designed, skillfully produced and effectively used have great influence on teaching learning
 - It increases interest, hold attention and clarify ideas.
 - It reinforces the concepts, increase memory, add tone and also save times.
 - The additional support of media in classroom enhance learning.

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3.6.2 DIGITAL MEDIA IN TEACHING LEARNING

After reading this Unit, you will be able to

Learning Outcomes

- Explain the concept of Digital media
- Enlist various types of Digital media tools
- Explain the Importance of digital media in classroom
- Explain the factors to be considered while using digital media in classroom

3.6.2.1 INTRODUCTION: Digital Media

In the current age of globalization, digital media is becoming extremely important to prepare the students of 21st century (Center for Digital Education,2007). Technologies such as internet facility, web conferencing, Social media such as Facebook, twitter, blogs and wikis and other educational devices are the factors that change the role of teachers in educational environment. Keeping in view, the current scenario of technical education system, it demands the new trends in teaching about the concepts of engineering and technology which can help the learners to be a technocrat with good understanding of subject matter and friendly to use various digital media tools.

Digital media includes any format or devices used to convey content using signals in simple terms the electronics ways to capture, process, store and communicate the information (Jankowska ,2004).It is referred to as accessing, storing, managing, retrieving, creating and communicating digital information.

3.6.2.2 Types of Digital Media Tools

Media integration is consistently referred to as a relatively new phenomenon in education. Although complete media integration is not yet commonplace in classroom throughout the country due to the lack of infrastructure resources and knowledge about different ICT tools that are available to the teacher now a days.

Literature suggested different classification of digital media tools. Lim and Tay in 2003, classified media into the following categories:

I. Communicative tools

These tools allow the students to communicate with the teacher and peers outside the physical classrooms. These tools are most suitable for the activities that require some time to think before giving the response (Chen, Hsu and Hung,2000).

II. Informative tools

The tools are considered as a passive collection of information. Tools and information resources of the existing internet resources are the example of informative tools (Chen, Hsu and Hung, 1999).

III. Situating Tools

Multi used domain, virtual reality and simulation are involved in situating tools that helps to increase student's ability to use the concepts of the discipline in real practice (Phillips, 2004).

IV. Constructive tools

The tools that helps to create text, graphics, videos, virtual realities.

V. Collaborative tools

These are the tools that provides flexibility of one to one communication, one to many communication or many to many communications mainly in online learning environment (Lee, 2002).

Digital media tools i.e Information and communication technologies have brought revolution in every aspect of life including education. The range of alternatives available include (Refer Table3. 6.2.1):

Table 3.6.2.1: Various media tools and their uses

S. No.	Media tools	Uses
Information Providers		
1.	TedEd(Podcast)	Variation of TED Talks that offers shorter animated clips of subjects such as science, technology, social studies, etc. A platform where different communities can collaborate. https://ed.ted.com
2.	YouTube	No. of videos based lectures, recorded academics talks are available on YouTube. https://www.youtube.com
3.	Slide share	Slide Share is a hosting service for professional content including presentations, infographics, documents, and videos. https://www.slideshare.net/
Classroom interaction Tools		
4.	Edmodo	Edmodo is where teachers and students communicate, maintain calendars and posts any information. https://www.edmodo.com

5.	Google+	The site has best graphics & themes, and provide opportunity to have interactions among students and teachers by generating a circle on their own to connect. https://accounts.google.com
6.	Teacher Tube	A free community platform to share instructional content and videos of all sorts of started from very basics to more complicated work. https://www.teachertube.com
7.	Sgrouples	Users can create their own group and share information. Information shared within the group not for everyone. https://twitter.com/sgrouples
8.	Class Dojo	Class Dojo is a classroom communication app used to share reports between parents and teachers. Teachers track student behaviour and upload photos or videos. The gamification style system teaches developmental skills through real-time feedback. https://www.classdojo.com
9.	WordPress	On WordPress teachers can set up a web of communication and lessons with their students. Teachers can use it to create their own blogs to inspire students. https://wordpress.com
Social Networking Media		
10.	Facebook	Separate accounts have been created by teacher and students to connect with each other for academic purposes. https://www.facebook.com
11.	Twitter	Twitter is being used for academic purpose by pasting quotes for the students to increase their motivation level and also serve as a reminder tool to pass / remind information. https://twitter.com
12.	Instagram	The features of Instagram like photos and effects available for them, the students are sharing academic photos such as posters to present in conference, create pictorial presentations also. https://www.instagram.com
13.	Blog	Using blogs teachers can put lessons, links, and also promote writing skills among students by giving them such assignments. https://www.blogger.com
14.	Skype	Skype promote and develop virtual connections among academic communities. Most of the time it is used to do video conferencing. https://www.skype.com/en/

