UNIT 1 ISSUES IN COMMUNICATION

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1.0 INTRODUCTION

This is the first unit of the course on Communication Technology for Distance Education. The purpose of this Unit is to discuss the concept of communication as a basic human process. We shall discuss and explain the broader framework for the study of communication, which is the mainstay of distance education.

The quality of communication is becoming more and more significant in social transactions and in the educational systems in particular. In this unit we discuss two broad issues — i) the concept of communication, particularly educational communication, and ii) the process of communication. An attempt has also been made to link the concept of general communication with education in general and distance education communication in particular.

1.1 OBJECTIVES

After going through this unit carefully, you should be able to:

- define the concept of communication,
- explain the functions and process of communication;
- describe the different kinds of communication with examples of each;
- enumerate educational communication as a system;
- describe the barriers in the way of effective communication, and
- explain the implications of communication for distance education.

1.2 COMMUNICATION: THE CONCEPT

Communication is defined in many different ways. Some explain it as an 'art' — something creative, while others say it is a science — a learned process.
behaviour/skill. In a broader sense, communication is much more than an art. It is partly a skill and partly a science as it involves certain learnable techniques and psychomotor skills. However, communication is better described as a science because it is based on certain principles that can be verified and used to make it effective. Our assumption here is that communication is a scientific study, which produces skilled communication practitioners. Thus, we shall study 'communication' as a science and seek a scientific explanation for the concept of communication.

It is difficult to define communication through a single definition. Different people perceive it in different ways in the different contexts, provided by the various environments or surroundings where communication takes place. Starting from the sharing of meaning to persuading others to elicit the desired/intended responses, communication has been defined to suit situational purposes. We may agree that 'the search for the single definition of communication seems to be a futile quest'. At best we can define communication according to its components. There are three main components of communication: the source, the channel, and the receiver. From the source's point of view, communication is essentially persuasion, i.e., to assure you as a communicator that your communication has taken place, or that the desired outcomes are achieved. From the receiver's point of view, communication is a process to elicit the desired responses. As a source you would be happy if the receiver could behave in the way you intended him/her to behave. From the channel point of view, communication is a medium, a carrier of information from the source to the receiver and/or vice-versa. In other words, we can say that communication is defined in terms of the functions to be performed or the objectives to be achieved. According to Shannon and Weaver (1949) the primary concern of communication is to reproduce as faithfully as possible a message sent from one place to another place. On the basis of different explanations, Schramm (1973) defined communication as the functions of persuading, informing, teaching and entertaining people. Therefore, communication is a process by which people create and share information with one another in order to reach a common understanding (Rogers, 1986).

1.2.1 Functions of communication

On the basis of the explanation we have given in the preceding paragraphs, we conclude that communication involves individual as well as collective activities of sharing ideas, facts and information. Thus communication performs various socio-psychological functions. MacBride (1980) has discussed some functions of communication in a social system. The main functions are as follows:

i) Information: Communication refers to collective storage and dissemination of information for wider utilisation by people. In this way it enables people to participate in and take intelligent decisions on, any issues of social relevance. Information has been taken as a resource for development — socio-cultural and economic.

ii) Socialisation: Communication helps individuals become active members of the society to which they belong. People learn social norms in
order to live cohesively. Having access to a variety of information, individuals get opportunities to understand each other and appreciate other people's feelings, emotions, ideas and expectations in a social system.

**iii) Motivation:** Motivation of the individual members of a society plays an important role for its development. Communication fosters the individual and community activities and motivates the people to meet goals, which have been mutually agreed upon. Well-informed individuals take the initiative in activities of social welfare.

**iv) Education:** Dissemination of information enhances the individual’s intellectual development and helps one acquire the skills and aptitude required to become a productive member of society. In this way, communication and education are two sides of the same coin. The quality of education depends on the quality of communication between society and its members.

**v) Entertainment:** Entertainment and recreation are important means of making individuals and society healthy. People find enjoyment and entertainment through various communication activities, viz. dance, drama, sports, music, etc. These means of communication provide personal and collective enjoyment.

