

BESC-133 by Curriculum, Teaching-Learning And Assessment

Block

2

TEACHING AND LEARNING

Unit 5

Learner and Learning

Unit 6

Teacher and Teaching

Unit 7

Learning Environment

Unit 8

Organizing Learning Experiences

BLOCK 2 TEACHING AND LEARNING

Introduction to the Block

The **second Block** is devoted to offering more information on a variety of topics such as who is a learner, concept of learning, who teachers are, and their diversified roles. Keeping in view of different types of learning environments, this Unit addresses the need to create a positive learning environment. This Block concludes with how to organize learning experiences according to the needs of learners.

The second **Block** comprises four units.

Unit 5 focuses on what learning is, how learners learn and what nature of learning is. In this Unit, you will come to know how child development and learning are related, and the implications of curriculum and practice. In addition, you will also study how children learn, their learning styles and the factors that enhance learning.

Unit 6 describes who teachers are, what characterize them from other professionals, and what roles they play as teachers. In addition, you will come to know how teaching and learning are related. This Unit also provides some of the necessary details related to teacher and teaching with a view to helping you understand what a teacher is and how teaching is carried out in the classroom.

Unit 7 begins with providing you an understanding of the concept of learning environment and its theoretical perspectives. Specifically, the Unit focuses on the different types of learning environment with examples. This Unit also explains how to create a positive learning environment where respect for all is the motto. This unit concludes with the description on dynamic interaction among methods, media and content.

Unit 8 deals with the concept of learning experience and its nature. This Unit provides detailed information on how to select, design, and organize learning experiences. Engaging learners in learning activities is as important as designing them. Finally, a discussion on learning experiences from the community is also covered in this Unit.

UNIT 5 LEARNER AND LEARNING

Structure

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5.1 INTRODUCTION

Learning is an essential ingredient of meaningful and effective life. It can open up the doors of opportunities and successful life. In the absence of required level of learning, chances for success and development can be few. As we know, none of us is born with all the knowledge and skills that now we have. At the time of birth, we had only a few traits and impulses. However, as we began to interact with our environment with the help of these, we gradually began to construct very simple concepts and skills. As time passed, we went on growing physically and developing intellectually. If we go on learning on our own, it would take a long time to build up all what we require. So to facilitate learning, society has set up schools and appointed teachers to help us learn. As a student of education discipline, you ought to know what learning is, how learners learn and what nature of learning is. In this Unit, you will come to know how child development and learning are related, and the implications of curriculum and practice. In addition to the above, you should also study how children learn, their learning styles and the factors that enhance learning.

5.2 **OBJECTIVES**

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

- define learning;
- explain the process of learning as construction of knowledge and skills;
- spell out the characteristics of learning;
- explain how child development and learning are related;
- highlight the implications of curriculum, practice, and rehearsal of learning;
- explain briefly the different ways through which children generally learn and their learning style;
- elucidate the various factors that influence learning;
- illustrate the concept of multiple intelligence; and
- explain the various types of learning.

5.3 WHAT IS LEARNING?

If we look at the concept of learning from its historical perspective, we can easily notice that its meaning has been steadily changing over the last hundred and twenty-five years or so. These changes have mainly happened under three stages namely, (i) the behaviourist school of thought, (ii) the

cognitivist school of thought, (iii) the constructivist school of thought, respectively. As these stages are important milestones in the development of the concept of learning, they need to be explained briefly.

5.3.1 Behaviourist School of Thought

The scholars who lived from about 1900 to almost 1950 mostly belonged to this school of thought. The behaviourists, in their attempt at making psychology a science, gave importance to those behaviours that can be observed and measured. They considered learning to be nothing but a response strengthening process. When learners responded to the questions correctly, if they were reinforced, their responses would get strengthened. So behaviourists considered learning as a response strengthening process.

5.3.2 Cognitivist School of Thought

As the behaviourists did not pay any attention to the inner processes involving learning and paid attention only on observable aspects, a new school of thought known as cognitivist school of thought came up. The cognitivists believed that every discipline has a structure and when large unit of knowledge is broken up into smaller ones and presented logically through lecture or demonstration, learners would acquire knowledge and skills easily. So they believed that learning is nothing but acquisition of knowledge and skills.

5.3.3 Constructivist School of Thought

It is a new school of thought that came up during the 1980s. The constructivists believe that learning is not as passive as the cognitivists thought. They began to consider learning as personal and that everyone constructs his or her own knowledge and skills as a result of integration of the present knowledge with their prior knowledge.

As we can see, learning is a process that involves a series of actions that lead to some output. Our five senses take information from the environment. It enters the brain as streams of chemical impulses. The brain analyzes the information, retains the relevant and rejects the irrelevant. The retained information is sent to the working memory where the new information and the relevant aspects of prior knowledge that is already stored in the memory get integrated. As a result, new knowledge and skills are constructed. Hence, constructivists believe that learning is nothing but construction of knowledge and skills.

As our discussion above, points out that the concept of learning has been steadily undergoing conceptual changes over the years. Most scholars today believe that learning is a relatively permanent change in an individual's potential behaviour as a result of integration of the knowledge that he or she has presently gained with that which was stored in the memory. As a result, behaviour is modified either by the addition of new and different information

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and capabilities or by the extension and enhancement of those that an individual already possessed. These changes that have taken place as a result of learning get exhibited in the cognitive structure of the learners by way of cognitive growth, development of newer life skills, methodological skills, attitudes and interests. Thus, the new knowledge that the learner has constructed, depending on their nature, can belong to the cognitive domain, affective domain or the psychomotor domain.

Cho	eck Your Progress 1
Not	es: (a) Write your answers in the space provided after each item.
	(b) Compare your answers with those given at the end of the unit.
1)	Why did the behaviourists focus only on behaviours that could be observed and measured?
2)	What according to the behaviourists is learning?
<i>_</i>)	what according to the behaviourists is learning.
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3)	What is learning in terms of cognitive perspective?
4)	What according to the constructivists is learning?

5.4 NATURE OF LEARNING

We have, by now seen what learning is. Now let us briefly look at the nature of learning. As in the case of any other process, learning is also marked by certain characteristics. As students of education, it would be advantageous for you, to know what they are. Some of these characteristics are as follows:

- a) Learning is a very complex process. It involves all sorts of things such as knowledge, skills, insights, values, and even habits.
- b) Learning can be active as well as passive. It is active when you are actively involved in the process of learning. It is passive when you are not actively involved just as when you learn by listening to a lecture or watching a demonstration.
- c) All learning involves some sort of processing of information. It involves a series of activities such as analyzing, synthesizing, evaluation, etc. In the absence of processing, there can be no learning.
- d) Learning can be triggered by experiences, intense desire for accomplishing something worthwhile, failures and successes.
- e) Learning can result in the construction of new knowledge or incrementally adding to what has been learned previously.
- f) Learning can be planned or unplanned.
- g) Outcome of learning can be something desirable or even undesirable.
- h) Learning can be done individually or collectively.
- i) Learning is lifelong. It begins from the time of birth and continues till we die.
- j) Learning is not a matter of adornment, as it was often thought in the past. It is a matter of sheer necessity.

Learning, as the above list indicates, is multifaceted. It is complex. It can be incremental, cumulative or even transformational. It is not a matter of adornment but a sheer necessity. We need to learn or else we will perish.

Check Your Progress 2						
Not	Notes: (a) Write your answers in the space provided after each item.					
	(b) Compare your answers with those given at the end of the unit.					
1)	Why do we say that learning is a very complex process?					

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2)	Why is passive?	_	from	lectures	and	demonstration	considered	to be
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5.5 CHILD DEVELOPMENT AND LEARNING: IMPLICATIONS FOR CURRICULUM AND PRACTICE

We have by now, discussed at some length the concept of learning and its characteristics. Let us now deliberate a bit on the topic of child development and learning. Child development refers to a field of study that deals with different aspects of human development and change from conception through adolescence. It focuses on growth, rate of change and social interaction in the family and among peers. Although a few studies have been carried out in the area, that of Piaget seems to be more appropriate as far as child development and learning are concerned.

After having studied elaborately how infants and children develop cognitively, Piaget noted that they develop in four stages, namely, (i) sensory-motor stage, (ii) pre-operational stage, (iii) concrete operational stage, and (iv) formal operational stage. He argued that all people, irrespective of race and nationality, pass through the same stages in exactly the same order. These stages are generally associated with specific ages. Let's now take up each of these stages and see how they develop from infancy through adolescence.

i) Sensorimotor Stage (0-2 years)

This stretches out from 0-2 years of ages. This stage is concerned with senses such as seeing, hearing, tasting and the motor activity. Hence, it is called sensorimotor stage. Making use of their senses and movement, infants develop some capacity for imitation, memory and thought. Infants begin to recognize that objects do not cease to exist when they are hidden. The organized way of making sense of experience (scheme) of a 6 month old baby catching sight, grasping and dropping an object is rigid. However, by 16 months, its dropping scheme becomes more deliberate and creative.

ii) Pre-operational Stage (2 to 7)

This stage refers to the phase before a child masters logical mental operations. At this stage, children gradually develop the use of language and ability to think in terms of symbols. They are able to think operations through logically in one direction. Children begin to use symbols such as words, gestures, signals, images, etc. to represent actions or objects mentally. For example, the word "bicycle" can create an image of it even when it is absent. The stage thus sees change from sensorimotor to representational schemes through direct interaction with the environment. This process is called adaptation.

Adaptation involves two complementary activities, namely **assimilation** and **accommodation.** Assimilation involves fitting new information to existing schemes. Accommodation has to do with altering existing schemes or creating new ones in response to new information. This stage sees extraordinary increase in mental representation. However, their thought processes are not logical. They are rigid, limited to one aspect of the situation at a time and strongly influenced by the way things appear at the moment.

Both teachers and parents concerned with learning of children should realize that children at this stage need use of concrete props and visual aids. They should make short instruction and use demonstrations, games, and audio-visual aids wherever possible. In addition, they should be given a lot of hands-on-experiences. Thus, in this stage, children should be provided with a wide range of experiences in order to build a strong foundation for concept learning and language.

iii) Concrete Operational stage (7-11 years)

This stage is a major turning point in children's cognitive development. As their thought processes are far more logical, flexible and organized, their thoughts more closely resemble those of adults. They have ability to arrange items along qualitative dimensions such as length and weight. Children also have better understanding of spatial reasoning. However, their thinking is logical only when it comes to matters that are concrete. Their mental operations are poor when dealing with abstract things.

Children at this stage need continued use of props and visual aids especially when dealing with matters that are more sophisticated. Similarly, they use diagrams to illustrate hierarchical relationships such as branches of government, etc. When explaining complex idea, use familiar examples. Children should also be given opportunity to classify objects and ideas on increasingly complex levels. They should also be presented with problems that require logical and analytical thinking.

iv) Formal Operational stage (11 years to Adulthood)

The capacity for abstract thinking becomes full-fledged around age 11. At this stage, they can think like scientist. Unlike a concrete, operational child who can only operate "reality," a formal operational adolescent can "operate on operations". Concrete things and events are no longer required as objects of thought. Instead, adolescents can come up with new and more general rules through reflection. Formal operations involve mental tasks involving abstract thinking and coordination of variables.

The formal operational adolescent can make use of charts, graphs and diagrams. They should be given opportunity to solve problems and reason scientifically. At this stage, teachers should give them opportunity for exploring many hypothetical questions. Teachers should also resort to active learning techniques and ask open ended questions rather than convergent questions. In addition, teachers should give them opportunity to put things in their own language, get them solve problems, discuss with peers and others and apply knowledge in novel situations.

As our above discussion reveals, children move through four stages during which the exploratory behaviour of the infants changed into abstract logical intelligence of adolescents and adulthood. Piaget's stage sequence has three important features, namely:

- i) It assumes that all aspects of cognition develop in an integrated fashion, undergoing a similar course of change.
- ii) The changes are invariant. It follows a fixed order and no stage can be skipped.
- iii) The stages are universal as children all over the world undergo the same fixed order of cognitive development.

Implications of Piaget's theory on Curriculum and Practice

Piaget's theory advocates four main implications on the theory and practice of education. His theories emphasized the notion of developmentally appropriate curriculum in which the curriculum, context, resources, and instruction are appropriate to the cognitive, affective and psycho-motor domains of education. More than that, several theories of education has its root in Piaget's theory of education. The recent constructivist theory of learning is indebted to Piaget's contribution to education. The four main teaching implications drawn from Piaget's theory are as follows:

• Focus on children's thinking process rather than on products: Generally teachers focus on correct answers of students while giving activities. According to Piaget, instead of correct answers, teachers should appreciate the methods used by learners to arrive at particular conclusions. Appropriate learning experiences should be provided

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according to the level of cognitive functioning of learners. Children profit from experience only when they can interpret this experience with their cognitive structures.

- Active involvement of learners in the learning process: Piaget deemphasized rote memorization of learning and encouraged discovery approach. In this approach, teachers provide activities that allow learners to interact directly with the environment.
- De-emphasis on practices to make thinking process of children similar to adult: In order to speed up development, some techniques might be used to accelerate children's progress through various stages proposed by Piaget. Piagetian theory proposed that no teaching is better than premature teaching because it imposes adult formulas upon children instead of true cognitive understanding.
- Acceptance of individual differences in developmental progress:
 Piaget's theory assumes the same developmental stages for all children.
 Children may do so but at different rates. Therefore, different small group or individual activities must be given to children instead of the whole class. Besides, while assessing children instead of using normative standards of same age-peers, assessment should be made on previous course of development of each child.

Check Your Progress 3

No	Notes: (a) Write your answers in the space provided after each item.						
	(b) Compare your answers with those given at the end of the unit.						
1)	Define the following terms in a sentence each:						
	a) Child development						
	b) Accommodation						
2)	What are the implications of Piaget's theory to curriculum and practice?						

5.6 HOW DO CHILDREN LEARN AND THEIR LEARNING STYLE

We have seen that learning is tentatively permanent changes in the behaviour of the learners. It is a process of becoming different from what we were earlier. We keep on learning something or other all the time when we are awake and alert. Our sensory organs keep on capturing and passing on information related to the things that receive our attention. It would be quite beneficial to know the different ways through which children learn. In what follows an attempt is made to describe some of all modalities children use for learning.