15.	Myspace	A largest social networking site in the world. It offers an interactive, user-submitted network for personal profiles, blogs, groups, photos, music, and videos. https://myspace.com/
16.	Labroots	Lab Root is a social networking site that allows peers, students to interact with each other majorly technical professionals, engineers' and scientists. The site is a precious tool which provides information. https://www.labroots.com/
Research Information Sharing		
17.	Academia.edu	The main purpose is to share research in various fields. www.academia.edu/
18.	Research Gate	Platform to collaborate for research ad share research information/result globally. https://www.researchgate.net/
Interaction with Professional		
19.	LinkedIn	Information about the world of work can easily be assessed with the help of this professional platform where students can also apply for jobs by posting resumes. https://www.linkedin.com/
20.	edConnectr	A visual mapping engine that save valuable time and energy of educators by narrows down certain criteria helps them to find like-minded educators. https://twitter.com/edconnectr?lang=en
Video/Audio Media Preparation		
21.	Vimeo based tool	There are no. of video making tools available which helps the students to create video of their projects, role plays, etc. https://vimeo.com/blog/category/video-school
22.	Pinterest	Pinterest allows the teachers to create their pages for classes by using different themes available on that. https://www.pinterest.com
23.	Prezi	Prezi is a presentation software. Instead of explaining slide by slide, conversational presenting can be achieved using a single space. https://prezi.com/
24.	PowToon	Animated videos and animated presentations can be created by using this cloud-based software. https://www.powtoon.com/

25.	Podcast	podcast is a " digital recording of a radio broadcast or similar program, made available on the internet for downloading to a personal audio player." in other words, it is a digital audio file that is created, shared and heard. Podcast can also be in the form of videos streamlined online, however, video podcast is known as vidcast or vodcast. (You can check different Podcast that can be easily used in education on the link below (https://www.opencolleges.edu.au/informed/features/50-educational-podcasts-you-should-check-out/)
26.	Web virtual tools based reality	VR technology has delivered an effective means through which digitisation and audio-visual aids can be more effectively harnessed to address current requirements of education and required outcome. http://virtualrealityforeducation.com/resources/
Visualisation tools		
27.	Visualisation tools	Fusion Charts Chart.js Leaflet NVD3 D3.js
Evaluation tools		
28.	Online Evaluation Tools	Plickers Google forms https://www.plickers.com/ https://docs.google.com/forms
Media Preparation		
29.	Writing tools	One note, Scrivener
30.	Online board	Trello https://twitter.com/trello Hubspot https://www.hubspot.com Blackboard https://www.blackboard.com/index.html
31.	Online learning platform	Swayam- https://swayam.gov.in/ NPTEL- https://onlinecourses.nptel.ac.in/ MOOCs- http://mooc.org/ Edx - https://www.edx.org/ Coursera- https://www.coursera.org/ Udacity - https://in.udacity.com/ Udemy - https://www.udemy.com/ Khan academy - https://www.khanacademy.org/ Skillshare - https://www.skillshare.com/

		<p>Harvard University - https://online-learning.harvard.edu/</p> <p>Ted - https://ed.ted.com/</p> <p>Alison - https://alison.com/</p> <p>Future learn - https://www.futurelearn.com/</p> <p>Web Development - https://digitaldefynd.com/best-free-web-development-course.../</p> <p>Digital Marketing - https://digitaldefynd.com/best-free-digital-marketing-cert.../</p> <p>ios app development - https://digitaldefynd.com/best-ios-app-development-course-.../</p> <p>Open Learn - http://www.open.edu/openlearn/</p> <p>Future Learn - https://www.futurelearn.com/</p> <p>Tuts Plus - https://tutsplus.com/</p> <p>Open Culture - http://www.openculture.com/</p>
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PRACTICE TASK

1. Define Digital Media
2. Name three Digital Media tools that can be easily used in classroom.
3. Match the following:

Column I	Column II
A. Podcast	1. Facebook
B. Social Media	2. Google Form
C. Evaluation tool	3. Slide Share
D. Animated videos	4. TedEd
E. Presentation Software	5. Powtoon

FEEDBACK

1. Media is a channel of communication that carries information between a source and a receiver.
2. Different Digital Media tools are:
 - Google Forms
 - WhatsApp
 - You tube

3.