What we have given here is a brief account of the functions of communication. You may add a few more functions of communication based on your own experience. Now let us take a look at the means of communication.

### 1.2.2 Means of communication

There are various tools and media which serve as means of communication among human beings. Starting from the signs — the primitive means, to super computer-based communication, there are various techniques, technologies and materials generally used to collect, produce, carry, receive, store, retrieve and disseminate information. All human beings make use of one or the other means of communication depending upon their accessibility and effectiveness. We shall discuss some of the prominent means of communication in this sub-section. Since this is an issue that concerns everybody, we shall discuss the potential of each means of communication as well as its weaknesses.

**i) Signs and sounds:** Since primitive times, human beings have been using simple signs for communication. Body language and other non-verbal languages, viz., facial expression, gestures, music, songs, drawings, paintings, etc. are in use in different societies. In the tribal societies these means of communication are used for a variety of purposes, despite their obvious limitations (MacBride, 1980). These means of communication became refined and their reach was extended to still larger uses with the passage of time.

**ii) Language:** A number of languages and dialects are used for communication purposes all over the world. In India, there are 18 main languages listed under the Eighth Schedule of the Constitution and over
hundreds of dialects used for communication. Language plays an important role in communication in both the face-to-face situation and at a distance — at the national or the international levels. The use of language is an important factor in educational communication too. Problems arise as a large section of the people does not understand each other's language, and this hampers the effectiveness of communication among them.

**iii) Postal system:** The postal system is the most vital network for point-to-point delivery of information. It serves as the focal point for communication at a distance throughout the world. You may be aware of the fact that most of the communications of open-universities, including IGNOU, takes place through post only. The postal system is the most accepted means of communication in both developing and developed countries. India has one of the biggest, well-established and efficient postal services in the world, which makes it possible for us to reach each and every corner of the country.

**iv) Telephone:** One of the interpersonal communication networks is the telephone system. The telephone is a sophisticated extension of traditional oral communication. No other media can match the telephone for direct and spontaneous communication (MacBride, 1980). The use of the telephone in education is not yet popular in India. The limited telephone network and the high costs, besides the lack of initiative on the part of the educators in the country, are the main handicaps in using the telephone extensively in distance education. The growth of telephone communication, however, has been quite rapid in our country in recent years. It is expected that the density of the telephone in the year 2000 would be 26.44 million (2.77 telephones per 100 persons). The number of the telephones in the rural areas, however, would be very low (1.33 million) during the same year while about 80 per cent of India's population resides in the rural areas (Narain & Gupta, 1989). When we compare these figures with those of the developed countries, we find that the facility of the telephone networks is very poor in our country. In Australia, Japan, Canada and the U.S.A., one telephone connection is available to every 2, 2, 1.5 and 1.3 persons respectively (Agarwal and Agarwal, 1990).

**v) Mass media:** The invention of the printing press and the radio waves have revolutionised the communication system throughout the world. These means have increased the reach and effectiveness of communication. Textbooks, newspapers, radio and television broadcasts have stepped into the area of mass education. By overcoming geographic barriers, broadcasting is successfully transmitting information to an unlimited audience. It crosses the boundaries of countries. The innovations in communication technology have opened new horizons for communication.

**vi) Satellites:** The satellite-based communication has opened new horizons for the transmission of information over long distances. Satellites have brought the entire world together. One can transmit or receive information from any part of the world in no time at all. Many countries have their own communication satellites. India is among the few countries to have her own multi-purpose communication satellites. The satellites so far launched by India are largely used for various domestic purposes. Besides the television
and radio broadcasts, the Indian National Satellites (INSATs) are capable of providing facilities for the meteorological data, telephone networking, remote sensing, etc.

**vii) Computers:** The computers are the most advanced and sophisticated means of communication. They are a force in education, as they perform a number of functions with complete efficiency. They have made communication more interactive and individualised. We have a separate block on the computer and communication networks in this Course (Block 5), where we discuss computer-based communication in detail.