5.6.1 Learning through Imitation

Imitation is one of several ways in which children learn. They generally imitate their parents. Little girls take their mothers while little boys take their fathers as role models. They also try to imitate their teachers in many ways. Many of the skills they pick up are as a result of imitation. Not only children but also even adults are often imitating others. Those who are not confident, for example, are found looking for people who are confident. Once they find one, they watch their behaviour very closely and try to act in the way they do. In course of time, such people are found to be confident as a result of imitating others.

5.6.2 Learning through observation

Observation is yet another way through which children learn. In schools, teachers put up several experiments and demonstrations in the laboratory. Children observe them very closely and learn. Similarly, children who want to study the social behaviour of chimpanzees go to the forest where they are found. They observe them as they play and take in details of their behaviour. Thus observation is one of the very common ways of learning.

5.6.3 Learning through Listening

If you just look into the classrooms of even today, you can see that much of the knowledge and skills students gain is through listening. Teacher talk is the medium through which they generally teach. Students listen to them and learn. They also listen to radio and other such media and learn. Most of the learning that children do is through observation and listening.

5.6.4 Learning through Trial and Error

When an individual confronts a situation, if s/he is not sure as to how it can be solved, s/he strives to find out all the possible ways through which the problem can be solved. Then s/he examines all the options and chooses the one that s/he thinks is the most appropriate. In case, it is not working, s/he

would take up the next item. The process continues until the problem is solved. This way of trial and error is another way to learn.

5.6.5 Learning through Experimentation

Carrying out an experiment is yet another way to learn. When you are in doubt as to what the reality is, it is not always wise to rely on intuition and guess work. Our guessing can often go wrong. Suppose you are a teacher, you may think that your students are very happy with your ways of teaching and evaluation. Our thinking may be different from the reality. In such cases, if you wish to know the reality, it would be nice to carry out an experiment. Conducting experiments is another way to learn.

5.6.6 Learning through Reflection

Once you have done an act, if you think that it is not up to the level of your expectation, you can learn to do it better through reflection. You can coin a few questions pertaining to the act such as "What was the purpose of the action? Was it good enough to fulfil the objective? What went wrong? What went right?" After having mentally recreated the action, you can make use of such questions for reflection. As you do this, the insight you have gained will enable you to come out with better performance when you do it again next time.

As you have seen, there are several ways through which you can learn. When it comes to learning, we should not think in terms of the best way but in terms of the most appropriate one in the given situation. Our success in learning depends to a great extent, on our ability to select the correct alternative.

5.6.7 Learning Style

We have, by now, discussed some of the ways through which students learn. However, it should be remembered that, although they use these methods occasionally, every learner has his or her preferred style of learning. Some of them prefer to learn by seeing. Such learners are called **visual learners**. Some others prefer to learn through by listening. They are called **auditory learners**. Yet some others prefer to learn through doing. They are called **kinesthetic learners or tactile learners**. These are the three most widely recognized categories of learning styles. Most people in the world are visual learners. They use their sight to gather information. Visual learners fare well in lessons with lots of written, pictorial, diagrammatic modes of presentation.

Unlike visual learners, auditory learners prefer to make use of spoken explanations for learning. They make good use of their ability to listen. They like to use technological aids such as voice recorders in the process of learning. Kinesthetic or tactile learners, on the other hand, enjoy movement and space. They enjoy hands-on activities, watch demonstrations of what they need to do before trying themselves.

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As noted above, every learner has his or her preferred style. One has to find one's preferred learning and use it for learning purpose. This is important, if one is to make the most of his ability for learning. This will make learning more easeful, efficient and effective.

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	Check Your Progress 4						
Notes:		(a) Write your answers in the space provided after each item.					
(b) Compare your answers with those given at the end of th							
1)	Def	ine the following terms in a sentence each:					
	a)	Learning Style					
	b)	Auditory Learners					
	0)						
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		Tri da i m di T					
	c)	Kinesthetic/Tactile Learners					
	• • • •						
	• • • •						
2) Why is it important t		y is it important to know about one's own learning style?					
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5.7 FACTORS INFLUENCING LEARNING

Learning well is not everyone's cup of tea. Whether or not one can learn well depends on a number of factors such as aptitude, attitude, concentration, motivation, intelligence, readiness for learning, etc. If these qualities are present in a person at the appropriate level, s/he will be able to learn well. Let us take up some of these factors and discuss briefly what they are, and how they can enhance the process of learning.

5.7.1 Aptitude

Aptitude refers to the potential of a learner to assimilate knowledge, skills or understanding successfully. It is often used in relation to specific areas of

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knowledge or skills such as science, arts, commerce, technology, etc. We often notice that some students take an aptitude test towards the end of Class X before they select a particular stream of study. Such a test will help them find the area of study in which they have natural inclination. In case they happen to select the area as per their aptitude, it will help them learn with ease and effectiveness.

5.7.2 Attitude

Attitude refers to a mental state that affects performance. Depending on whether we have a positive or negative attitude towards learning, we may do well or badly in our studies. If our attitude is positive it will provide us with self-confidence, determination and ambition that help us avoid failure by eliminating all negative thoughts. This will also help us build up a positive belief in our ability to perform and willingness to take risks. So our attitude towards learning is an important factor that decides whether we learn well or not.

5.7.3 Concentration

Concentration has to do with the act of focusing our attention on learning. It refers to our ability to think as we wish, control our thoughts and direct them to a definite end. It refers to the ability to keep our mind on one subject until we have thoroughly mastered it. When we listen to a lecture or read a book, if we do not concentrate, we will fail to capture what is being presented. Only when we concentrate, we will be able to perceive the ideas and arrange them in their logical order and understand. In the absence of understanding, no true learning can take place.

5.7.4 Motivation

Just like aptitude, attitude and concentration, motivation is another important factor that can contribute to learning in a big way. A motive is something that can make a person move to action. This driving force can be a need, a desire for accomplishing something or an emotion. The main components of motivation are energy, determination and a willingness to work. Motivation, thus, stimulates one into action. In the absence of motivation, no learning can take place. It is one of the main springs of learning.

5.7.5 Intelligence

Intelligence has to do with how people gather and use information to solve problems and behave appropriately. People, who are intelligent, have the ability to think analytically and creatively. They also have the required level of common sense. People with these abilities at the appropriate level will be able to meet and adopt to novel situations quickly and effectively, to utilize abstract concepts and grasp relationships and learn quickly. So intelligence plays an important role in learning.

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5.7.6 Readiness to Learn

Maturation and learning are closely related. For learning to take place in the way required, certain level of maturation is essential. Maturation has to do with an increase in competency and adaptability. Learning without attaining a definite level of maturation does not yield good results. Learning at each level should be initiated only when children attain the required level of readiness. In case, learning is thrust upon children prior to attaining readiness for learning, the time and energy spend can go waste.

As we have discussed above, whether or not learning take place, to a great extent, depends on the presence or absence of these aspects at the required level in the students. In the next section, we will discuss about multiple intelligence.

5.8 MULTIPLE INTELLIGENCE

Our notion as to what intelligence is growing increasingly complex these days. For several years psychologists referred to it as a general ability called "g" factor. However, it took a major leap in the 1980s. In the year 1983, Howard Gardner and in 1985, Richard Sternberg came out with separate models of different types of intelligence. Their works brought about drastic changes in the notion of intelligence from a singular entity to a multifaceted complex one. Gardner suggested that in our everyday life we can exhibit our ability in any of the nine intelligences. He also observed that there are several ways in which human brain can manipulate information and skills during the learning process. He also opined that the best teaching and learning occurs when we use the greatest variety of techniques thereby making success possible for all learners.

As noted above, Gardner (1983, 1993) came out with his "Theory of Multiple Intelligence". He argued that we do not have intelligence but rather multiple intelligence each independent of the others. He insisted that intelligence does not consist of a hierarchy of abilities but rather it is composed of several separate intelligences. These intelligences according to him are as follows:

- 1) Visual-Spatial Intelligence: This intelligence refers to ability to think three dimensionally. Architects, artists, sailors are people who exhibit this intelligence.
- 2) Logical-Mathematical Intelligence: This intelligence involves ability to think inductively and deductively, ranking, organizing, analyzing, concluding and evaluating. Scientists, engineers, accountants excel in this intelligence.
- 3) Verbal-Linguistic Intelligence: This intelligence refers to the idea of speaking and listening. The ability to use words into its myriad forms is the base of this intelligence. Speakers, journalists, authors are the people who have this intelligence.

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- **4) Musical Intelligence**: It involves the sensitivity to pitch, melody, rhythm and tone. Composers and musicians are people who have this intelligence.
- 5) **Bodily-Kinesthetic Intelligence:** This intelligence has to do with skills to manipulate objects and be physically adept. Athletes, dancers are people who have this intelligence in abundance.
- 6) Interpersonal Intelligence: This ability is mostly concerned with the give and take of communication and ability to understand people and manage them. Teachers, mental health professionals are examples of people with this intelligence.
- 7) Intrapersonal Intelligence: This refers to the ability to introspect and understand oneself and direct oneself. Theologists and psychologists are people with this intelligence.
- 8) Naturalistic Intelligence: This refers to the ability to find subtle changes in the environment, collect, sorts, and categorize objects, classify, label are discern patterns. Farmers, botanists, and ecologists are examples of people with this intelligence.
- 9) Existential Intelligence: This refers to the ability to use intuition, thought and metacognition and answer deep questions about human existence. Scientists, philosophers and theologians are people with this intelligence.

Following the footsteps of Gardner, many scholars, no more consider intelligence as a singular entity but rather as a composite of several separate intelligences. Although in the initial stages of schooling (up to Std.X), curriculum should be developed by cutting out relevant points from all the intelligences, thereafter it should be based on specific intelligences. We need to find out the aptitude of students and they should be allowed to pursue their studies in specific intelligences in accordance with their aptitude. This will allow students to carry out their studies with ease and confidence.

Check your Progress 5					
Notes: (a) Write your answers in the space provided after each item. (b) Compare your answers with those given at the end of the unit. 1) Define the following terms in a sentence each:					
a) Aptitude					
b) Attitude					

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	c) Intelligence
2)	What does readiness to learn mean?
3)	How does intrapersonal intelligence differ from interpersonal intelligence?
4)	Give examples for two types of people who have naturalistic intelligence in abundance.
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5.9 TYPES OF LEARNING

As our experience shows, not all learning is the same. Learning keeps differing depending on the internal and external conditions that prevail. Internal conditions, as Gagne notes, are the learner's prior knowledge, physical stamina, emotions and mental makeup. External conditions are things and elements in the environment that enhance learning from the inside. Only when these internal and external conditions are properly organized, good learning can take place. After having meticulously studied, Gagne divided human learning into eight categories. According to him, classical conditioning or signal learning is the simplest way of learning. It is followed by stimulus- response learning. Gagne, thus, arranged the different types of learning from the simplest to the most complex one which happens to be problem solving. This hierarchical way of arranging human learning is quite useful to everyone of us especially to those who are students of education. Let us therefore, take up each one of them and discuss briefly.

5.9.1 Signal Learning

The Russian physiologist Pavlov through his experiment on a hungry dog developed signal learning, commonly known as classical conditioning. He offered the dog food following the ringing of a bell. This process of ringing the bell and giving food continued for quite a number of times. Thereafter, when the bell was rung, although no food was given, the dog was seen salivating. This process of eliciting saliva through the association of a neutral stimulus is called conditioning. In other words, classical conditioning is a form of associated learning in which a neutral stimulus become associated with a meaningful stimulus and acquires the capacity to elicit a similar response.

5.9.2 Stimulus – Response (S.R.) Learning

This way of learning has its origin from the puzzle-box experiment carried out by Thorndike on a cat. He placed a hungry cat inside a box and a dish of food outside the box. To get the good, the cat had to manipulate a lever within the box. B.F.Skinner, using this type of learning, conducted a series of experiments and made it suitable for human learning known as operant conditioning. The word operant refers to voluntary behaviour of emission by a person. Stimulus-response reinforcement or operant conditioning is a type of learning in which voluntary behaviour is strengthened by consequences.

5.9.3 Chain Learning

In chain learning two or more stimulus-response connections are joined together. Such connections may be of words or motor activities. Boy-girl, daddy-mummy are examples of word chaining. Similarly, the unlocking of a door with a key which involves a number of motor activities such as facing the lock, holding the key right side-up, inserting it into the key-hole, turning the key, etc. are examples of motor chaining.

5.9.4 Verbal Association Learning

In this type of learning, the child learns to link an object and its name. As the child plays with the ball, mother tells "ball". As a result of listening to her a number of times, the child learns to associate the object ball and its name. Even in the absence of the object, the child would be in a position to associate the object and its name.

5.9.5 Discrimination Learning

This type of learning has to do with the ability to respond differently to similar but not identical stimuli. For example, when a child is able to discriminate a feeding bottle from other types of bottles, he has learned to discriminate. Discrimination involves ability to look at things analytically.

5.9.6 Concept Learning

When we deal with countless objects, events, and people around us, we have to first simplify things by organizing specific items into general cognitive categories called concepts. In other words, concepts are categories that group objects, events, and characteristics on the basis of common properties. For example, let's take up the concept "fruits". This mental grouping sums up a variety of items such as apple, grapes, pear, banana, guava, papaya, etc. Thus, when we use a word such as "vegetables", "tree", etc, we refer to a general category of things. Conceptual understanding is a key aspect of learning.

5.9.7 Rule Learning

Another name for rule learning is learning of principles. We need to master a large number of principles, rules, and formulas to make life easeful. For example, learning of rules is very important in the learning of languages. The rule "Nouns are naming words" will enable us to distinguish nouns from all other categories of words. Similarly, learning of formulas will help us a lot in the learning of mathematics, science, etc.