Column I	Column II
A.	4
B.	1
C.	2
D.	5
E.	3

3.6.2.3 Advantages of using Digital Media in Classroom

- The digital media tools could be used for storage of information, online interaction, collaborative learning and improvement of interest in learning, Communication without boundaries, research, information catalogues and innovation in the new world.
- Due to the connectivity available by using different media tools regardless of time and space the information can be spread to the large audiences at a speedy rate.
- The Social media such as YouTube, twitter and Facebook can be easily used for creating a discussion in the classroom. These are the fastest way of finding information that might be of great value for all students.
- The blogs/Wikipedia can be utilized to encourage creative writing and to enrich grammar skills. The blogs are also employed as project life cycle management tools as well as collaborative document building.
- Animation and simulations enhanced understanding and create information in various forms.

(Heinchi et al.1996, kemp and daylon, 1998, Kemp & Smellie, 1989)

3.6.2.4 Factors to Consider while using Digital media in Classroom

Digital media could play a vital role in education and help both teacher and students to maximize their knowledge. Some of the factors that needs to be consider while using media in classrooms are:

- Media enhance the effectiveness of communication if it is properly designed, skillfully produced and effectively used have great influence on teaching learning. Ethical use of media must be kept into consideration.
- Media give students something new, but not all of teachers know how to implement it correctly, so sometimes media disturb learning process instead of helping students to achieve learning goals.
- Always start small, teacher can use PowerPoint Presentation, may be find one video to show. when teacher and students both are comfortable then expand the use of media
- The media is used to enhance learning, so carefully integrate media in classroom. Initial impact of usage need to be evaluated after collecting feedback.
- Most of the students use digital media for personal purposes and not for learning. So, the role of teacher is not just to define or dictate ideas, generate or assign contents, but also to help every learner to construct learning path

- Computer mediated communication such as email, blogs, wikis do not have the capacity to support social and affective interaction because they lack the ability to process ambiguous content.
- Use media as per the demand of the content and what are the expectations of students. Present material under the best possible environmental conditions. Nonverbal cues increases speaker –listener interactions so people prefer face to face communication for complex task as compare to online interaction.
- In India there is an increase of ‘digital gap or knowledge” between those who have the knowledge as well as access of the media and those who have no knowledge and access of media. Before introducing media teacher must know how to use it.

PRACTICE TASK

1. Explain the limitations of digital media usage in classroom.

FEEDBACK

- Training Is required to the teachers to properly plan their class by integrating Media
- If the teacher fails to help learner to decide their learning goals students can use media for nonacademic purposes.
- For complex task and content there is a need to plan more interaction on online learning environment.
- Lack of resources and digital literacy is a major issue to integrate media in classrooms in India.

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UNIT 3.7

Use of Board (Whiteboard/Blackboard)

“The inventor or introducer of the system deserves to be ranked among the best contributor to learning and science, if not among the greatest benefactors of mankind.”

(Krause, D.A)

3.7 USE OF BOARD (WHITEBOARD/BLACKBOARD)

Learning Outcomes

After reading this Unit, you will be able to

- Explain the concept of board (white/black).
- Assess the advantages of using board effectively.
- Assess the disadvantages of using board only as a classroom instructional medium.
- Explain how board can be effectively used in classroom.
- Explain various methods of using the board in the classroom.

3.7.1 Concept of Using Board in Classroom (White/Black)

Even today when the teacher can use many visual aids like smart boards, LCD projector, board (whiteboard/blackboard) still remains the most widely used instructional medium in classroom. It helps the teacher to present written and visual ideas, has had a profound impact on pedagogy since ages (Avenia T.2012). Despite the new technology and devices used in the field of education till date it remains irreplaceable. Being teachers, we all agree that it helps us for making instructions concrete and understandable.

There is no much difference in principles or factors for using either white or blackboard that must be followed by the teacher to make a presentation effective. The available literature for the chalkboard also supports the effective utilization of the whiteboard.

(Author's viewpoint)

As the board (whiteboard/blackboard) usually available in every classroom teacher should plan and practice board presentations in the same way they plan and practice the use of other teaching aids.

Definition

A whiteboard is a non- electronic variation of the traditional “rewriteable” classroom blackboard but is white instead of black and of a material that can be written on with coloured makers known as dry erase markers.

3.7.2 Advantages of Using Board

“The inventor or introducer of the system deserves to be ranked among the best contributor to learning and science, if not among the greatest benefactors of mankind.

(Krause, D.A 2000)

In 21st century the use of various teaching aids and media such as blogs, discussion boards and smart boards are increased but yet classrooms still thrive when stripped down to the basic chalk/marker and a board (white board / black board).