### 1.2.3 Process of communication

Having discussed the concept, functions and means of communication, let us now discuss another important theme — the process of communication. The process of communication most widely accepted is that of Shannon and Weaver (1949), which identifies five elements in the process, viz, the source, the receiver, the channel, a coding system and noise: We shall elaborate on each of these components in this sub-section along with the feedback and contextual issues in the communication process.

**i) Source and receiver:** These two are the most important components of any communication process. No communication takes place without the source (i.e., the sender of information) and the receiver (i.e., the consumer of information). The source and the receiver could be human beings, animals or even non-living objects. For instance, the computer (a non-living machine) can be a source of information. In the case of educational communication, the institutions are the sources and the learners are the receivers of information.

**ii) Channels:** The means through which communication between the source and the receiver takes place are known as the medium or channel of communication. We communicate through various channels viz., by touch, by beating drums, through spoken words, through printed words, electronic gadgets, etc. Even facial expressions can function as a verbal and non-verbal channel of communication. The tribal societies still use the traditional channels of communication such as sound signals sent over long distances. In the present century, modern societies use the radio, television, cassettes, telephone, computers, video discs, videotexts, satellite, etc., as channels for communication. We can add many more examples of the communication channels used these days.

The relationship among the source, the receiver and the channel can be shown as follows:
The channel (the term medium is also used interchangeably) is an important component of effective communication, and we should be very careful in selecting the appropriate channel for communication. There can be two types of channels of communication — direct and indirect. In the direct channel of communication we use spoken words, facial expressions, physical postures and so on as channels for transmitting information and ideas. In the indirect channel of communication, we use various electronic and non-electronic channels of communication. In classroom teaching, for example, we usually depend on direct communication, i.e., face-to-face teaching, while in distance education, besides oral communication, we use both print and non-print media. The choice of a communication channel has important implications for the curriculum design in a given mode of education.

iii) Code: A communication code is a set of signals or symbols that creates meaning for both the source(s) and the receiver(s) (Rogers, 1984). Word of mouth, written material, visuals, etc., are codes that communicate ideas, views and feelings. There are several verbal and non-verbal codes that we use for our social communication. For successful communication the code used should be mutually accessible to the source and the receiver.

iv) Noise: There are some factors that affect the smooth flow of communication. Those factors which disturb or interfere with the passage of information between the source and the receiver are termed 'noises' or 'barriers'. Thus, noise is the term that refers to any factor which prevents the proper exchange of information, apart from those caused by the sender and the receiver. It may be anything, such as technical problems in reception, overloaded information, etc. The spatial position of noise can be illustrated as follows:

![Fig. 2 Noises to Communication](image)

There can be various types of noise causing barriers in the flow of information. We discuss here three types of noise.

a) Poor reception: You might have seen that poor sound quality in audio media, distorted pictures in a video programme, poor quality of paper and printing in text materials and so on can distort the message or reduce its effectiveness. Such interruptions demotivate the users from participating in the communication process.

b) Overloaded/ambiguous information: Overloaded information can interfere with the reception of the message. For example the course unit, with too much content can distract the students and present them from comprehending the meaning of the message. Too much continuous information through the radio or TV broadcasts may distract the attention of the audience and make them passive users. The
bombardment of messages from the source cannot ensure that every message will go through. Similarly ambiguous information creates barriers in student’s learning.

c) **Environmental distractors:** Environmental distractors are also frequent sources of noise. You can take an example of listening or viewing of audio or video-cassettes. Distractions such as the ringing of a telephone, or the noise made by a typewriter, lessen the effectiveness of communication. Even home viewing is distracted by children playing around one, ringing of the telephone, discussion among the members of the family, etc.

To ensure effective communication, the receiving end/place should be noise-free, and the environmental distractors should be eliminated or minimised to the extent that these do not affect the attention of the consumer while receiving the message. This is true in the case of studying the instructional materials also.