5.9.8 Problem-Solving

The word "problem" refers to any situation that we find difficult to overcome. Problem-solving involves finding a solution to the problem. In solving a problem, it should be studied analytically, all possible ways of solving it need to be thought out and listed, out of which the one that seems to be the best need to be selected and acted upon and evaluated to find whether or not the solution has been achieved. Problem-solving is considered to be the most complex way of learning mainly because it involves all the higher order skills such as analysis, synthesis and evaluation.

Gagne, thus, found that no human learning is the same. He categorized learning into eight types and ordered them hierarchically. He believed that children naturally follow this order and that each one of them is a prerequisite for the learning of the next level. He emphasized that, in learning, the lower steps must be mastered before moving to the higher levels. Gagne's theory of learning has, thus, provided a genuine basis for the process of teaching and learning.

rearming.				
Check Your Progress 6				
Notes: (a) Write your answers in the space provided. (b)Compare your answers with those given at the end of the unit.				
1) Define each of the following concepts in a sentence.				
a) Classical conditioning				

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	b) Operant conditioning	
2)	Why is problem-solving considered to be the most complex of all learning?	
3)	What do you mean by concept learning?	

5.10 LET US SUM UP

Learning is construction of knowledge, skills and attitude through integration of prior knowledge and incoming new knowledge. Learning is a complex process. It involves processing of information. Learning can be done individually or collectively generated in groups. Learning can result in the construction of new knowledge or incrementally added to what has been learned previously. Child development happens in four stages during which the exploratory behaviour of infants passes through various stages and turns out into abstract logical intelligence of the adolescents. In learning, the role of curriculum rehearsal and practice is very crucial. Children use several ways to learn. Their learning is enhanced by such factors as attitude, aptitude, motivation and concentration. Intelligence is not just a single entity as it was thought in past but it comprises several separate and independent abilities. As children develop, they make use of eight types of learning starting with the simplest signal learning and keep on moving until they reach the most complex- problem-solving method of learning.

5.11 UNIT- END EXERCISES

1) How is child development related to learning?

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- 2) 'In the absence of information processing no learning can take place'. Discuss.
- 3) Explain the concept of 'multiple intelligence'. Discuss how it can influence the process of teaching and learning.
- 4) What is learning style? Name any two of the styles and comment on them briefly.

5.12 REFERENCES AND SUGGESTED READINGS

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5.13 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1) The behaviourists focussed only on such behaviours as they wished to make psychology a science.
- 2) To Behaviourists learning was a response strengthening process.
- 3) The cognitivists believed that learning was nothing but acquisition of knowledge and skills.
- 4) Constructivists believe that learning is personal and that everyone constructs his or her own knowledge and skills through integration of the present knowledge with their prior knowledge.

Check Your Progress 2

1) We consider learning as a complex process as it involves learning of all sorts of things such as knowledge, skills, insights, values and even habits.

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2) Learning through lectures and demonstration is considered to be passive as the learners are not actively involved in the process. ii) Learning like any other process, involves a series of activities such as breaking the content into concepts, logically organizing them thereby making it meaningful and understandable. Hence, processing is unavoidable.

Check Your Progress 3

- 1) a) Child development refers to a field of study that deals with understanding human constancy and change from conception through adolescence.
 - b) Accommodation is the process of altering existing schemes or creating new ones in response to new information.
- 2) Focus on children's thinking process rather than on products,

Active involvement of learners in the learning process,

De-emphasis on practices to make thinking process of children similar to adult, and Acceptance of individual differences in developmental progress.

Check Your Progress 4

- 1) a) Learning style refers to the preferred style of learning of an individual.
 - b) Auditory learners are those who prefer to learn through listening.
 - c) Kinesthetic learners are those who prefer to learn by doing.
- 2) If one knows one's preferred style of learning, it will help him make the most of his learning. It will also make his learning more easeful, effective, and efficient.

Check Your Progress 5

- a) Aptitude refers to the potential of a learner to assimilate specific areas
 of knowledge or skills such as science, arts, commerce, technology, etc,
 successfully.
 (b) Attitude refers to a mental state that depending on
 whether positive or negative helps us do things well or badly.
 (c) Intelligence has to do with ability to think analytically and creatively and
 solve problems and behave appropriately.
- 2) As maturation and learning are closely related, for learning to take place in the way expected, certain level of maturation is required. So learning at each level may be initiated only when children attain the required level of readiness.
- 3) While interpersonal intelligence is concerned with ability to understand and manage people, intrapersonal intelligence has to do with ability to introspect, understand and direct oneself.

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4) Farmers, botanists are examples of people with naturalistic intelligence in abundance.

Check Your Progress 6

- 1) (a) Classical conditioning is a form of associated learning in which a neutral stimulus becomes associated with a meaningful stimulus and acquires the capacity to elicit a similar response.
 - (b) Operant conditioning is a type of learning in which the voluntary behaviour is strengthened by consequences.
- 2) Problem-solving is considered as the most complex of all types of learning because it involves all the higher order skills such as analysis, synthesis and evaluation.
- 3) Concepts are categories that group objects, events and characteristics on the basis of common properties. Concept learning would help us deal with countless objects, ideas and events with ease.



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UNIT 6 TEACHER AND TEACHING

Structure

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- 6.2 Objectives
- 6.3 Who is a Teacher?
- 6.4 Concepts of Teaching, Instruction and Training
 - 6.4.1 Teaching
 - 6.4.2 Instruction
 - 6.4.3 Training

6.5 Teacher Characteristics

- 6.5.1 Content Mastery
- 6.5.2 Knowledge of Pedagogy
- 6.5.3 Knowledge of Educational Goals and Objectives
- 6.5.4 Knowledge of Curriculum
- 6.5.5 Knowledge of Educational Contexts
- 6.5.6 Knowledge of Learners and their Characteristics
- 6.5.7 Interpersonal Knowledge

6.6 Teaching Skills and Competencies

- 6.6.1 Teaching Skills
- 6.6.2 Teaching Competencies
- 6.6.3 Putting Objectives in Behavioural Terms

6.7 Diverse Roles of Teachers

- 6.7.1 Planning and Making Decisions about Instruction
- 6.7.2 Building a Productive Learning Climate and Motivating Students
- 6.7.3 Classroom Management
- 6.7.4 Curriculum Transaction
- 6.7.5 Assessment and Evaluation
- 6.7.6 Role of Nation-Building

6.8 Relationship Between Teaching and Learning

- 6.8.1 Reflective Teaching
- 6.9 Let Us Sum Up
- 6.10 Unit-End Exercises
- 6.11 References and Suggested Readings
- 6.12 Answers to Check Your Progress

6.1 INTRODUCTION

When learners come to school, although they have learned many things by way of socializations, much is left for the formal organizations like schools

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and colleges to handle. These organizations have the responsibility to equip the learners with all the required knowledge, skills and attitudes. This is done mostly by teachers through the processes of teaching and learning. Teachers are professionals and experts. They have a rich store of well-organized knowledge about the many specific situations of teaching. This includes knowledge about the subject they teach, their students, general teaching strategies, subject specific ways of teaching, settings for learning, curriculum matters and the goals of education. As students of education, you ought to know who teachers are, what characteristics that mark teachers off from other professionals, and what roles they play as teachers. In addition, you also need to know what skills and competencies are as well as how teaching and learning are related. The present Unit entitled "Teacher and Teaching" attempts to provide you with some of the necessary details related to teacher and teaching with a view to helping you understand what a teacher is and how teaching is carried out in the classroom.

6.2 OBJECTIVES

After going through this Unit, you will be able to:

- explain who a teacher is;
- bring out the differences involving the concepts of teaching, instructing, and training;
- list and explain some of the important characteristics of a teacher;
- illustrate what teaching skills are;
- explain what competencies are;
- point out how competencies differ from skills;
- list and explain the various roles that teachers play;
- highlight some of the relationships that exist between teaching and learning;
- define what reflective teaching is; and
- elucidate the process of reflective teaching.

6.3 WHO IS A TEACHER?

Teachers are individuals who have elaborate systems of knowledge for understanding problems in teaching and learning. They are experts who have control over various knowledge bases of teaching and learning and use this knowledge to guide the science and art of their classroom instruction. Depending on the level at which they teach, they have the required content mastery in the subject or discipline they teach. In addition, they have necessary awareness about the theoretical and practical aspects related to teaching and learning. By way of theoretical knowledge, they have acquired relevant portions of the foundation courses of education such as philosophy,

sociology, and psychology. As for practical aspects related to instruction, they are well-versed in general teaching strategies such as the principles of classroom management, effective teaching and evaluation. With all these, an ideal teacher is an expert in the art and science of classroom teaching.

Apart from both content and pedagogical knowledge, a teacher is good at selecting, planning, organizing and execution of various educational programmes. Planning has to do with knowing what we want to do, how to do it, and how to find out whether or not learners have succeeded in what was expected of them. Teachers generally carry out three levels of planning, namely, yearly planning, unit planning, and daily lesson planning. Year plan takes care of the even distribution of the content throughout the entire academic year. Unit plan analytically looks at the unit or lesson, picks out the teaching points, spells out the objectives of teaching, and strategies for teaching and evaluation. Then the unit plan is broken up into as many daily lessons as required.

Apart from planning, teachers have a very large number of skills, techniques, strategies and methods for teaching. They make use of active and passive modalities in their teaching. To help learners learn actively, they make use of learner centred methods as assignment, projects, brainstorming, discussion, discovery, inquiry, etc. When a large amount of information is to be passed on, they make use of methods such as lecture or demonstration. Thus, depending on the nature of the content and the objectives of teaching, they use the most appropriate method that suits the situation in question.

Teachers not only plan and teach but they also evaluate the performance of the learners and take up necessary remedial measures to help them improve their learning. Besides all these, ideal teachers always strive to update their knowledge and skills. They always keep moving in tune with the changing needs of the changing times. For them, learning is lifelong. They do not only update their knowledge but also strive to raise their instructional awareness on a daily basis. For this purpose, they introspect and find their own shortcomings. They observe their colleagues teaching and pick up points that make their instruction better. In this way, an ideal teacher is a person who has the knowledge and ability to mould his/her students in the best way possible.

6.4 CONCEPTS OF TEACHING, INSTRUCTION AND TRAINING

The term "teacher", as noted above, is one who teaches in a school. However, in our day to day life, we can also use the term in a wider context to include professionals in other institutions who have a pedagogical role such as music teacher, driving teacher, sports teacher, etc. So the term may be used in both a specific sense (schoolteacher) and in a more general sense as one who helps another in learning something. So the term "teacher" may be taken to cover all persons such as trainer, instructor, and tutor who teach in schools as well as in colleges.

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6.4.1 Teaching

Teaching when used in the specific sense requires a lengthy period of training and adherence to a professional code of conduct. As a teacher, you may teach, train or instruct others. All these are done to bring about changes in the cognitive structure of the students. However, they involve significant change in their meaning. The term teaching refers to the actions of someone who is trying to assist others to reach their fullest potential in all aspects of development. Teaching results when the teacher does any activity with the intention that his/her learners would learn something as a result of it. For example, when he/ she explains to his/her learners a scientific principle or a procedure for solving a mathematic problem and anticipates that his/her learners would learn it, teaching would result. Teaching would also result, when he/she gives a reading passage to the students for learning. In this way, directly through face-to-face instruction or indirectly from books, films, etc, teaching can occur. Teaching can also be done through online classes using internet or TV channels. Teaching is the process of facilitating learning by leading discussions, asking open- ended questions and acquiring knowledge by active participation.

6.4.2 Instruction

As compared with teaching, instruction is one way as the teacher provides the procedure to do something. If the teacher is providing step-by-step instruction to complete a task solving a mathematical problem in a class, it is an example of instruction. The teacher is active while the learner is expected to follow the teacher. It includes both teaching and management. They coordinate so well that it is difficult to tell one from the other. A question that the teacher puts to the class is an act of teaching while restricting its answer to a single student is part of classroom management. Similarly, recognizing learner's attention behaviour, managing deviant behaviour, recognizing learner needs, etc. that occur along with teaching are all part of management process while teaching. Effective instruction involves efficient use of both management techniques and teaching methods.

6.4.3 Training

The term "training" is usually used to refer to an act of practical rather than a theoretical nature, although it involves a substantial amount of theoretical matters in it. As we know, training cannot be carried out in the absence of theoretical aspects. However, as the focus of training is mainly laid on preparing the learner for a specific task, job or profession, the process is named as training. For instance, teachers are provided in-service training or pre-service training. Teaching and instruction are more academic when compared to training as it is concerned with mastering skills and competencies.

As you might have noted by now, although there are some differences in meaning among teaching, instruction, and training, the central process that runs through all of them is learning.

Ch	eck Your Progress (1)	
No	tes: (a) Write your answers in the space provided after each item.	
	(b) Compare your answers with those given at the end of the unit.	
1)	Define the following concepts in a sentence each:	
	a) Teaching	
	b) Instruction	
	c) Training	
2)	How is teaching different from instruction?	
3)	What does training focus?	

6.5 TEACHER CHARACTERISTICS

We have already seen what a teacher is and how teaching, instruction, and training differ from one another. A teacher's duty is to help students develop intellectually, socially, physically, emotionally and morally so as to bring about their all round development. Only when teachers have the required

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knowledge and skills, they will be in a position to carry out such a big task. Ideal and efficient teachers are marked by certain characteristics. Let us now take up some of these characteristics and deal with them at some length.

6.5.1 Content Mastery

Content mastery or deep knowledge of the subject that the teacher is to teach is an important trait of an ideal teacher. Every subject or discipline, as you may have noticed, is made of a number of major topics. Each of them, in turn, can be broken down into a number of sub-topics and each sub-topic is explained with the help of suitable examples. When a teacher knows all the major topics in the subject area and the sub-topics and the inter relationships that bind them together as units, s/he is expected to have content mastery. It will help the teacher to deal with the subject authoritatively.