The advantages of using this visual aid are:

- Board whether whiteboard /blackboard is easily available at very low cost which is also simple in use, require minimum maintenance, flexible to use and very economical educational Technology. (Baratram, A.W., 1981)
- The teacher can develop his/her lesson at a pace the students' can understand and also by considering the type of the content i.e. verbal pattern, diagram, numerical problem etc.
- The board (white board / black board) eliminate the urge to feed information forcefully. The teacher can present any information to students' any time they demanded as well as if he/she thought it is required.
- For students, board (white board / black board) is a mean of self-expression and self-participation.
- While using the board teacher can obtain immediate feedback from students by analysing their body language and by asking questions to the students. It also Increases the rate of interaction between teacher and students
- By sketches, diagrams, outlines it is easy to clear confusing verbalism and also help the teachers to present information. (C Karan Fuson, T Stephen Smith, 1996)

3.7.3 Disadvantages of Using Board

- The teacher is the only source to provide the information.
- The traditional boards (white board / black board) do not allow the information to be stored. Only those students are benefitted who are present in the class.
- Board (whiteboard/blackboard) must not be the only aid used by teacher, some other teaching aids also need to be used depending upon the nature of the subject.
- Sometimes it is not possible for the teacher to take care of individual needs of the students.

PRACTICE TASK

1. Define Board (White/Black).
2. Enlist advantages and disadvantages of using board (whiteboard/blackboard) in classroom.

FEEDBACK

1. A whiteboard is a non- electronic variation of the traditional “rewriteable” classroom blackboard but is white instead of black and of a material that can be written on with coloured makers known as dry erase markers.
2. The advantages of using this board (White/Black) are:
 - Board whether whiteboard /blackboard is easily available at very low cost which is also simple in use, require minimum maintenance, flexible to use and very economical educational Technology.
 - The teacher can develop his/her lesson at a pace the students’ can understand and also by considering the type of the content i.e. verbal pattern, diagram, numerical problem etc.
 - It eliminates the urge to feed information forcefully. The teacher can present any information to students’ any time they demanded as well as if s/he thought it is required.
 - For students, board (white board / black board) is a mean of self-expression and self-participation.
 - While using the board teacher can obtain immediate feedback from students by analysing their body language and by asking questions to the students. It also Increases the rate of interaction between teacher and students
 - By sketches, diagrams, outlines it is easy to clear confusing verbalism and also help the teachers to present information.

The disadvantages of using board (White/Black) are:

- The teacher is the only source to provide the information.
- The traditional boards (white board / black board) do not allow the information to be stored.
- Only those students are benefitted who are present in the class.
- Board (whiteboard/blackboard) must not be the only aid used by teacher, some other teaching aids also need to be used depending upon the nature of the subject.
- Sometimes it is not possible for the teacher to take care of individual needs of the students.

3.7.4 Factors for Effective Presentation by Using Board (White board/ Black board)

Following principles/factors, if taken into consideration by teachers while working on board (whiteboard/blackboard) would improve the effectiveness of the instruction in the classroom.

3.7.4.1 Dos' Need to be followed While Using Board (Whiteboard/Blackboard)

i. Preplanning

- While preparing lesson plan the teacher need to decide what type of content can be best presented by using which teaching aid. (Jadhav, V.S. et.al ,2010)
- Collect everything need for the board such as marker/chalk and duster. There must be specific place where markers / chalk and duster can be kept.
- Keep the board clean. If the board (whiteboard/blackboard) is not clean properly, it is possible that the information is not visible to all the students especially who are sitting in the last row.
- It should be placed on the surface that is well lighted and the entire surface should be in complete view even for the students who are sitting in the last row of the class.
- The board should be mounted on an appropriate height within the reach of the teacher and visible to the students.

ii. Organisation of board space

Lesson Outcomes	Title of topic	Business area
1.		
2.		Additional Information
3.		
4.	Working area "Develop one point at a time".	<div>For e.g. Any Formula</div>

iii. Writing on board (whiteboard/blackboard)

The qualities required in writing are legibility, speed and beauty. In developing legibility consider the following aspects:

(a) Style of writing

- Writing material need to be simple and brief. Precise statements are more effective than writing long sentences. Avoid spelling mistake.
- Keep incidental work separate from the main record. Organize the work into topics and use a heading for each. Highlight important statements and enclose formulas/equations in rectangle.

(b) Shape

- Keep your lettering as simple as possible and legible. Use capital letters where appropriate, but remember that the words written in lower case are easier to read.