Both the terms — noises and barriers — are used to express any interference in communication (whether one-way or two-way) between the source and the receiver(s). The noises or barriers are deciding factors in the effectiveness of the pedagogic interaction between the student and the teacher in both face-to-face and mediated instruction. Taking this fact into consideration, barriers to communication have been given an extended treatment in Section 1.4.

v) **Feedback:** So far we have been discussing one-way communication only, i.e. a message that flows from the source to the receiver. This type of communication is helpful for certain purposes such as giving information, making announcements, etc. The radio and the television broadcasts are good examples of one-way communication. But in day-to-day life you have seen that most communication is two-way. The source and the receiver of information get feedback from one another and this process continues to affect the behaviour of both of them. The second aspect of feedback is that the response messages are acted upon to make adjustments or improvements in the content, methodology or style of communication. Thus feedback is a communication in response to the previous message received from the source. Broadly, feedback refers to any process by which the sender obtains information as to whether and how his/her intended receiver received the information. The receiver, in turn, raises his/her queries or doubts for further clarification and tries to confirm whether or not he/she has understood the information correctly, or as it is intended by the source.

Besides informing the source as to how satisfactorily the information has been received by the receiver, feedback enables both the source and the receiver to correct omissions and errors. Feedback influences one’s on-going or future communication behaviour. In a face-to-face situation, feedback can be verbal as well as non-verbal. The source or the receiver can respond instantly by either accepting or rejecting the communication. A simple smile can communicate the reaction of the source or the receiver. You might have observed that simply nodding the head can make communication two-way, and the sender can get the necessary feedback about whether or not his/her
communication has got through. In some cases, for instance in distance education, feedback is received through printed communication. In non-face-to-face communication situations, feedback takes different forms. There can be two types of feedback — immediate feedback and delayed feedback. In face-to-face teaching, the student gets immediate feedback from his/her teachers. Even in computer assisted learning the student can get immediate feedback on his/her progress. But since the student prepares his/her assignment-responses and submits them to the evaluators for their comments and grading, he/she gets feedback on his/her work after a few days time. In the radio and TV broadcasts also, the teacher and the student get feedback after time gap. Whether immediate or delayed, feedback is important to make communication effective and to ensure the intended effect on the students. It also implies that we are concerned with producing the desired effect on the receivers by making feedback more frequent and systematic.

**vi) Context:** The context in which communication occurs also plays an important role in sharing information. The meaning of communication is affected by the social, physical or cultural context. In our daily life, we hear many persons saying, 'you have taken my words out of context'. 'You have taken me very seriously. I was just joking', and so on. The belief, values and behaviour-related factors also influence the effectiveness of communication. Similarly, the mental and physical condition (they could be suffering from anxiety and fatigue) of the participants also affect the process of communication.

To conclude, the communication process includes a sender, a channel, a receiver, a relationship between the sender, an effect, a context in which communication occurs and a range of things to which the message refers (Mcquail & Windahl, 1981). It also includes a purpose, or an objective to be aimed at and achieved. These components are used to collect, pool and disseminate information.

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**Check Your Progress 1**

**Notes:**

a) Write your answer in the space given below.

b) Compare your answer with the one given at the end of the Unit.

Define the following terms, in two lines each.

i) Channel  

ii) Code  

iii) Noise

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1) .......................................................... .......................................................... 

2) .......................................................... .......................................................... 

3) .......................................................... .......................................................... 

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1.2.4 Types of communication

Communication can be discussed at four levels, which are:

- Interpersonal communication
- Group communication
- Organisational communication
- Mass communication

**Interpersonal communication:** Interpersonal communication includes conversation between two persons. This is a common type of communication, in which two persons share their feelings, emotions, thoughts, ideas, etc. Interaction between two friends, between teacher and student, between mother and child and the like are a few examples of interpersonal communication. Talking on the telephone to someone is yet another example of interpersonal communication at a distance.

**Group communication:** In this type of communication, the members of a group interact with each other. A group is a collectivity of people who have common interests. Discussions in a workshop, a seminar, or a family are examples of group communication. Group communication is used to take a collective decision on a problem, an issue or a matter of common concern. The participants involved in a group communication take active part in communication to achieve a set of goals, to develop social contacts or to find the solution to a problem faced by the group. Group communication is represented diagrammatically in Figure 3. The family, a section in an office, and a classroom are examples of group communication systems.