6.5.2 Knowledge of Pedagogy

Another trait that marks off an ideal teacher is his/her knowledge of pedagogy. It deals with teaching as a professional practice and as a field of academic study. Pedagogy deals not only with the practical application of teaching or skills but also curriculum issues and the body of theory related to how learning takes place, etc. It deals with traditional expository methods like lecture and demonstration, learner-centred methods like projects, assignments, programmed learning materials, and group centred methods such as discussion, seminar, roles play, etc. Apart from these, pedagogy also deals with a wide range of media like print media, human interactive media, audio-visual media and realia. In addition, pedagogy shows how to make use of various gadgets such as software, hardware, etc. for facilitating instruction. Knowledge of pedagogy is, therefore, an important characteristic of any effective teacher.

6.5.3 Knowledge of Educational Goals and Objectives

Apart from knowledge of content and pedagogy, another characteristic that is generally shown by teachers is their knowledge of goals and objectives. Instructional objectives are generally seen at three levels, namely, (i) immediate objectives, (ii) intermediate objectives and (iii) remote objectives. Immediate objectives are expected to keep students involved with a feeling of continued achievement. Intermediate objectives highlight what students are expected to perform at the end of teaching each day. Remote objectives visualize what students expect to achieve in future. Goals and objectives are like road maps. They provide guidelines and direction to various instructional activities. In their absence, there can be chaos and confusion. Knowledge of goals and objectives help teachers plan, organize and carry out various instructional activities systematically. It also helps them avoid waste of time and energy.

6.5.4 Knowledge of Curriculum

Curriculum refers to the total list of content and activities prepared for the education of pupils. For convenience, this total list is divided in terms of subjects like science, mathematics, etc. This subject-wise list of items is called syllabus. Like curriculum, it contains selected and organized content, goals and objectives, techniques and methods for syllabus transaction, and suggestions for evaluation. Curriculum and syllabus state what an ideal learner is supposed to learn. This knowledge helps teachers strictly follow the given guidelines and avoid confusion.

6.5.5 Knowledge of Educational Contexts

Another characteristic of teachers is their ability to locate and exploit the various educational contexts for the purpose of teaching. Apart from schools and colleges, there are a number of informal and non-formal agencies that can provide contexts for learning. Every society has several educational agencies like museums, zoos, art galleries, self-government bodies, cooperative organizations that have tremendous educational potentials. Similarly, there are a large number of knowledgeable people like training personnel in various organizations, social workers, doctors and others who have specific knowledge and skills useful to students. This knowledge will enable teachers to locate and exploit them to the maximum extent possible. This way of using community resources for enhancing learner excellence is an important aspect of education.

6.5.6 Knowledge of Learners and their Characteristics

Every ideal teacher has clear understanding of their learners and their characteristics. No teacher can be effective until s/he knows her or him through and through. There is no reason to go ahead with planning until s/he knows where his/her students stand with respect to their learning. S/he should have a tentatively precise profile of each learner. This will enable her/him to come out with ways of remediation and enrichment. In the absence of this ability, no instruction can be effective.

6.5.7 Interpersonal Knowledge

Every effective teacher has the required level of interpersonal and intrapersonal knowledge. Her/his interpersonal knowledge will enable her/him to maintain good relation with her/his students, educational community, parents and the community around. Knowing people is a pre-requisite for interacting effectively with them. Knowing someone means knowing her/his ethics and dispositions. This knowledge will make teachers interact with all concerned as frequently as possible and find ways to tap into their inner motivations. If teachers are to select resources, create open-ended opportunities for inquiry and to make connections between life experiences and school experiences, teachers need to have interpersonal intelligence.

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By now, we have discussed briefly a number of characteristics and how they are useful in the process of instruction. You might have realized that becoming an ideal teacher is easier said than done. It cannot be achieved overnight. Excellence in teaching is developmental. It takes several years to build up sound professional and interpersonal knowledge. Excellence comes only when teachers have deep insight into various bases of knowledge.

Ch	eck Your Progress (2)					
No	Notes (a) Write your answers in the space provided after each item.					
	(b) Compare your answers with those given at the end of the unit.					
1)	Define each of the following concepts in a sentence each:					
	a) Goal					
	h) Cymri cylynn					
	b) Curriculum					
	······					
	c) Pedagogy					
	.,.,					
2)	What does content mastery mean?					
	·					
2)						
3)	List any five characteristics of an ideal teacher.					

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4)	Note down any two advantages of having interpersonal knowledge.			

6.6 TEACHING SKILLS AND COMPETENCIES

The process of teaching generally involves a number of steps or stages such as planning, presentation of content, practice, assessment and evaluation, and assigning homework.

6.6.1 Teaching Skills

Teachers make use of several skills for teaching. Depending upon the ways these skills are used, they are put under three headings, namely, (i) pre-instructional skills, (ii) instructional skills, and (iii) post instructional skills.

- 1) Pre-instructional Skills
 - a) Selection and logical arrangement of teaching content
 - b) Statement of instructional objectives
 - c) Choice of proper teaching aids
- 2) Instructional Skills
 - a) Skill of introducing the lesson
 - b) Skill of explanation and illustration
 - c) Skill of reinforcement (use of consequences to strengthen behaviour)
 - d) Skill of questioning and probing
 - e) Skill of using silence (the use of teacher silence for a few seconds that follow the posing of a question before a student is called to respond. It is called "wait-time").
 - f) Skill of closure (the act of summing up what have been taught during the lesson)
- 3) Post Instructional Skills
 - a) Evaluation (testing and finding whether or not the predetermined objectives are fulfilled or not)
 - b) Planning remedial measures
 - c) Giving home assignments

The above are some of the skills that teachers generally use for instructional purposes. Teacher efficiency and effectiveness, to a great extent, depend on how well-versed teachers are in these skills.

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6.6.2 Teaching Competencies

When teachers teach, they have always in mind the goals or aims for which they teach. A goal is a general statement as to what the students are able to achieve at the end of an educational programme or course. Teachers generally follow a means - ends analysis process for achieving the goal. They divide the goal into competencies and then each competency, in turn, into its constituent skills. For example, the aim of an English teacher in teaching English in the classroom is to help learners attain proficiency in English. Similarly, the goal of a cricket coach is to turn the trainees under her/him into excellent cricketers. The first step they do in achieving their goal is to divide it into sub-goals or competencies.

A competency is a statement that describes the observable demonstration of a composite of specific skills. The goal of teaching English, as noted above, is achieving proficiency in English. The English teacher breaks it up into competencies like listening competency, speaking competency, reading competency and writing competency. The teacher then breaks up the listening competency, for example, into such specific skills as recognizing and understanding the spoken words, guessing at unknown words and phrases, distinguishing between literal and implied meaning, identifying relevant points and rejecting the irrelevant, making use of the non-verbal clues to grasp the message, etc. Similarly, the cricket coach divides the goal of excellence in cricket into competencies like bowling, batting and fielding. Then he/she breaks the bawling competency into its component skills like holding the ball in the hand, moving up to the mark of running, running up to the point of throwing the ball, raising the hand and sends the ball swirling strait at the stump.

If you analytically look at the process of teaching and learning, you can easily notice that it comprises a large number of competencies. Knowledge of content matter, ability to analyze the content to be taught, skill in sequencing the content, ability to spell out the instructional objectives in clear terms, giving required reinforcement, ability to communicate fluently with clarity, ability to assess learner achievement are some of the major competencies involving the process of teaching and learning. The learning of a large number of individual skills is of little value unless combined and interrelated into a composite of performance that is greater than the sum of individual skills. In the present situation, teacher also needs technical competency to utilise various online teaching platforms.

6.6.3 Putting objectives in Behavioural Terms

We have discussed at some length what teaching skills and competencies are. Now let us briefly discuss how to put objectives in behavioural terms. If objectives are to be meaningful, they have to be put in such a way as to make the teacher's instructional intent clear. They should not be presented using words such as know, understand, appreciate, believe, etc. as they will not

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allow us either to observe or measure. So, we should use only such words as list, recite, identify, differentiate, solve, compare, contrast, etc. for stating instructional objectives as they are words that express actions that are observable and measureable. For example, the instructional objectives may be stated as "The learners will be able to compare the functions of the brain with those of the computer", or "Given a list of verbs and nouns, learners will be able to differentiate verbs from nouns". If objectives are put in behavioural terms, it will be advantageous to both the teacher and the learners. This will make assessment easy for the teacher and learning easy for the learners as it makes the teacher's instructional intent more clear and precise.

Check Your Progress (3)	
Notes: (a) Write your answers in the space provided after each item.	
(b) Compare your answers with those given at the end of the Unit.	
i) Define the following terms in a sentence each:	
a) Competency	
b) Wait time	
	-01 LL
c) Closure	DOLL
	EKSII
2) Name any two pre-instructional skills.	
3) What do you think are the advantages of putting instructional objective in behavioural terms?	3

6.7 DIVERSE ROLES OF TEACHERS

Teachers are appointed to prepare youngsters for life. They are expected to bring about all round development of the children. Teachers, therefore, have to take care of learner's intellectual, physical, moral, social and emotional development. So the roles that teachers are to play are manifold. Some of these roles are so crucial that, you, as learners of education, ought to know at least some of them. Let us now take up some of these roles and deal with them briefly.

6.7.1 Planning and Making Decisions about Instruction

Planning and decision-making are processes that call for sophisticated understanding and skills. By way of planning, teachers have to decide what content is to be taught, why and how to teach it and find whether or not they have succeeded. In other words, they have to develop a step-by-step procedure use for teaching, taking into account the variables of the learners and availability of the resources and facilities so as to lead to the attainment of the pre-determined objectives. In fact, teachers begin their planning even before they enter the classroom for teaching. They generally undertake three levels of planning, namely, yearly planning, unit planning and daily lesson planning. Teachers know that in the absence of planning, teaching can become disorganized and chaotic resulting in negative consequences both for the teachers and the pupils. Planning is necessary both for student learning and the overall flow of classroom life. Planning also gives a sense of direction for the classroom activities. It will also help to produce smooth running classrooms without any interruptions.

6.7.2 Building a Productive Learning Climate and Motivating Students

Apart from planning, another important role that teachers play is building a productive classroom climate and motivating students. Learning can take place only when there is an intellectual climate in the classroom. If the teacher goes on talking all the time, giving learners seldom an opportunity for participating in the process, learners will naturally feel bored. Instead if the teacher provides students more scope for autonomy, participation, and involvement, the class will become active and alive. Teachers can also resort to active ways of learning such as discussion, role-playing, assignment, projects, brain-storming, etc. Along with this, learners will also be given opportunity for expressing their ideas freely without fear of being laughed at or punished. They also pay attention on concerns of learners by setting realistic and achievable goals and helping them work in groups. Apart from creating a productive climate, teachers also motivate learners for learning better. Learners have such motives as need for achievement, fame, affiliation, power, etc. Effective teachers strive to motivate learners by identifying their

motives that has the highest driving force. Thus, they help learners put in real effort and energy in their learning tasks and come out with better results.

6.7.3 Classroom Management

Classroom management is an integral part of classroom instruction. It has to do with manipulation of learner attentiveness to optimize learning in the classroom. Classroom management is concerned with maintaining peace and order within the classroom. In case the classroom is disturbed and chaotic, nothing can go right. Such a classroom can distract both the teacher and the learners. It prevents learners from concentrating on the classroom activities and prevents them from reaching their fullest potentials.

Effective teachers use a number of methods and techniques to assist them in their classroom management. They develop and use signal system for the purpose. For example, when a learner wants to respond to a question, s/he raises her/his hand. They also establish rules and procedures such as when going to the laboratory or playground, they should go in a line. Teachers also break up potential cliques by allotting seats at different places in the class. They also avoid long lectures and over dwelling of teaching points. They also resort to active ways of learning. In short, effective teachers manage to create a classroom atmosphere wherein they can teach and learners can learn.

6.7.4 Curriculum Transaction

In addition to planning, creating a positive climate, and managing the classrooms, another important role that the teacher is to play is teaching or curriculum transaction. In the recent past, teacher generally used to employ expository methods like lecture and demonstration for teaching. Now, unlike in the past, we believe that every individual constructs his/her own knowledge and skills by integrating their present knowledge with that of their prior knowledge. So, now teaching is considered as an interactive process in which both the teacher and the learners are actively involved. So teachers these days use such learner-centred methods as projects, assignments, role play, brain-storming, discussion, etc. Contemporary teachers are held responsible for using teaching practices that have shown to be effective. They use practices that have scientific basis. They also build up a nurturing and caring environment and activate student energy to work for the accomplishment of the predetermined objectives. As a result, learners develop ability to think critically and ability to perform independent inquiry. Thus, as a result of active learning, students construct knowledge and skills that passive learning cannot afford.

6.7.5 Assessment and Evaluation

Assessment and evaluation are integral parts of teaching. Teachers who have spent a large amount of energy and time in planning, teaching and managing classrooms should know whether or not their effort has yielded the expected

result. Evaluation involves three steps, namely, (i) testing, (ii) measurement, and (iii) evaluation. Testing is the usual technique that teachers use for gathering information for knowing how much learners have learned. Test consists of a set of questions or tasks to which learners respond. Test result shows the characteristics of the learners. Apart from testing, teachers may use other techniques such as interviews, rating scales, checklists for gathering information. Measurement is assigning of a numerical index to what is assessed. Evaluation is making a judgement on what is measured. Assigning a grade is an evaluative act. So is the act of deciding whether someone has passed or failed.

The purpose of evaluation can be several. It may be to appraise the change in the learner's behaviour, or to diagnose their strengths and weaknesses. It can also provide scope for feedback and find ways and means for improvement. Although assessment and evaluation processes consume a large portion of teachers' time, this role is something that cannot be overlooked.

6.7.6 Role of Nation-Building

Today's children are tomorrow's adults who take up various responsibilities in different areas of life. Their efficiency and effectiveness, to a great extent, depend on the type of education they received in schools and colleges. In case, they have built up the ability to think critically and creatively, to make decisions and solve problems, to live and let others live, it is because of the teachers who taught them. If as adults they are able to look after themselves, help the community in which they live, and serve the nation with devotion and work for its progress and reputation, it is again because of the teachers who taught them. Again, if the citizens of today are performing well wherever they are and whatever position they are placed, it is because of the teachers who taught them.