(c) Lettering Size

- For determining the appropriate size of letters capital and small, count paces to rear most seat. Size of capital letters in minimum i.e. height should be four times the distance in number of paces from the rearmost seat while it should be two and a half times the distance for small letters.
- A letter 1-inch-high can be clearly seen at a distance of 25 feet. Appropriate size for capital letters is 40 mm and the size of the running letter should be 22.5 mm. Use different colours for writing.

(d) Spacing

- For increasing the legibility of handwriting, give proper space between words and lines
- Do not overcrowd the board with too much of subject matter. A few important points make a vivid impression.
- Remove distracting material from the board so that students can concentrate on the material being presented at that time.
- Spacing between the two written lines should be two third of the height of the capital letters.
- Write horizontally. It is better to write in small letters and leave reasonable space between them than to write larger and have two rows of writing practically touching each other.

(e) Speed

- Speed is essential for good co-ordination of the board (whiteboard/blackboard) work and oral exposition but not at the price of legibility.

(f) Sketching on board

- Complicated figures can be shown to the students by using different teaching aid e.g. with help of power point presentation and one can also provide handout to the students
- Develop the diagrams as the lesson develops
- While developing figure/writing, it is desirable that the teacher should explain or narrate.
- Draw the diagram to explain essential principles and make it as simple as possible. For drawing horizontal draw left to right and for drawing vertical line draw from top to bottom.
- Label the diagram neatly and dimension them properly.

(Barat Ram, A.W, 1981)

(g) Posture and Movement

- Always stand up straight. Facing the board squarely and work at eye level. To keep you writing horizontal move while writing.
- The whole arm should be move freely from the shoulder. If only a wrist movement is used it will result in small lettering. Work with your forearm keeping wrist rigid.

(h) Clean the board

At the end of your lecture, make sure to clean the board (whiteboard/blackboard) so as to avoid inconvenience on the part of next teacher, clean the board properly.

3.7.4.2 Do Not Need to be followed While Using Board

- Do not use abbreviation that is not being commonly used.
- Avoid the use of extreme corner of the board for writing content.
- Do not turn your back to the student while writing is over. Stand on one side and explain the content to the class.
- While drawing something it is permissible to look at the board because teacher is not able to explain the content.
- Do not use double lines or underline for headings.

3.7.5 Different Methods of Using Boards

Board (whiteboard/blackboard) is regarded as a medium to be used by the teacher and students both. Some of methods of using board are as follows:

3.7.5.1 Teacher-Centred Methods

This method is best to use when any new information given to the students that need to be explicit and clear. Till date, in India most of the classrooms have been organized with students sitting in rows with the teacher at front using board (whiteboard/blackboard) to pass instruction to direct learning and ensuring disciplined classroom. The different method used by the teacher for these types of instructions are:

- I. **Solve then explain method (Teacher centred approach):** The teacher will solve the problem on the board (whiteboard/blackboard) along with the explanation. In this method the teachers can also integrate the technology to make students understand the content fully.

(C. Karen Fuson, T. Stephen Smith, 1996).

- II. **Sequencing method:** The solution of the problem need to be given in sequence rather than the whole content presented in one go.
- III. **Verbal Summary notes:** The teacher present the key points of the topic in writing and develop the content explanation verbally in classroom.

(Barat Ram A.W., 1981)

3.7.5.2 Students' centred method

Since from 1970's teachers began to experiment with more innovative and experimental style of teaching. Teacher can give more control to the students' over what happened in classroom.

In 21st century, the different teaching methods can be used with traditional board (whiteboard/blackboard) that can facilitate the collaborative learning environment where students' plays an active role and use the board (whiteboard/blackboard), both in problem solving and for the explanation of the work to each other. These student centred teaching methods by using board (whiteboard/blackboard) are:

- I. **Brainstorming:** By using the board the teacher can call students to generate a large number of ideas quickly. It actively engages the students in the learning process and

encourage full participation as one person ideas sparks off ideas for others. The teacher can use board (whiteboard/blackboard) for the brainstorming sessions for the class.

- II. **Mind map /Concept map:** To increase the rate of interaction and to engage the students' actively in the process of teaching learning the faculty can choose many collaborative techniques such as mind mapping/concept mapping.
- III. The teacher can call group of students to use board (whiteboard/blackboard) for concept mapping also which will help the students to organise their thought visually. It facilitates the teacher to identify prior knowledge, a breakdown in understanding of different components of a topic or area of improvement.

PRACTICE TASK

1. What are the various parameters teacher needs to consider while using the board in classroom?
2. Enlist various teacher centered methods of using the board (Whiteboard/ Blackboard).