![Fig. 3: Group Communication](image)

**Organisational communication:** It is that communication which revolves around one organisation. Since any organisation consists of groups of individuals, it can be said to be multiple group communication system having interaction among each other. Communication may start from any point in the organisation, but the immediate ways of the information is only within the organisation. Examples of this type of communication are schools, industries, offices, etc. Notifications are normally used as means of communication in such organisational communication system.
Mass Communication: Mass communication involves more than two persons but it is beyond group and organisational communication. As the term 'mass' indicates, this type of communication always concerns a large number of people sharing information, ideas, thoughts, etc. In this case we use the mass media to communicate with a large number of people. In mass communication we include face-to-face, as well as, print and non-print communication. For example, the radio and television programmes are broadcast to educate, inform or entertain a large number of people.

Mass communication has three characteristics. We discuss them briefly here:

i) The audience is large and heterogeneous. You know that radio and television, being mass communication media, have a large audience with different backgrounds, tastes, ages, occupations, etc. Both the illiterate and the literate can make use of these media. The newspapers, another mass medium, have a comparatively smaller audience.

ii) The source is an institution or a group of people. For example, the Ministry of Information and Broadcasting, Government of India, is engaged in broadcasting television and radio programmes all over the country. The Times of India group, is one of the private institutions engaged in printed mass communication in India. Similarly, IGNOU is engaged in creating and disseminating knowledge to a large number of students throughout the country, and it is an example of a mass education institution.

iii) Some kind of mechanism is used to reproduce information. The mechanism could be the printing press, programme production studio, transmitters, the TV and the radio receivers, etc.

Check Your Progress 2

Notes: a) Write your answer in the space provided.

b) Compare your answers with those given at the end of this unit.

i) Write two educational implications of interpersonal communication.

ii) Give at least one example each of different types of communication.

1.2.5 Educational communication

The word 'communication' came from the Latin word 'communicate', meaning 'to share'. The act of teaching and learning is also an act of sharing the content, the skills and the attitudes. Distance education is an act of sharing of content, etc. with the students, at a distance. Thus, education can be seen as a communication process between society and individuals (Hills,
Hills further elaborates that education should be looked at constantly in order to determine how well it is communicating the norms of society. In other words, educational communication concerns itself with the process of how the teachers and students act and interact to enhance the knowledge of the latter. In educational communication, the sources are teachers/institutions, and the messages related to the curriculum (the content, the skills and the attitudes and related activities which educate, inform, train, enlighten, inspire and entertain the students). The receivers are the students and various teaching strategies such as demonstrations, tutorials, textbooks, assignments, audio-visual components, libraries, etc. are used as media to transfer the contents. In distance education, the act of communication is performed through self-directed education by making various teaching-learning arrangements.

With the advancement in communication technologies, it is now possible to impart education throughout the world via satellites, which have the potential to communicate even live events to the students at their workplace. Thus, education has crossed many barriers of space and time. As a consequence, the methods of teaching and learning have also changed. Technologies such as computers, video-tapes, video discs, teletexts, communication satellites and teleconferencing services have stepped in to improve the nature of educational communication. These technologies have made the teaching learning process more lively and interactive. They have enhanced the pace of learning and also improved the means of retention and retrieval of information. Interestingly, Hills (1986) regards the computer as man's 'fourth brain', taking its place alongside the other three — cerebrum, optic lobes and cerebellum.

Let us take the example of the Shannon and Weaver model of communication (1949), and discuss its application to educational communication. In this model, the source of information is the teacher or the educational institution, i.e., the agency which intends to transmit knowledge, skills, values and culture to the future generations. The teachers supply and manage information in a way so as to make it understood by the students. The teachers make their ideas visible by coding them in a series of symbols in the form of spoken or written words, or visual signals.