Thus ideal teachers know their roles as nation builders, planners, decision makers, motivators, classroom managers, curriculum transactors and evaluators. Therefore, they take all the measures within their ability to make themselves capable of carrying out their roles with utmost devotion and piety.

Check Your Progress (4)
Notes: (a) Write your answers in the space provided after each item.
(b) Compare your answers with those given at the end of the unit.
1) Define the following terms in a sentence each:
a) Planning

Teacher and Teaching

		Teacher and Teaching
	b) Classroom management	
	c) Curriculum transaction	
2)	What does building a productive learning climate mean?	
		ODI E'C
		IUPLE 3
3)	Why are assessment and evaluation integral parts of teaching?	
		DCITV

6.8 RELATIONSHIP BETWEEN TEACHING AND LEARNING

We have by now, discussed several aspects related to teacher and teaching such as teacher characteristics, teaching skills, competencies, and diverse roles of teachers. Now let us deliberate at some length on relationship

between teaching and learning. Our own past experience as learners also show that there is a lot of connection between teaching and learning.

The way teachers teach, largely decides whether or not students learn. Successful teachers know that students pay attention to what they teach only when they perceive what teachers teach are relevant and interesting. Conversely, when students realize that what they teach are irrelevant, they are unlikely to pay attention to it. We know that what students learn now is not for today but for the future when they take up their responsibilities. So their time in the classroom should not be wasted on useless pursuits. Hence, teachers need to realize that what they teach in the classroom today should not only be useful to them in the future but also that it should be taught in such a way that they remember it for a long time to come. This is possible only when teachers select methods of teaching, learning experiences and activities judiciously. When students perceive what the teacher teaches is both useful and interesting, they will concentrate and as a result, learning will take place.

Experienced teachers know that learner-centred ways of teaching provide better scope for active participation of the learner in the teaching-learning process. Only when students are actively involved in the process, they will be able to concentrate and construct their own knowledge and skills easily. Concentration leads to better perception and increases scope for integration of the new knowledge with that of their prior knowledge. Ideal teachers realize this fact. So they give up the habit of teaching learners through expository methods like lecture and demonstration and use learner-centred methods such as discussion, role-playing, brain-storming, etc. The more the students' involvement, the greater is the learning outcome.

Stimulus variation is yet another way to bring about better learning outcome. If teachers go on using day-after-day the same techniques, strategies or methods, students are bound to be bored. Then they will naturally find it difficult to concentrate. In its absence, nothing can enter the brain. To overcome this problem and make learning more pleasurable, teachers have to master a number of techniques and methods. In case they do that, they can make their teaching very interesting by selecting and using appropriate ones looking into the nature of the content and the objectives of teaching it. Teachers may, for example, introduce a topic through discussion which, in turn, may be followed by a description and then a question answer session, etc. They may also use a number of media like the audio-visual media, human interaction media, print media, realia and the like. With the incorporation and use of different techniques and media, learning can be made more pleasurable and productive. Learners would find it easy to concentrate and as a result, better learning would take place.

As your experience in learning would have shown, most of the methods that teachers use for teaching are also methods of learning for learners. Nearly almost all the methods that teachers use have either explicit or implicit link

Teacher and Teaching

on how knowledge and skills are constructed. You, as a learner, can make use of those methods for your learning. This implies that you have several strategies in your repertoire of learning. The more the number of learning strategies at your disposal, the greater will be your scope for accomplishing more and more types of learning with much effectiveness. For example, learner-centred methods like inquiry, discovery, discussion, questioning, role-play, etc. which teachers use for teaching are also methods of learning for learners. You can follow up the steps teachers use for teaching, and use the same for self-learning.

The processes of teaching and learning, as we have noticed, are unquestionably interlinked. There is undeniable relation between how teachers teach and how students learn. By resorting more and more to learner-centred methods of teaching and bringing about greater stimulus variation, teachers can help students learn better.

6.8.1 Reflective Teaching

Reflective teaching is a way of teaching in which teachers help their learners learn things better with the help of reflection. Reflection is the process of recreating one's experience once it is over and ruminating over it with a view to improving it. Reflection, thus, offers learners ample opportunity for mentally recalling their own experiences, analyzing and evaluating their own performances and drawing lessons out of them. There is no other tool that is as good as reflective teaching for systematically exploring, posing questions, framing designs, finding limitations and making improvements in our actions. As we know, it is not possible for us to reflect on a task as we are experiencing it. Only when the task is over, we are in a position to reflect over it and find out what went wrong and what went right. In the light of the insight gained from reflection, we can reframe and repeat the task again and again until we attain the required level of proficiency in it.

Many scholars and practitioners have found this method of recalling the experience, looking at it critically, and finding ways to improving our performance favourable. Some of them have come out with models that help us use it as a method of teaching. Out of these, the model evolved by Korthagen and Kessels (1999) known by the acronym ALACT is quite suitable for teaching purpose. The various letters in it stand for:

A - Action

L – Look back

A – Awareness of essential aspects

C – Creating alternative methods of action

T – Trial

The above model, as you notice, has five phases. Each step is explained below taking the example of method masters attempting to improve the practice teaching ability of their teacher trainees through reflection. Before



the beginning of the practice teaching sessions, the teachers explain to their trainees all the theoretical aspects needed for improving their teaching ability using the reflective teaching method.

Let us now explain each step one by one:

- i) *Action*: The trainees select a topic, plan a lesson, and teach it as per the direction given by the teacher.
- **ii)** Look back: Once the lesson is completed, the learners mentally recreate each step of the lesson and reflect over it. The first is introduction. To help reflection, they frame a few questions such as "Was the introduction proper? Did it help learners link the topic with their prior knowledge? What were the limitations of the introduction? etc. In this way, they recall each step, coin questions, reflect and find out their strengths and limitations. In this way they get to know the limitations and strengths of each stage.
- **iii)** Awareness of the essential aspects: As a result of reflection as explained above, the trainees get substantial awareness about the positive and negative aspects of their performance.
- iv) Creating alternative ways of Action: In the light of the insight gained through reflection, the trainees create alternative ways of overcoming their limitations.
- v) *Trial:* Once the reframing is done using new techniques and modalities, they teach once again. This process of reframing and reteaching continues under the guidance of the method master until they reach adequate level of proficiency in practice teaching.

Research has found reflective teaching quite efficient and effective in improving the teaching ability of teacher trainees. Similarly, it can be used by anyone to enhance any action that needs to be improved. Using reflection as a means of teaching or learning also is found to have several advantages. It can help us move away from the level of impulses and routines to a level where our actions are guided by critical and creative thinking. It can also help us rehearse or practise what we have heard or seen thereby leading to deeper understanding and greater retention. This method is now being used so frequently for teaching and learning that it has become something of a buzzword in education.

Che	Check Your Progress (5)	
Not	es:	(a) Write your answers in the space provided after each item.(b) Compare your answers with those given at the end of the unit.
1)	De	efine each of the following expressions in a sentence each:
	a)	Stimulus variation

	b) Active ways of teaching	Teacher and Teaching
	c) Reflective teaching	
2)	Why are active ways of teaching not as good as passive ways of	
	teaching?	
3)	Write down any two relationships between teaching and learning.	
	THEPE	OPLE'S
4)	What do you think are the advantages of using reflection as a method of teaching?	RSITY

6.9 LET US SUM UP

Teachers are professionals and experts who are appointed for preparing youngsters for life. Teaching is an attempt to bring about the required changes in the cognitive, affective, and psychomotor domains of the learners. It is the process of facilitating learning. If teachers are to do their job with efficiency and effectiveness, they should be marked off by such characteristics as content mastery, knowledge of pedagogy, knowledge of

educational goals and objectives, knowledge of curriculum, knowledge of contexts in which learning takes place and knowledge of learners and their characteristics. They should also have expertise in the handling of various teaching skills and competencies. Only when teachers have all these characteristics and abilities, they will be in a position to carry out the multiple roles such as planning for instruction, building productive learning climate in the classroom, motivating students, managing classrooms, transacting curriculum, and assessing and evaluating learner performance. They should also be well-versed in the handling of various teaching skills and competencies, and novel methods like reflective teaching. Above all these, teachers should also know how teaching and learning are related. Only then they will be able to carry out the act of instruction at the optimum level possible.

6.10 UNIT- END EXERCISES

- 1) Why is managing classroom important?
- 2) 'Assessment and evaluation are integral parts of instruction'. Discuss.
- 3) What is planning? How does it help the teacher in teaching?
- 4) In what sense are teachers nation builders?
- 5) What does knowledge of educational context mean?
- 6) What does each letter in the acronym ALACT stand for? Explain them briefly.

6.11 REFERENCES AND SUGGESTED READINGS

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6.12 ANSWERS TO CHECK YOUR PROGRESS

Check your progress (1)

- 1) a) Teaching is a process of attempting to promote changes in the learners.
 - b) Instruction is a process which involves efficient use of both management techniques and teaching methods.
 - c) Training is a process wherein the focus is mainly laid on preparing the learners for a specific task, job or profession.
- 2) Teaching can be done either through face-to-face interaction or indirectly through assignments. Unlike teaching, instruction includes both teaching and classroom management.
- 3) The focus of training mainly lies in the preparation of learners for a specific task, job, or profession.

Check Your Progress (2)

- 1) (a) Goal is a general statement as to what the learners will be able to accomplish at the end of a course of study. (b) Curriculum refers to the total list of content and learning experiences, prepared for the purpose of education of learners. (c) Pedagogy deals with teaching as a professional practice and as a field of academic study.
- 2) Content mastery refers to deep knowledge of the subject. If a teacher knows all the major and sub-topics of all the units of the subject and the interrelationships that bind them together as units, s/he is considered to have content mastery.
- 3) Content mastery, knowledge of pedagogy, knowledge of goals and objectives, knowledge of learners and their characteristics, and knowledge of assessment and evaluation.
- 4) Interpersonal knowledge will allow the teacher to maintain good relationship with her/his learners. It will also help her/him find and exploit human resources for improving the quality of education.

Check Your Progress (3)

- 1) (a) Competency is a statement that describes the observable demonstration of a composite of specific skills. (b) Wait time refers to the skill of using silence for a few seconds that follow the posing of a question before a learner is called to respond. (c) The skill of closure refers to the act of summing up what have been taught during a lesson.
- 2) a) Selection and logical arrangement of teaching content.
 - b) Statement of instructional objectives.
- 3) If instructional objectives are put in behavioural terms, it will help the learners understand the teacher's instructional intent more clearly and precisely. This will also make assessment easy for the teachers.

Check Your Progress (4)

- (a) Planning refers to the step-by-step development of a procedure for teaching taking into account the variables of the learners and availability of resources for the attainment of the predetermined objectives. (b) Classroom management has to do with the manipulation of student attentiveness with a view to optimizing learning in the classroom. (c) Curriculum transaction refers to effective implementation of the curriculum contents according to the objectives specified in the curriculum.
- 2) Teachers can build a productive climate in the classroom by providing learners more scope for autonomy, participation and involvement; by resorting to active ways of learning such as discussion, project, roleplaying, etc; and by giving opportunities for expressing their ideas freely without fear of being punished or laughed at.
- 3) Assessment and evaluation will help teachers find whether or not their effort has yielded the expected result. This will give teachers scope for providing learners with the required feedback, and find ways and means for improvement. It will also help teachers bring about the required changes in their own teaching. So assessment and evaluation are aspects that cannot be avoided.

Check Your Progress (5)

- (a) The expression stimulus variation refers to the process of selecting and using appropriate techniques and methods looking into the nature of the content and the objectives of teaching it. (b) Active ways of teaching refers to the habit of teaching students through expository methods like lecture and demonstration wherein the teachers are active and the students passive. (c) Reflective teaching is one of the ways of teaching in which the teachers help their students learn things better through reflection.
- 2) Active ways of teaching such as lecture and demonstration, teachers are active and students are passive. Conversely, in learner-centred methods like discussion, role-playing, etc, learners are active and so they provide better scope for learning.
- 3) Learner -centred methods of teaching bring about better learning than that of teacher-centred methods. Similarly, practising stimulus variation in teaching is also found to bring about better learning.
- 4) Unlike any other methods of teaching, reflective teaching can be used by anyone to enhance any action that needs to be improved. It can also help us to rehearse or practise what we have heard or seen thereby leading to deeper understanding and greater retention.



UNIT 7 LEARNING ENVIRONMENT

Structure

- 7.1 Introduction
- 7.2 Objectives
- 7.3 Concept of Learning Environment
- 7.4 Types of Learning Environment
 - 7.4.1 Formal Learning Environment
 - 7.4.2 Informal Learning Environment
 - 7.4.3 Non-Formal Learning Environment
 - 7.4.4 Virtual Learning Environment
- 7.5 Creating Positive Learning Environment
 - 7.5.1 Teaching Respect to All
- 7.6 Dynamic Interaction among method, media and content
- 7.7 Let Us Sum Up
- 7.8 Unit-End Exercises
- 7.9 References and Suggested Readings
- 7.10 Answers to Check Your Progress

7.1 INTRODUCTION

Our traditional conception of learning environment is centered on places and spaces. When we look at today's classroom, it demands multiple modes of students' learning and provides space for collaboration and cooperation among learners. In this sense, we can say that effective learning environments do not confine themselves to place, space or time. It comprises different support systems like teaching methods, strategies, technologies, and teaching-learning resources that need to be taken into consideration for creating a conducive learning environment. Providing meaningful learning in any context expands our notion of learning environment. With technological innovations, the concept of learning environment needs to be understood in the context of virtual learning. You are aware that how the influence of COVID-19 pandemic situation leads to the creation of virtual learning environment. Though we were confined to our homes during this period, virtual learning environment enabled us to continue our learning process. In the present Unit, you will understand the journey of varied learning environments. You will also learn how to create a positive learning environment and comes to know how the interaction takes place among methods, media and content.

7.2 OBJECTIVES

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

- explain the explain the term learning environment;
- classify the various types of learning environments;
- compare the pros and cons of different learning environments;
- create a positive learning environment; and
- establish a logical relationship among method, media and content.