FEEDBACK

1. Preplanning
2. Organization of board space
3. Writing on board
 - Style of writing
 - Shape
 - Lettering Size
 - Spacing
 - Speed
 - Sketching on board
 - Posture and Movement
 - Clean the board

2. The different method used by the teacher are:

- i. **Solve then explain method (teacher centred approach):** The teacher will solve the problem on the board (whiteboard/blackboard) along with the explanation. In this method the teachers can also integrate the technology to make students understand the content fully.
- ii. **Sequencing method:** The solution of the problem need to be given in sequence rather than the whole content presented in one go.
- iii. **Verbal Summary notes:** The teacher presents the key points of the topic in writing and develop the content explanation verbally in classroom

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Additional Resources

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Videos

- Classroom Management 8: Using the Board, [lrnteach english](#),Published on Aug 6, 2012<https://www.youtube.com/watch?v=82YMaq1JbA0>
- Using the board in ELT,[Dylan Gates](#),Published on Jul 31, 2017, <https://www.youtube.com/watch?v=Eb5AgCDP5vM&t=114s>

UNIT 3.8

Feedback

“The single biggest problem in communication is the illusion that it has taken place.”

(George Bernard)

3.8 FEEDBACK

“Just the right amount”

(Shute, 2008)

Learning Outcomes

After reading this Unit, you will be able to

- Explain the concept of feedback
- Enlist various types of feedback
- Explain four 'W's and one 'H' of feedback
- Explain the relation between Assessment and Feedback

3.8.1 Concept of feedback

In the process of Communication, the final and most important component is feedback. It is the response given by the receiver to the sender. In order to decide effectiveness of communication the sender needs response of the receiver. The feedback tells the sender many things such as, whether the message is received successfully or not, whether the choice of medium/channel was appropriate etc. If the appropriate feedback is given by the receiver to the sender then the sender can modify, remodel his strategy of communication.

In educational institutions, the communications are more effective where feedback is applied. With feedback, it is possible to judge to what extent the communication is getting through. It also provides an opportunity for questioning which leads to clarification. It helps the students as well as the teachers to maximize their potential by identifying their strength and areas for improvement, and identify actions needs to be taken to improve performance.

Feedback can be normal in terms of summative evaluation but also provided on day to day basis as a part of formative evaluation. When the learners and teachers do not receive an adequate feedback in respect of their performance, it increases the uncertainty at their part.

Feedback is a term that has several definitions, it can relate to many issues and is used for many purposes. The focus of this module is on education and research defines the feedback in this context are as follows:

“Information that students have about their performance with the intention of guiding them in acquiring desired attitudes and skills”.

(Westberg & Hilliard, 2013; Hattie & Timperley, 2007)

Taras, 2013 mentioned that feedback ultimately is what one needs in order to learn, a key to learning. It is “a product that is presented to the learner by someone”. In simple terms, the feedback is simply a judgement about the performance of the other.

The teacher’s job is to make ensure that students learn the way they are meant to learn. When the teacher helps the students and shows his/her expertise, teacher is giving the feedback that is critical to effective teaching and learning process.

3.8.2 Types of feedback

The feedback is broadly divided into two types:

- i. Intrinsic feedback:** Individual receives feedback from within about quality of performance during process of completing activity.
- ii. Extrinsic feedback:** Information supplied about the performance of an individual by other agents or persons about the appropriateness or accuracy of performance.

Examples of Extrinsic feedback are teacher telling students that their answer is correct, incorrect or needs improvement, very good to very poor depending upon the nature of learning objectives, task and process.

Forms of Extrinsic Feedback: Extrinsic feedback can take many forms. They are depicted in Table 3.8.1.

Forms of feedback	Description of feedback	
Positive and negative feedback	Positive	Negative
	Give information to an individual about correct aspects of students' performance	Informs students of their incorrect or inappropriate performance
Reinforcement and punishment	Reinforcement	Punishment
	Strengthens particular behavior or response	Weakens particular behavior or response
Intended and non-intended feedback	Intended	Non-intended
	Feedback received by the students is interpreted in the same way as sender wanted to convey	Receiver of the feedback has different perceptions from that intended by the sender
Evaluative and non-evaluative feedback	Evaluative	Non-evaluative
	Involves implicit or explicit value judgements about an observed performance Can be expressed in a non-verbal mode.	Based on objective and factual criteria
Corrective feedback	Includes in addition to feedback, ways to correct errors	

(Source: Cole & Chane, 1987)