As there are various channels of communication used in education these days, the main question in selecting the appropriate channel of communication is whether it clearly and accurately communicates with the students as desired by the source (the teacher or educational institution). The teachers have a variety of audio-visual media, viz., broadcast, audio / video cassettes, computers, teletext, teleconferencing, etc., which can be exploited to achieve the desired objectives at a faster pace and for larger student bodies.

The important point is that information should reach the students without any distortion. There are many sources of noise, which can mar the effectiveness of the teaching and learning process. The interruptions (noise) in the way of communication should be removed. The biggest potential source of noise in distance education is the reading material that constitutes the master medium. The reading materials need to be prepared with clear
objectives, to be written in simple language and to be presented in a logical sequence. The materials should be self-explanatory, self-directed, self-contained and self-evaluating.

As mentioned earlier, the students should receive the information that is intended by the teacher or distance education institution. For this, they should possess the minimum pre-requisite of knowledge skills to comprehend the message, undertake notes, answer the self-assessment questions and work on the prior knowledge possessed by the students. In other words, the course materials should be based on the background or prerequisite knowledge of the target students.

Feedback plays an important role in improving the quality of the course materials and achieving the desired objectives. The teacher should get information about how his/her materials/units, audio or video programmes are being received and assimilated by the students. Such information will make communication more effective and will eliminate errors in decoding and the problems caused by ‘noise’ in the entire teaching/learning process. On the other hand, the students should also get feedback on their progress of comprehension of the content discussed. Feedback about their performance will motivate the students to draw more from the learning material.

For the purpose of clarity, the process of educational communication can be represented as follows:

![Educational Communication Process Diagram](image)

You will notice here that the students have a dual role. They function as the receivers as well as the sources in educational communication. The teacher plays the role of a ‘manager’, and uses various teaching arrangements to help the students achieve their course objectives. The students interact with the learning materials and get the desired meaning out of it. Therefore, in educational communication, more importance has to be given to the students, the students are not simply the passive recipients of communication, but they actively participate in the learning process. The students in distance education are independent learners who are the directors of their learning. It is all the more necessary that the medium used for them is free from noises.
Tiffin and Rajasingham (1995) discusses education as a communication system, which is purposive, receives certain inputs like students, teachers, knowledge, problem, and processes them at different communication levels so that the learners become knowledgeable to apply learned skills and knowledge to given problems. Education as a communication system also shares the characteristics of an open system, viz. negative entropy, feedback, steady state, differentiation, equifinality, teleology and hierarchy. Let us discuss these concepts in order to understand and apply them to distance education.

i) Negative-entropy: Open systems resist the trend towards disorder and more towards increased organisation. For this purpose, they depend on feedback system and the environmental supra system.

ii) Feedback: Feedback is a special input about the system and its environmental conditions; and about its functioning. This enables the system to take corrective steps to adjust its malfunctioning, if there is any.

iii) Steady state: It is a condition of dynamic equilibrium, in which the system maintains its structure as stable, despite fluctuations in environmental condition.

iv) Differentiation: Open systems not only adapt to changing environment, but also move in the direction of higher level of organisation or growth. Growth leads to differentiation of functions and to specialisation.

v) Equifinality: It is the ability of open systems to reach a given state or condition by several different paths. Because of their inherent resilience and capability to adjust in changing environmental open systems arrive at a given desired state through various alternative methods.

vi) Teleology: It is a characteristic of open system that indicates the purposefulness of the system and works according to its objectives.

vii) Hierarchy: Open systems are hierarchical, that is, they are both independent framework consisting of a number of integral lower level sub-systems, and each one is a dependent member of the higher level system.

All these characteristics can be easily applied to education as a communication system. Figure 5 depicts distance education as a communication system having the characters of an open system. Processing at different fractal levels in the figure indicates the communication types. Support sub-system in distance education includes, study centre, regional centre, material distribution system, etc. The control sub-system includes the Instructional Design (ID) and administrative sub-system that looks after the system in general.
1.3 ROLE OF COMMUNICATION

In the previous section, you studied the concept of communication in detail. In this section, we discuss the role of communication in society in general and education in particular. Communication is woven into our day-to-day existence, and is considered to be both individual and a collective activity embracing all transmission and sharing of ideas, facts and data in our daily life.