7.3 CONCEPT OF LEARNING ENVIRONMENT

Before initiating the concept of learning environment, let us read the following conversation:

Conversation	Conversation 1	
Teacher:	We are going to study about the preparation of standard solution of sodium carbonate.	
Student 1:	Can we go to the laboratory to study its preparation?	
Teacher:	Of course. Let me check the availability of school lab. (Teacher checks its availability with the lab in-charge) Sorry students, but Chemistry lab is not available right now. But I can demonstrate its preparation in classroom. However, you all can try it only in the laboratory. Is this okay with you all?	
Students:	Yes, this seems to be a good idea.	
Conversation		
Teacher:	We are going to study about the preparation of standard solution of sodium carbonate.	
Student 1:	Can we go to the laboratory to study its preparation?	
Teacher:	No, not now. Study the theory first.	
Students:	How will we understand it without doing it practically?	
Teacher:	We need to complete the syllabus first. Rest will be seen later on.	
Conversation	Conversation 3	
Teacher:	(via video-conferencing) Hello students, today we are going to study about the preparation of standard solution of sodium carbonate. (Teacher uploads an animated video of the steps showing the preparation of standard solution of sodium carbonate)	
Students:	Can we try preparing this solution at home?	
Teacher:	No, it can be risky. Any experiment should be performed under an expert's supervision. Don't worry, we will arrange some contact classes for practical sessions.	
Students:	Okay, that will be fine.	

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What do these conversations tell about learning environment? If you have read carefully, the first conversation clarifies that the teacher had tried to understand students' concern about learning and respected it. In the second conversation, the teacher was in a hustle of completing the syllabus and so the students' need was nearly ignored. While in our third conversation here, it can be read that the teacher and students are chatting online to experience online learning environment.

Here, you can see that even the content for learning is same in each situation, the way of delivery is different. Therefore, a learning environment refers to the way an educational environment is being set up. According to Finnish National Board of Education (2004), a learning environment is a learning setting consisting of **the physical environment**, **psychological factors** and **social relationships.** Let us try to understand them one by one.

First, the setting of physical environment clarifies that all learning takes place in a reckonable and noticeable physical characteristics. This type of learning environment includes the buildings, premises, furniture and equipments. Moreover, this physical environment also constitutes the educational technology, i.e. the technical learning environment. For example, on his first day to school, Ravi entered the classroom and found the well arranged cushioned writing pad chairs, a smart LCD projector, a white board, a teaching platform and good ventilation. This whole setting motivated him to learn and he curiously started waiting for his learning to begin. On the other hand, his neighbourer, Swastik, when entered his classroom he found that half of the fans were not-working, tables and benches were scratchy and an old blackboard with distorted frame, a pair of old table and chair for teacher and broken windows. So, on his first day to school, Swastik just wanted to run away from there. He was not at all curious to start his new learning experience. This is how, physical learning environment matters in building psychological environment for teaching and learning.

The areas of psychology that are mostly related to the classroom arrangement and learning environments include, environmental, educational, and social environments. Both students and teachers need these psychological factors to have a positive impact on their working potential, otherwise there can be an outburst of emotions which may further lead to cognitive and behavioural consequences. Our knowldge of Psychology about cognitive development, social cognitive theories, brain development, learning styles, and critical pedagogy have helped us to make learning environment more learner-centric. For example, as it was mentioned earlier that Swastik wanted run away from the school by looking at the physical characteristics of his classroom. This is actually the psychological impact of physical structure of the learning environment on him. So, it can be said that the psychological learning environment covers not only the cognitive environment which includes the knowledge and skill to be learnt, but also the self-awareness



theories (emotional environment) which includes the emotions, motivation, and values.

Now, let us understand how social relationships affect the learning environment. This social learning environment is actually related to social network, strucure and system. This type of learning environment, therefore, is affected by all the people who are involved in learning situation and also the interaction between/among them. For example, orientation of parents and students before the commencement of new academic session, regular parentteacher meeting, principal's interaction with teachers and students, training workshops for teachers, events like sports meet, exhibitions, educational clubs, virtual classrooms, parent-children interaction, home environment, and many more. In order to create such a social learning environment we need to set up an instructional system design so that it can bridge the gaps between the needs of the learners, objectives of learning, delivery of instruction, and evaluation. Technologies in education which have been used more frequenly in recent times have stepped in bridging these gaps. For instance, flipped classroom, smartboards, and e-books. There are few more technology to be used in classroom that can transform the world of education, like slideshow, podcasts, social media, gamification, virtual tours, and online assessments. No doubt, more and more innovative and upcoming technologies may be added to the list. Such social relationships and technological innovative ideas in teaching-learning process definitely affect the learning environment.

Check Your Progress 1
Notes: a) Write your answers in the space provided after each item.
b) Compare your answers with those given at the end of the unit.
1) If you are the principal of a secondary school, what steps you would take to improve learning environment in your school?
(Hint: Consider the physical, psychological and social factors of learning environment)
2) Explain how social relationship affect learning environment.

Learning	Environment
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List some social activities that affect the learning environment.

Moving on, we will now discuss the three important types of learning environment and their impact on learning.

7.4 TYPES OF LEARNING ENVIRONMENT

Fathima is not going to school for past few days. She is suffering from viral fever. However, she did study updates with the help of her friends and she has been studying at home with the help of her parents. But she is missing her learning experiences at school campus. On the other hand, Sujoy enjoys spending time with his father. He likes to learn about his father's business and morals of life, rather than going to school.

Now, you might have noticed from above examples that Fathima and Sujoy have different ways of experiencing learning. These different ways of learning lead to different environments of learning, thus creating various learning environments. Therefore, learning environment, can be classified as learner-centred, knowledge-centred, and assessment-centred; some others see it as face-to-face, online and hybrid. Here, we are going to figure out with a broad and the most commonly known classification of learning environment.

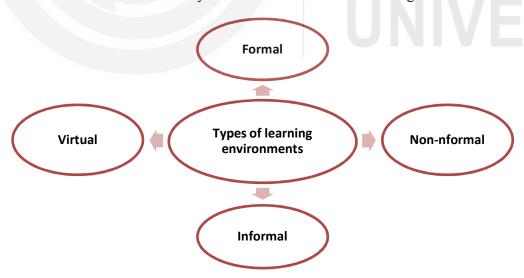


Fig. 7.1: Types of Learning Environment

From figure 7.1, it is clear that the learning environment can be formal, non-formal, informal, and/or virtual. We are going to discuss each in detail.

7.4.1 Formal Learning Environment

Ravi and Swastik, from the earlier examples of impact of learning environments were dealing with formal learning environments, *i.e.* the school. Well, this is interesting to know that this education system actually exists to promote formal learning. This type of learning system follows a definite syllabus and close examination system, with an intention that learning is the ultimate goal for all the activities performed by the students. The learning outcomes of the performances or engagements are measured by tests/exams and with some other sort of assessments too. This is a type of learning environment which is most commonly known. Whenever, there is a conversation about the education of an individual, the first question comes into our mind usually is 'which school/institution/college/university the learner belongs to?' We all believe that the learning can be at its best in a learning environment, which is *formal*. So, let us try to understand the important characteristics of a formal learning environment.

Characteristics of formal learning environment

This type of learning environment is comprised of systematic management, efficient teachers, and enrolled students. The teachers and the students share a relationship of understanding the facts of the system and process of learning. The students have to attend classroom learning, write notes, complete the given assignments, and appear for examinations. In order to understand this formal learning environment more intensely, let us understand its features:

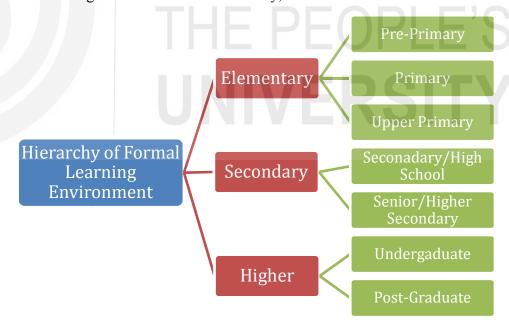


Fig. 7. 2: Hierarchical structure of existing formal learning environment

Hierarchical structure: As you can see in Figure 7.2, the hierarchy of a formal learning environment in India is structured as Elementary, Secondary and Higher Education with their own hierarchical structure. An individual has to successively cross through these hierarchical levels to have a formal learning. However, this structure is going to change with the effect of National Education Policy (NEP) 2020. NEP 2020

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states, "the extant 10+2 structure in school education will be modified with a new pedagogical and curricular restructuring of 5+3+3+4 covering ages 3-18 ..." This restructure of 5+3+3+4 is termed as foundational, preparatory, middle, and secondary levels, respectively. This policy is, therefore, emphasizing on Early Childhood Care and Education (ECCE)."

Similarly, NEP 2020 has also talked about restructuring the degree programs at higher education level, thus, restructuring the whole structure of Higher Education Institutions (HEIs). NEP 2020 says, "The undergraduate degree will be of either 3 or 4-year duration, with multiple exit options within this period, with appropriate certifications, e.g., a certificate after completing 1 year in a discipline or field including vocational and professional areas, or a diploma after 2 years of study, or Bachelor's degree after a 3-year programme. The 4-year multidisciplinary Bachelor's programme, however, shall be the preferred option since it allows the opportunity to experience the full range of holistic and multidisciplinary education, in addition to a focus on the chosen major and minors as per the choices of the student. An Academic Bank of Credit (ABC) shall be established which would digitally store the academic credits earned from various recognized HEIs so that the degrees from an HEI can be awarded taking into account credits earned. The 4-year programme may also lead to a degree 'with Research' if the student completes a rigorous research project in their major area(s) of study as specified by the HEI." Furthermore, it envisages, "HEIs will have the flexibility to offer different designs of Master's programmes: (a) there may be a 2-year programme with the second year devoted entirely to research for those who have completed the 3-year Bachelor 's programme; (b) for students completing a 4-year Bachelor 's programme with Research, there could be a 1-year Master's programme; and (c) there may be an integrated 5-year Bachelor's/Master's programme. Undertaking a Ph.D. shall require either a Master's degree or a 4-year Bachelor's degree with Research. The M.Phil. programme shall be discontinued."

- Calculative and planned: Right from the beginning of the session to its end, an individual finds everything very planned in a formal learning environment. They receive all in advance- the course content, annual calendar, list of activities and their schedule, etc. All these descriptions are very calculative in terms of time duration and assessments. Even the in-charges and pattern of conducting them are also well-planned in advance.
- Chronological grading system: In such a learning environment where a hierarchical structure exists and everything is calculatedly planned, how can the grading system not be sequential? The learning outcomes, in a formal learning environment, are graded either through numbers or letters. For example:



Table 7.1: An example of grading system in formal learning environment

Marks Range	Grade	Grade Point
91-100	A1	10.0
81-90	A2	9.0
71-80	B1	8.0
61-70	B2	7.0
51-60	C1	6.0
41-50	C2	5.0
33-40	D	4.0
21-32	E1	0
00-20	E2	0

As we can see in table 1, the grades evolve out in chronological order. Like individuals scoring 91 to100 will be graded as A1 and on a 10 point scale would be allotted with 10 points, while those scoring 33 to 40 will be assigned with grade D and grade points as 4.0. So, it is clear that better the learning outcomes of the individuals, the higher will be the assigned grades and vice-versa.

- Close Examination System: As discussed in the introduction section of formal learning environment, this type of learning environment has a prescribed syllabus which has to be finished and assessed within a definite period of time, hence following the track of close examination system.
- Teacher teaches/facilitates: In a formal learning environment, teachers play an important role in teaching the syllabus, assessing the learning outcomes, and conducting co-scholastic activities. Besides, a teacher may also be responsible in grooming her/his students in all the psychological attributes. For this reason, the students find themselves more influenced by their teachers, be it any way. So, the formal learning environment truly works on the psychological development of individuals.

Pros and cons of formal learning environment

Like most of the things, formal learning environment has also its pros and cons. Let us start with the **benefits** of this learning environment. The education here is very *organized* because each thing is pre-determined and planned. This also leads to an organized learning process. Secondly, **face-to-face learning** is a prime benefit because students can directly learn from and interact with their teachers. Thirdly, **regular assessments** keep a check on their learning outcomes. Fourth, students can have **authentic passing certificate**. Also, the **learning here is intentional** if seen from learner's

Learning Environment

perspective. Moreover, a formal learning environment may also help in making individuals more social, expressive, and confident.

As stated earlier, formal learning environment has its **cons** too. Every individual is unique in one's own way. They have their own potential and way of learning things. But, a formal learning environment believes in a *rigid curriculum* corresponding to the prescribed norms. So, the course content and its presentation are actually not based on the analysis of the needs of individuals, in particular. The individuals cannot learn at their own pace because of rigid examination system. The *teachers also work under the pressure* of completing syllabus and assessing learning outcomes, that they hardly can pay attention on each student individually. The unique learning needs, pace of learning, capability of understanding the concepts and efficiency of the individuals are at stake in formal learning environment. Moreover, the social interactions among students may take inappropriate directions if not kept under strict check. Thus, the formal learning environment helps the learners to learn in a formal way through organised channels, pre-designed curriculum and regular assessments.

Ch	eck Your Progress 2	
Not	Notes: a) Write your answers in the space provided after each item.	
	b) Compare your answers with those given at the end of the unit.	
1)	Discuss the hierarchical structure of formal learning in India.	
2)		
2)	Tabulate the pros and cons of formal learning environment.	
3)	How is the formal learning environment responsible for psychological	
	development of students?	

Now, let us talk about another type of learning environment, which is the informal learning environment.

7.4.2 Informal Learning Environment

Learning of a mother tongue by an individual, learning from observations, are some examples which do not require structured or organizational settings for learning. Such a learning environment is known as informal learning environment. Informal learning can take place wherever and whenever individuals have need, motivation, or opportunity for learning. It may be intentional or incidental. Self-directed learning, experiential learning, mentoring, coaching, etc. are few more examples of informal learning. And this type of learning environment can be found anywhere; be it in families, communities, educational institutions, hospitals, museums, and many more. It cannot be deny that informal learning environment exists in our daily life and involuntary activities. In order to understand informal learning environment better, let us see the types of informal learning.