Table 3.8.1: Different Forms of Extrinsic Feedback

PRACTICE TASK

1. Define Feedback.
2. What are the different types of Feedback?

FEEDBACK

1. Information provided to the students about their performance with the intention of guiding them in acquiring desired attitudes and skills.
2. The feedback is broadly classified as:
 - i. Intrinsic Feedback
 - ii. Extrinsic Feedback

Different forms of extrinsic feedback are:

- Positive and Negative feedback
- Reinforcement and Punishment Feedback
- Intended and Non intended Feedback
- Evaluative and Non Evaluative Feedback
- Corrective Feedback

3.8.3 Four 'W's and one 'H' of feedback

Feedback is about validity; what students' have done. There are many strategies that how the feedback can become effective. The major parameter needs to be focused while using feedback are:

- Why to provide feedback?
- When to provide feedback?
- Who will provide feedback?
- What to provide in feedback?
- How to provide feedback?

The explanation of these parameters are given below:

3.8.3.1 Why to provide feedback?

At Institute level mainly the feedback is provided to students', teachers and administrators. Following are the reasons why the feedback is being provided:

- a) Feedback to students – Students must have feedback about the quality of the work they have produced along with the clarification they require. The purpose of giving feedback is given in Table 8.2.

Explain the students what they have done	Clarify their doubts , inform, describes
Identifies strengths and weaknesses	Diagnosis, differentiates, remediates
Help students to move forward	Motivates, empowers, liberates
Assists in evaluation of programme	Monitor, maintain standards.

(Source: University of reading, 2000)

Table 8.2: Purpose to provide feedback to students

As a result, it provides a

- basis for maintaining or improving performance
 - forum for assessing need and planning additional experiences.
- b) Feedback to teachers – Immediately, after the class when teacher collect the feedback provided by the student he/she can reflect on whether the learning objectives are achieved or not, what can be the best instructional media / method to be used while teaching. Teacher come to know about the effectiveness of the teaching.

- c) **Feedback to administration** – The feedback collected at institute level helps to maintain and monitor standard which assists with evaluation of the programme.

3.8.3.2 When to provide Feedback?

For feedback to be effective for students, it must result into improvement in the quality of work submitted and taken them from that point to the next level. The timing and function that will be served by providing feedback needs to be taken into account. The feedback will be effective only if:

- When it is provided to the students' immediately after the completion of the task.
- The feedback must be given only after the students have made genuine attempt to complete the task.
- When the students are engrossed in figuring out a difficult task, feedback should be delayed, but frequent. Feedback related to task can be provided which guide the students to complete the task (however, this does not mean to provide all the guidance which create ease for them to complete the task).
- Sometimes, for difficult task early feedback can also be provided to students which helps in better understanding
- For formative evaluation, the feedback provided to the students must be free from any judgement and the purpose is to modify the thinking and behavior. It also helps, the teacher to make decision about instructional delivery and can alter instructions if required.
- For summative evaluation, the feedback need to be provided along with the final grades / scores of the student.

The factors that influences the way, feedback is provided is totally dependent upon the amount of the feedback, type of task assigned and number of students. If the class size is large, the feedback to the group can be provided immediately using oral mode and time consideration is also taken into account for providing feedback to the individual student.

3.8.3.3 Who will provide feedback?

The feedback can be provided by –

- a) **Teacher to individual student** – Individual feedback can be given based on particular qualities of a students' work and is maximum utilized by the students. Sometimes, when the teacher tries to avoid some of the ego issues, the feedback can be provided individually in private.

b) **Teacher to group of students'** – Group feedback is a regular part of instruction. The group feedback is provided:

- For performance based activities, when the students are working in groups.
- For revision on a specific task.
- When returning the work submitted by the student.
- To develop understanding for the readiness objectives of the class/lectures.

c) **Self-feedback by the student**

Self-generated feedback by the student might lead to reinterpretation of the task, setting up goals again, identify tactics for improvement and using appropriate strategies. It might influence subsequent self-regulation of the student, when according to feedback they are ready to revise his/her knowledge domain, beliefs.

d) **Peer Feedback**

Peer feedback is not a peer review for evaluation. This type of feedback encourages the students to become more introspective and reflective. It provides growth, assistance, guidance, recognition and encouragement.

3.8.3.4 What to provide in feedback?

The feedback provided to the students must be relevant appropriately and according to the task assigned. The decision to provide what type of feedback will depend on nature of the task, activity structure (individual or group), level of performance. For providing the quality feedback, following parameters need to consider:

- Feedback helps the students to acquire 'Learning to Learn Skill'. The quality feedback provides information about the task, in-depth analysis which present detailed errors.
- Feedback about the task needs to be more specific and timely. It must also taken into account the current understanding and ability level of the student. It must provide the information that facilitate the process of learning.
- The effective feedback always related to the achievement of learning objectives in particular which helps the students to progressively develop the task in hand.