We all communicate with each other through discussions, writing letters, through telephone conversations, the radio and TV broadcasts. Every social
system depends on the effectiveness of communication among its members. By ‘effective communication’ we mean clear understanding of the message by the participants — both by the source and the receiver. Communication does not mean just giving information — it is a two-way process. Information should be understood by the receiver(s) in terms of the intentions of the sender(s).

Why do we study about communication? The answer is simple. We are all involved in one or the other type of communication in such a way that we cannot overlook the importance of communication in our life. We, therefore, require a serious study of the concept. A thorough understanding of communication as a process will help us ensure that the information gets through. If the receiver does not receive the message in its correct perspective, the communication will collapse. This is the reason why we try to clearly understand the concept of communication. Now think of the importance of educational communication, which deals with complicated information. It is a difficult task to communicate educational information in such a way that every student understands it properly. If the student succeeds in showing some change or improvement in his/her behaviour, we can claim that educational communication is successful.

To communicate with the students at a distance is more difficult than with those who study in a face-to-face situation. There are several barriers between the distance education institutions and the students learning at a distance. For example, there is no provision, in most cases, for immediate feedback from either side. Most of the students and teachers do not know each other. In such a situation where you do not know much about your students, you have to be extra careful to ensure effective communication to achieve the educational objectives or bring about the desired changes in their behaviour. So, whatever medium is used, communication should reach the receiver(s) successfully.

1.4 BARRIERS TO COMMUNICATION

There are various stages through which a message has to pass through from the source to the receiver(s) and vice-versa. These cause a number of interruptions and distortions in the way of effective communication. Sillars (1988) discusses two types of barriers that usually distort the flow of communication, and these are discussed below.

**a) Barriers caused by the senders and receivers:** The act of communication is broken down by the senders and the receivers themselves. The reasons may be a lack of understanding between each other, poorly defined objectives, failure to comprehend the language used, etc., or both the sender and the receiver may not be clear about what to communicate.

The receiver may not perceive the message as intended by the source (communicator). Similarly, defensiveness, permanency of attitude, situational misunderstanding, unfounded certainty, etc. are forces that can lessen the effectiveness of communication among the participants.
The individual's background and experience also influence the effectiveness of communication. Personality characteristics — aptitude, attitude, interest, motivation, etc. can interrupt the smooth flow of information. Similarly, hidden distractors, such as tension, frustration, anxiety, etc. among students can also lessen the effectiveness of educational communication. You, as a source, cannot force a student, as a receiver, to learn unless he or she is mentally ready to receive educational messages or has the necessary prerequisites and study skills to grasp it.

At times, it is difficult to avoid barriers created by the source and the receiver. To overcome such barriers, we need to take special care at the stage of planning and developing the instructional materials. Use of different teaching arrangements (for instance, the print materials supported by the audio-video programme) can be used to bypass or overcome some of the distracting barriers. The use of language that is understood easily by the sender and the receiver may facilitate sharing the content.

As mentioned earlier, selection of the wrong medium may be disastrous for getting the message across. For example, if you want to discuss minor details of a system or, more specifically, if you want to discuss the flow of blood in the human body, the audio medium may not be as effective as the visual medium. So the use of appropriate medium can make communication effective and efficient. Similarly, choosing an unsuitable time for communication may have a negative impact on the outcomes. The effectiveness of communication may be enhanced if the timings of communication are appropriate.

b) Barriers caused by the external factors: There are certain external factors that can disrupt the flow of communication. Any type of ‘noise’, such as, physical noise caused by the plying of vehicles, the sound of a typewriter, conflicting messages, poor printing impressions, poor reception of the sender and the receiver.

One of the barriers of effective communication is indifferent behaviour and lack of sufficient motivation (of course, due to some internal or external factors) on the part of the receiver(s). The participants may not be ready to receive information and willing to actively participate in its transaction.