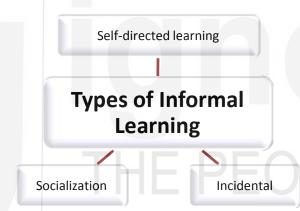


Fig. 7.3: Types of Informal Learning

Well you may have found the names of these types in the earlier explanation of informal learning environment. As seen in figure 7.3, these types include self-directed learning, incidental learning, and socialization. Let us try to understand these types.

Cooking using a recipe booklet or learning through fieldwork are examples of self-directed learning. Self-directed learning is not unintentional, and is carried out by an individual without the support of a teacher/instructor. However, a resource person or material may be involved. On the other hand, incidental learning is quite unintentional. The experience through an activity or an action becomes a learning outcome. It is only after this experience, the learner realizes that something is learnt. An example of incidental learning is an individual operating a tap in a luxurious hotel or mall. Another most common example of this learning can be a toddler pulling and pushing drawers. The third type of informal learning environment mentioned in figure 7.3 is socialization. An example can be a kid sharing lunch with another kid who was crying. Actually, socialization is a kind of informal

learning environment in which there is the involvement of internalization of values, attributes, behaviours, and skills. All these happen in our day-to-day life. For example, learning to speak a language of a region with social activities, without getting any specific training; toddlers learn what to eat or what not to.

While summarizing the three types of informal learning, it can be concluded that self-directed learning is intentional whereas the other two lack intentionality. Now, let us understand this informal learning environment from its pros and cons.

Pros and Cons of Informal Learning Environment

The informal learning provides such an environment in which the *process of learning is natural* and *based on experiences* in daily life. It neither require the learner to go anywhere nor is something learnt in a time-bound condition. A self-directed informal learning makes an individual to work hard towards the destined goal. Moreover, one may not take help of any professional institute or person, but can learn from other available resources, like internet, books, etc. and may also use variety of methods for learning outcome. Therefore, learning in such an informal environment is lifelong, cost-effective, and time-saving.

Internet is a web of information. Therefore, in an informal learning environment it may be difficult for an individual to understand the reliability of any information without the assistance of an expert or professional. This sometimes leads the individual in a dilemma about the reliability of the information. Since, there is hardly a schedule or fixed time duration to learn, it may lead to waste of time, and indiscipline.

Check Your Progress 3

Notes: a) Write your answers in the space provided after each item.

- b) Compare your answers with those given at the end of the unit.
- 1) Write the type of informal learning depicted by the following activities:

a)	from app development lectures available on YouTube:
b)	A toddler touches a hot iron and gets a burn on his hand. The next time when he sees the same hot iron, he runs away from it.

c)	A student in the playground helps his injured playmate with first-aid.
d) 	A child learns to make a world map by repeatedly arranging the pieces of jig- saw puzzle
 	formal learning may lead to yeaste of time and indicainline? Hoye?
?) 'Int 	formal learning may lead to waste of time and indiscipline'. How?

Now, between these, two learning environments i.e. formal and informal, there is another type of learning environment known as non-formal learning environment. Let us understand what it denotes.

7.4.3 Non-Formal Learning Environment

There are times when learners who want to learn but do not have any access to formal learning environment for one or the other reason. At those times, learners can learn through this non-formal learning environment. So, a learning that does not require surrounded walls, fixed furniture, strict management, live teachers but yet it lies in some kind of organizational framework, is what we call non-formal learning. This type of learning is equivalent to those done in school but the environment is very different from that. The examples of such a learning environment are distance learning, individual instructions, computer based instructions, reading groups, sports clubs, and so on. In this type of learning environment, learners intended to master a particular skill, activity and knowledge. However, non-formal learning is something what has usually been associated with adult education. Now-a-days, there is a lot of exposure to non-formal learning because of the emerging concept of skill development. Therefore, the young learners are getting more attracted towards non-formal learning environment which is now reaching somewhere near to the formal one in terms of assignments, assessments, grades and certificates. However, it provides quite a flexible learning environment for learners who want to learn.

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So, by reading the description of non-formal learning environment some of the distinguished features can be extracted. This type of learning environment provides a flexible time-table and adjustable syllabus. Therefore, learner can go for full-time or part-time learning and can study while in job. Besides, non-formal learning has a conversational and practical learning environment where an individual can also learn professional skills.

Pros and cons of non-formal learning environment

As discussed earlier, non-formal learning environment is flexible and adjustable in nature with conversational and practical mode of learning. This enables the learner to learn at one's own pace and grow naturally. There is age and time relaxation while learning. Learning can be made to happen by oneself or with the support of any professional. However, exams are not mandatory.

On the other hand, since exams are not mandatory the learning lands nowhere because the learner remains in a confusion whether the learning happened or not. Secondly, due to its flexible environment, learner may become irregular in studies. However, in distance learning mode, the certain percentage of attendance is must in scheduled contact classes.

Check Your Progress 4				
Notes: a) Write your answers in the space provided after each item.				
b) Compare your answers with those given at the end of the unit.				
1) Discuss how IGNOU provides a non- formal learning environment to the students.				
2) List the characteristics of non- formal learning environment.				

7.4.4 Virtual Learning Environment (VLE)

We all are aware of the recent pandemic situation that shook the whole world. During COVID-19, the whole country was under a lockdown period for many months. Though many markets unlocked subsequently, but formal educational environment remained closed for a longer period. In this difficult situation, the formal learning environment took the support of online classrooms and meetings.

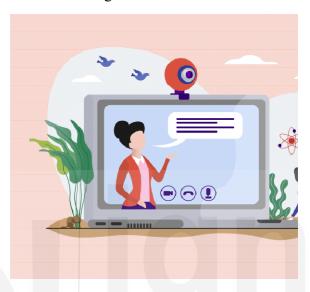


Fig. 7.4: Virtual learning environment

Source: https://myviewboard.com/blog/education/distance-learning-virtual-classrooms-where-learning-never-stops/

This system of online classrooms using internet is not new in the education world. But it was in huge demand during this pandemic. Every formal institution and organization wanted to continue the studies of new session through computers and internet. This teaching and learning process was carried out to enhance the learning experience of a learner by including internet and specially designed set of teaching and learning tools. Such a learning environment is known as VLE- Virtual learning environment (Figure 7.4). Therefore, a virtual learning environment is a system intended to share and deliver learning materials to learners through web. This type of environment may assist teaching-learning process both inside and outside the institutional premises. VLE is processed through a system which provides us with many assistive tools like communication, assessment, student tracking, meeting, and collaboration. Some of the most commonly used VLE are Google Classroom, Google Meet, Zoom and many more. Now the question is how to use and create this VLE in an effective way?

Using and creating an impactful VLE

Using any tool is not difficult. You just need to read the instructions carefully and you can operate it. But is this enough? You need to use it effectively and in an impactful manner. Same thing is applicable to VLE too. It is important to use and create in an effective and impactful manner. This can be done in

Learning Environment

numerous ways. A few ways are mentioned below which may help in making VLE useful and impactful. But these are not the only ways to create an impactful VLE. Being an individual instructor or teacher, you may design it in your own way using the tools within the webpage or application.

- Break the learning activities in short steps or content;
- Prepare video-based modules on these activities;
- While preparing the video- lectures, target audience and their interest should be kept in mind Also there should be appropriate voice modulation while delivering the content;
- Do not stick to the curricular framework only. Also try extracurricular or co-curricular learning paths;
- Promote learners' collaboration and ideation;
- Use games with badges and leader boards to motivate learners and reinforcing their learning; and
- Encourage learners' feedback.

Therefore, after creating an impactful VLE, you can use it just by uploading resource files. Once these resource files are uploaded, you can assess, track and communicate with learners by the respective tools provided by VLE source. You can also edit, re-order, or remove your resource files as and when needed. So, it is not incorrect to say that virtual learning environment is a design space for teaching and learning which is providing an alternative to real and face to face learning or we can say physical learning environment.

Pros and cons of VLE

As, discussed earlier, VLE enhances the other three types of learning environment. VLE helps in managing the different activities of teachers and students with ease. It also supports a numerous possible ways of communicating and sharing the content knowledge letting both the teachers and learners explore a new place of learning. Therefore, VLEs also assist teachers in developing lesson plans and monitor learners. It also assists in tracking learners' progress through assessments. Besides, learners can work on their activities and assignments at their own pace.

Despite having so many advantages of VLE, there are certain disadvantages too. Let us have an objective look on the pros and cons of virtual learning environment.

Table 7.2: Pros and Cons of Virtual Learning Environment

Sl. N.	Pros	Sl. N.	Cons			
1.	Virtual learning takes place at flexible times that is suitable to the learners as well as teachers.	1.	Virtual learning requires self-discipline, motivation and patience from the learner.			
2.	Virtual learning can occur wherever there is desired internet connectivity.	2.	Most of the time VLE is asynchronous which means it does not usually involve communication between persons, i.e. tutor and learner.			
3.	Anyone who has a computer, laptop, tablet or a smart phone can get access to VLE.	3.	There is lack of peer learning and peer discussion in VLE which may lead to partial understanding of the subject.			
4.	Virtual learning is cost effective as it does not involve any travel cost.	4.	The doubt clearing sessions may not be so frequent in virtual learning situations.			
5.	Virtual learning is convenient to almost everyone whether he/she is a full time working professional or the one who is completely engaged in household and family responsibilities.	5.	There may always be the probability of technological errors in the virtual learning software or the internet connectivity in the mid of the session. In addition, it may be time- consuming to deal with the technology related issues.			
6.	The online activities conducted in VLE are more engaging in nature because it enables mixing the educational activities with online tests, quizzes, videos, and podcasts.	6.	Learner may linger on the practice of the subject due to the flexible environment i.e. learner wishes to learn at his/her own pace and convenience.			

As you can see in table 7.2, the advantages and disadvantages of VLE make it easier and complicated at the same time. However, VLE is the demand of time. For one or the other reasons, both teachers and learners have to take the support of VLE for continuing the process of learning.

Learning Environment

Ch	eck Your Progress 5	Learning Environment
Not	tes: a) Write your answers in the space provided after each item.	
	b) Compare your answers with those given at the end of the unit.	
1)	Suggest the ways other than given in the text to make VLE more impactful.	
2)	Havy can pear discussion be promoted in VI E2	
2)	How can peer discussion be promoted in VLE?	
3)	List the characteristics of VLE.	

7.5 CREATING POSITIVE LEARNING ENVIRONMENT

A positive learning environment is one where learners feel connected and motivated; they can trust others and build a rapport for themselves too; and they are encouraged to take challenges, risks, and ask questions. Therefore, it is important to create a positive learning environment in a classroom. For this, the learners should be observed by the teacher frequently to understand their behaviours.

Read the following case study:

It was the first day of our third consecutive batch of graduation. We were having a new batch of around 100 students. Being a teacher, I feel this as a huge responsibility to know my students well enough so that I can plan a productive and positive learning environment for them. I started this by establishing a rapport with my students. Besides, I also kept observing their behaviours which helped me knowing more of them. But there are few whom I can make part of my narration.

First, I would like to tell about Seema. She seemed quite confident at her very first day to college. Talking to her, I realised that she was an intelligent, selfmotivated, and self-centred learner with an appreciating sense of aesthetics. I observed that in just few days, she and Meenakshi became good friends. Meenakshi was a slim girl with lazy walk. Earlier, I thought she would be an average student, but to my surprise, she was very good with her questions, disciplined work and handwriting. She also scored well in classroom assessments. And then there were these boys, Sanjay and Bhuru. They have been coming from a rural residential background and this was their first experience of an urban institution. They were reserved and hesitated. Even on asking a simple question, they hardly gave a response, but I must add they were very good athletes. On the other hand, it was Hemant, a city boy. He was confident, outspoken, and smart who belonged to an upper middle class socio-economic status. He was an average scorer in his classroom assessments. Now there were these two sisters, Anjali and Kiran who were brought up in a semi-urban residential background. They were in the city for their higher studies and were living in hostel. Their scores in classroom assessments were average, but they hardly talk to anyone in classroom. They did not even show any interest in any of the co-curricular activities. On asking, they replied with ambiguity. Another student, Sheetal, was polite, calm, curious, and above average scorer with urban residential background. She was quite regular in classroom and was always helpful.

(Experience of author as a Teacher)

Therefore, my class was full of such individual differences. The biggest question in front of me was how to satisfy each learner. What strategies should I design to cover the learning needs of every individual? How can I create a positive learning environment in such a diverse classroom? I tried on certain strategies, like one by one. I paired the students in such a way that one can help the other.

Activity 1

Pair the students for creating a positive learning environment.

My next step was to make a group of these students to perform the classroom activities. Trying this was helpful in creating a bond among them so that they could trust one another.



Activity 2

Design certain activities which can build trust among learners.

Furthermore, I added an individual activity. This activity was taking class tests on weekly basis. The average assessment score of each individual will be credited to their relevant groups. This helped them to fight for their team through a healthy competition and also get to know how much they have learnt until then.

I also tried to take the help of VLE for creating a constructive learning environment. I used to send them certain information on any content from their syllabus. A project was assigned to them based on that content which they have to complete as a group work. There was a leader of the group elected through voting. Further, this leader had to succeed his/her position to next member of the team whenever next assignment was distributed.

Activity 3

Design a virtual learning program on your favourite content from any of your course.

Besides, I also organized certain competitions based on scholastic activities among the groups. This helped my students to know one another and helped me to create a productive, effective, and positive learning environment in my classroom. For instance, I told them to prepare a working model on environmental issues and demonstrate it with its full description. All the tasks related to this assignment should have to be equally distributed among team members including the demonstration part. The peers would assess the assignment and the two best works would be rewarded and exhibited on institution's annual day celebration.

Activity 4

Design certain co-curricular activities that can create a bonding among learners in a classroom.