3.8.3.5 How to provide feedback?

There are three different modes that can be used to provide feedback. These are as follows:

- a) **Oral feedback** that is given orally and often in interaction with people (Brookheart, 2006). That is more instant and influential (Clark, 2003), but it is difficult to record and may be for a short

period. Whenever, the teacher provides oral feedback he/she must have clear judgement about how the student receive it.

- b) **Written feedback**, Word choices should be more respectful of students as individuals and position them as active agents of their own learning (Johnston, 2004). Much of the formal feedback, is written and also helps to maintain a formal record of progress. The written feedback can be given to individual students and to the group of students also. The factors to consider while providing written feedback are:
- The message must be clear to all the students in specific tone. The purpose of feedback is to improve the quality of work or other behavior characteristic, not accepting the poor quality of the work.
 - The feedback must be descriptive; not too short or not too broad, just in the right amount.
 - The message must convey the same meaning as intended by the teacher.
- c) **Non-verbal feedback**, according to the definition, the non-verbal communication is based on Learned, shared systems of acts we do, that we deem to be symbolic (Epstein & Rafi, 2004).

In the classroom situation, sometimes action speaks louder than words. The teacher can also provide feedback with physical act of communication like body movements, expressions and postures. Sometimes, no feedback is also feedback in itself, it would indicate disagreement or non-acceptance of idea.

PRACTICE TASK

1. What are the different parameters need to consider while providing feedback to students?
2. What are the different modes, a teacher can use to provide feedback in classrooms?

FEEDBACK

1. For providing the quality feedback, following parameters need to consider:

- Feedback helps the students to acquire 'Learning to Learn Skill'. The quality feedback provides information about the task, in-depth analysis which present detailed errors.
- Feedback about the task needs to be more specific and timely and also taken into account the current understanding and ability level of the student. It must provide the information that facilitate the process of learning.
- The effective feedback always related to the achievement of learning objectives in particular which helps the students to progressively develop the task in hand.

2. The different modes of feedback are:

- Oral feedback
- Written feedback
- Nonverbal feedback

3.8.4 Relationship between assessment and feedback

Feedback and assessment are closely related. The major purpose of the feedback is to improve the performance level of students. In higher education the assessment of student performance can be formative, summative, or both.

In formative assessment, feedback to students is provided in terms of their strength and weaknesses so that they can improve their performance. It also provides information to teachers about where students are experiencing difficulties and where to focus their teaching efforts.

Summative assessment is any assessment which counts forwards the final grade/mark including both final examinations and formally assessed assignments. Assessments are considered both formative and summative when the work contributes to the final mark/grade and when there is also the opportunity for students to improve their performance. The type and amount of feedback will vary depending upon whether it is formative or summative. The following are the key principles for teachers to consider when providing assessment feedback to students:

- Format of the feedback must be in line with method of assessment.
- While providing feedback, learning objectives must be taken into account.
- The transparent system of assessment need to be followed.
- The students and teachers must agree and clearly know the criteria for assessment.
- The institute must follow the criteria prescribed by the university / board.

Reflection on assessment allow teachers to review the appropriateness of the method of assessment being used and effectiveness of the feedback that they have provided. It can also be very useful for students' too because it facilitates personal development through reflective learning and self-regulation.

3.8.5 Obtaining and Providing Feedback

Table 3.8.3: Summarizes the type and mode need to be used to provide and obtain quality feedback

TABLE 3.8.3: OBTAINING AND PROVIDING FEEDBACK

Task	Providing Feedback			Type of Feedback		Obtaining Feedback		
	Oral	Written	Non-verbal	Summative	Formative	Oral	Written	Non-verbal
Assignment (practical guide)	<input type="checkbox"/>	<input type="checkbox"/>	--	<input type="checkbox"/>	--	<input type="checkbox"/>	--	--
Seminar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	--	<input type="checkbox"/>
Written Tests	<input type="checkbox"/>	<input type="checkbox"/>	--	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	--
Tutorial	<input type="checkbox"/>	<input type="checkbox"/>	--	--	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Practical Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Group Discussion	<input type="checkbox"/>	--	<input type="checkbox"/>	<input type="checkbox"/>	--	<input type="checkbox"/>	--	<input type="checkbox"/>
Project Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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