The domestic or social problems faced by a student may cause him/her to be less attentive than he/she might otherwise be. Similarly, lack of incentives, such as poor employment opportunities after passing a course may make communication defunct.

There are certain technical interruptions which create a lot of distortion in the communication process. Poor maintenance of equipment, substandard tools, defective receiving sets, weak transmission waves, etc. inhibit effective communication. The interference of some of the barriers can be reduced to a large extent if the sender/source understands the models or theories underlying the process of communication. We shall discuss some such measures as follows:

i) Both the parties involved should know that communication needs to be attended to. Both should take initiative in sharing information.
ii) Both the parties should recognise each other's communication signals, i.e. they should understand each other's language. Both should work at the same wavelength.

iii) Both the parties should be capable of thinking and feeling in somewhat similar ways. They should understand each other's message correctly, otherwise, they will not understand each other.

iv) Both the parties should engage jointly in a purposeful communication act. Comprehension of message is not enough in itself. For communication to succeed, there must be an outcome; the participants should display the communication specific intended behaviour. Information must be successfully shared so that a tangible outcome can be displayed.

1.5 LET US SUM UP

'Communication', as a scholarly field of study, is a science that produces skilled communication practitioners. It deals with the process of informing, motivating, teaching and entertaining people. It also involves creating and disseminating information, facts, ideas and feelings to its users.

Communication has manifold functions of which the main ones include informing, persuading, sharing, socialising, motivating, educating and entertaining people. These functions are carried out by various means of communication — signs, words, written language, postal services, the telephone, the radio, the television, the computers, etc.

There are six components of communication: i) the source and receiver, ii) the channel, iii) the symbol of code, iv) the noise, v) the feedback and vi) the context in which communication takes place. The effectiveness of each component contributes to the overall effectiveness of the communication process.

Broadly, there are four types of communication, viz., interpersonal, group, organisational and mass communication. Communication between two persons is known as interpersonal communication, and communication among more than two persons beyond an organisation is called mass communication. Education is also a communication system, which can be effected at all levels. Educational communication makes people well informed and socially productive members of society. Communication plays an important role in social transformation: socio-cultural and economic development.

There are various interfering variables, which distort the effectiveness of communication. The personality factors of the source and receiver, the choice of medium, the domestic and social problems, physical and technical disturbances, etc. are some of the prominent barriers to communication. These barriers can be overcome or reduced to a large extent, provided all the components of the communication process function effectively. Mutual understanding between the source and the receiver does increase the effectiveness of communication.
1.6 CHECK YOUR PROGRESS: THE KEY

1. i) Channel: The means or medium through which communication takes place between the source and the receiver is called the channel.

ii) Code: A Code is a set of symbols that create meaning for both the source and the receiver. For example a written or spoken word is a code.

iii) Noise: The factors which disturb or prevent proper exchange of information between the source and the receiver are called noise.

2. i) The educational implications of interpersonal communication could be outlined as follows:
   a) Personal contact programmes should be organised for distance learners.
   b) Telephone and postal correspondence should be used.
   c) Instructional materials should be directly addressed to the students.
   d) Self-study groups should be formed.
   e) Comments on the student assignment-responses should give the feeling that the student is, as it were, talking to the teacher and the peer group.

ii) Examples of different types of Communication are as follows:
   - Intrapersonal communication : Reading a book
   - Interpersonal communication : Teacher and Student
   - Group communication : Class room
   - Organisational communication : School, offices
   - Mass communication : TV, Radio broadcast.

3. i) Feedback: Feedback is communication in response to a previous message. In other words, feedback refers to the process by which the sender and the receiver get information as to whether the information has been received and understood.

ii) Your answer may, among other things include:
   - giving information on the progress of the student,
   - suggesting modifications in the content and approaches adopted in presenting the content,
   - telling whether the objectives of the course have been achieved, and to what extent,
   - facilitating pedagogic interaction between the teacher and the student, and thus motivate the student for learning, and
   - breaking the feeling of isolation among the students.