Interaction through social media also helped me a lot to know my students and to let my students know me. Summarizing it, we may say that creating a positive learning environment demands an approach which can bring teacher and students altogether. It, therefore, becomes a responsibility of a teacher if any behavioural issue is observed in/among students, those have to be resolved so that they can feel connected and trust others. For this, a teacher might need to design and develop strategies such as we have discussed earlier in this section with the help of a case study of first year graduates.



Creating a positive learning environment cannot happen in a day or two, it is a time taking process. Therefore, along with these approaches and strategies for creating a positive and productive learning environment, the important thing to remember is the inclusion of equity and empathy in teaching-learning process. Let us understand what teaching respect for all means.

7.5.1 Teaching Respect for All

You are familiar with the Right of Children to Free and Compulsory Education, (RTE) Act, 2009. This Act was introduced to reduce the gaps in education based on socio-economic background, gender, caste, language, or disability. The most important thing to understand here is if an institution witness such distinguished groups of individuals, how that situation be managed. Well, we all know the fact that no two individuals are alike, yet share some relationship. You might remember your school days and you might have good friends who were entirely different from you. Why was that so? It can be possible that you had been taught of respecting everyone irrespective of his or her differences from you.

Teaching respect for all is a huge responsibility which a teacher must have to bear for the sake of effective teaching-learning process and a healthy learning environment. Certain barriers like gender discrimination, caste system, language differences, varied religions, regional and cultural differences, disabilities and some others can affect the classroom and school learning environment. In fact, letting these barriers affect our learning environments can lead to serious hazards to an individual's mental health. Therefore, we as teachers have to be very careful while talking to and teaching our students. This is a prominent part of teaching-learning process because what you say, express, act, and describe, your students hear, note, imitate and understand that only. Hence, no such words or sentences should be used and express which can hurt anyone's individuality. Every student/learner should be treated with equity. Besides, the students should also be taught about the impact and power of equity along with empathetic attitude for their fellowmates. This can be done primarily with your own actions, plus ethical and value-oriented educational videos, stories, lectures, field work and likewise activities and strategies.

Besides, it is not only the students who need to understand this diversity. The school administration should also keep this in mind that there lies diversity among the teachers too. Therefore, their behaviour towards their teachers can also create a learning environment for the students in which they can be taught respect for all diversities in and out of school boundaries.

The curricula can also play an important role in teaching respect for existing diversities through its content presentation which should be unbiased. The teachers can teach such content through group activities and reciprocal teaching. These groups should be formed on the basis of non-discrimination among students. The school administration should also design certain

activities as co-curricular part of learning environment. These co-curricular activities may include dialects, plays, folk dances, and so on, which inculcate values to all. Moreover, the administration should also organize certain events or activities which can bring students and teachers altogether as participants. This will make the students feel empowered and equally important.

Respecting all the diversities can also be taught by inculcating critical thinking among the learners so that they can analyze, question, and recognize the acts of discrimination and injustice. This kind of learning environment would encourage them to stand against such immoral and anti-social activities in any traditional or orthodox societal environment. Besides, the classroom management and arrangement should also encourage the teaching respect for all. Even the division of total students in sections of any class should also be randomized so that we can have classrooms with multi-diversities. This is how teaching respect for all can help in creating a positive learning environment.

	1
Check Your Progress 6	
Notes: a) Write your answer in the space provided after each item.	
b) Compare your answer with those given at the end of the unit.	
1) How can social media be used in creating a positive learning environment?	
	OPLE
	RSII

7.6 DYNAMIC INTERACTION AMONG METHOD, MEDIA AND CONTENT

In a teaching-learning process, you might be aware of the terms like method, media and content. The content is communicated to the learners using different methods of teaching and learning with the help of appropriate media. So both method and media are used for the delivery of content. Hence, they interact with one another. Let us discuss in detail about the what, why and how for the dynamic interaction among method, media, and content.

In teaching-learning process, method implies for an orderly logical arrangement, usually in steps of presenting content and material for instruction. It can be teacher-centred or learner-centred. While designing a lesson plan, it is difficult to develop it by using only one method for content presentation. A lesson plan may consist of two or more methods as per the

need of the learners and to meet the specific objectives. While incorporating method(s) in your lesson plan, the medium of presentation is also chosen. Therefore, media are the means of delivering content to the learners. For example, in a lesson plan you may present the content using different media like lectures, diagrams/pictures, and videos, as per the need of the instructional/specific objectives. So, in teaching-learning process, the strategies and methods that will best promote the intended learning are normally selected first, and then the media that will best deliver the learning platform are selected (Clark 2001). This is because some media work better than others when it comes to delivering certain content and contexts. However, when it comes to content, it generally refers to the facts, concepts, theories, and principles that are taught and learned in specific academic courses through different strategies and methods delivered through appropriate media. So, you may clearly observe that the meaning of method, media, or content reflect the interaction among them.

Next, we will discuss why method, media and content share a dynamic interaction. You know that in teaching-learning process the teacher when plans a lesson plan, the first thing s/he will do is content analysis. This content analysis leads a teacher to draw specific objectives. Now, at this stage the methods of delivering the analysed content are supposed to be decided. This decision must be taken by keeping in mind the audiences/learners because for having the desirable outcome, a teacher must know his/her learners well enough. Besides, the teacher also needs to plan about the media which is supposed to be used for delivering the content with chosen methods while executing his/her lesson plan. So, you can understand that method, media and content interact dynamically. Let us understand this with the help of an example. You want your learners to learn about pollution. In the beginning, the content analysis for pollution in the lesson plan would be taken as meaning and types of pollution. Your learners belong to class VII, so you want to deliver the content in an interesting mode. Therefore, you may choose inductive and deductive method along with media like video showing different kinds of pollution or animated slides or interactive audio-visuals. Therefore, you can see that content, method, and media altogether create a better learning environment and can make learning effective.

Furthermore, how can method, media, and content interact? You might have heard about the concept of system approach. It is a systematic attempt to coordinate all aspects of a problem towards specific objectives. In the field of education, system is a unit as a whole incorporating all its aspects and parts, like learners, teachers, curriculum, content and evaluation of instructional objectives. So, basically a system consists of a teacher, a student, and a programme of instruction all in a particular pattern of interaction. The System Approach focuses first upon the learner and then course content, learning experiences, effective media, and instructional methods. This system helps in incorporating the capability of self-correction and improvement. In system approach, the teacher should know all about his/her students and the

individual differences in their learning capacities and plan accordingly. Some of the steps in the system approach in education therefore, involves deciding appropriate media to achieve specific instructional objectives, defining learner characteristics and requirements, selecting appropriate methods suitable for effective learning, and selecting appropriate materials and tools.

Check Your Progress 7				
Notes: a) Write your answer in the space provided after each item.				
b) Compare your answers with those given at the end of the unit.				
1) How does system approach determine the interaction between media and method? Explain with an appropriate example.				

7.7 LET US SUM UP

A learning environment refers to the way an educational environment is being set up. It consists of the physical environment, psychological factors and social relationships which affect the learners in all types of learning environments. These types of learning environment in a broader way can be categorized as formal, informal, non-formal and virtual learning environments. Formal learning environment follows a definite syllabus and rigid examination system, with an intention that learning is the ultimate goal for all the activities performed by the students, whereas informal learning environment allows learners to learn wherever and whenever they have need, motivation, or opportunity for learning. Moreover, non-formal learning environment lies somewhere between the formal and informal learning. It is a learning that does not require surrounded walls, fixed furniture, strict management, live teachers but yet it lies in some kind of organizational framework, is what we call non-formal learning. But when we talk about virtual learning environment, it is a system intended to share and deliver learning materials to learners through web. All these learning environments have their own advantages and disadvantages which make them opted by the learners as per their aspirations, opportunities, and hard work. Therefore, the most important aspect of a successful learning environment is its positivity. So, whether a teacher, instructor, facilitator, or parents, everyone needs to create a positive learning environment by adapting certain strategies like greeting, accessibility, know each other, recognizing and reinforcing the desirable behaviours, and so on. Another thing, which is important in creating a positive learning environment, is a dynamic interaction among method,

media, and content because these three altogether make learning effective. Their interaction works on a system approach with systematic steps to be followed to foster effective learning environment.

7.8 UNIT- END EXERCISES

- 1) Discuss the perspective of an effective learning environment.
- 2) Differentiate between formal and non-formal learning environments with appropriate examples.
- 3) How can we say that self- directed informal learning is intentional in nature? Explain.
- 4) Write a short blog to let your teacher know you better in order to create a positive learning environment.
- 5) Design an event or activity in which 'respect for all' can be taught using a curricular content for any class.
- 6) Justify that the interaction among method, media, and content is dynamic.

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7.10 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1) Write your own answer.
- 2) The social learning environment is actually related to social network, strucure and system. This type of learning environment, therefore, is affected by all the people who are involved in learning situation and also the interaction between/among them.
- 3) Write your own answer.

Check Your Progress 2

- 1) Refer fig. 7.2.
- 2) Refer section 7.4.1, sub- topic Pros and cons of formal learning environment.
- In a formal learning environment, teachers play an important role in teaching the syllabus, assessing the learning outcomes, and conducting co-scholastic activities. Hence, teacher is also responsible to bring about the wholesome development of the child including all the psychological attributes. So, the formal learning environment truly works on the psychological development of individuals.

Check Your Progress 3

- 1) a) Self-directed informal learning
 - b) Incidental informal learning
 - c) Socialization
 - d) Incidental informal learning
- 2) Refer section 7.4.2, sub-topic pros and cons of informal learning environment.

Check Your Progress 4

1) IGNOU provides a non- formal learning environment to the students in the following ways:

- a) It provides many courses for the in- service working professionals with minimal experience, which help them to excel academically as well as professionally.
- b) Besides working professionals, it also provides an opportunity for homemakers to fulfil their wish to complete or continue education which is not possible for them in formal environment due to household responsibilities.
- c) It provides printed study material and regular counselling sessions (preferably at weekends) at its study centres for the learners.
- d) It provides flexibility in submitting assignments, projects and taking examination.
- 2) The characteristics of non- formal learning environment are
 - a) No requirement of formal infrastructural set up of education like building, furniture, classroom teaching material, strict management etc.
 - b) Flexible timings
 - c) Adjustable syllabus
 - d) No age bar for admission in a particular course
 - e) Relaxation in submission of assignments and projects
 - f) Suitable for both full- time and part- time learners

Check Your Progress 5

- 1) a) Choose the most effective teaching methodology
 - b) Select an organized content structure and add media
 - c) Use attractive instructional design
 - d) Choose the right software solution for teaching
 - e) Encourage students to form online groups for mutual connections and discussion of subject.
- 2) Peer discussion can be promoted in VLE by encouraging students to form online groups like Facebook pages, WhatsApp groups, telegram groups etc. On such platforms, subjective as well as current discussions can be done by the students.
- 3) a) VLE is a web-based learning environment.
 - b) A learner can access it from any place where there is internet available with one's own device- laptop, smart phone or a computer at internet café.
 - c) Teaching- learning process can occur both inside and outside the institution in VLE.
 - d) VLE is cost- effective.

Learning Environment

e) VLE provides assistance to formal, informal as well as non- formal learning.

Check Your Progress 6

1) Share worthy blogs, quotes spreading positive vibes, open you up, productive and positive posts from classroom/institution, etc.

Check Your Progress 7

1) Refer Section 7.6, paragraph 4.



UNIT 8 ORGANIZING LEARNING EXPERIENCES

Structure

- 8.1 Introduction
- 8.2 Objectives
- 8.3 Concept of Learning Experience
 - 8.3.1 Meaning of Learning Experience
 - 8.3.2 Types of Learning Experiences
 - 8.3.3 Elements of Effective Learning Experiences
 - 8.3.4 Key Learning Experiences
- 8.4 Nature of Learning Experiences
- 8.5 Relationship Among Learning Objectives, Learning Experiences, and Evaluation
- 8.6 Selection and Organization of Learning Experiences
 - 8.6.1 Concept of Selection of Learning Experiences
 - 8.6.2 Criteria for the Selection of Learning Experiences
 - 8.6.3 Principles Followed in Selection of Learning Experiences
 - 8.6.4 Concept of Organization of Learning Experiences
 - 8.6.5 Organization of Learning Experiences for Effective Teaching-learning Process
- 8.7 Designing Learning Experiences
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- 8.8 Engaging Learners in Learning Activities
- 8.9 Learning Experiences from the Community
- 8.10 Let Us Sum Up
- 8.11 Unit-End Exercises
- 8.12 References and Suggested Readings
- 8.13 Answers to Check Your Progress

8.1 INTRODUCTION

Your senses gather information or knowledge through seeing, listening, smelling, tasting, or touching. This knowledge or skill which you get from seeing or doing something turns into your experience. Therefore, you can call experience as a process of observing, encountering, or undergoing something. In other words, experience can help you gain knowledge or practical wisdom because of what you have observed, encountered, or undergone. So basically,

what you do or live through is what you learn from experience. How does this experience is connected to learning? You know that learning lead to permanent change or modification of behaviour as a result of practice or experience. The learning may not be directly observable, but it may manifest in the activities of the individual because it depends on practice and experience.

You can clearly see that both learning and experience are complementing each other. Therefore, it can be asked — what is meant by learning experience? What is its nature? How can learning experience be selected, designed, and organized? How can learners be engaged in learning activities? How can a teacher help in improving learning experiences? What are the learning experiences gained from the community? These are the few major questions that we try to find the responses in this Unit. You will also try to explore the relationship among learning objectives, learning experiences, and evaluation.

8.2 OBJECTIVES

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

- explain the concept of learning experience;
- describe the nature of learning experience;
- identify the relationship among learning objectives, learning experiences, and evaluation;
- analyze the process of learning experiences and evaluation;
- design and organize the appropriate learning experiences;
- explore the learning activities for engaging learners;
- evaluate the role of teacher in improving learning experiences; and
- describe the learning experiences gained from the community.

8.3 CONCEPT OF LEARNING EXPERIENCE

You know that in learning experience, learning and experience are combined together. One of the definitions of learning experiences provided by International Bureau of Education (Global centre of excellence in curriculum and related matters under UNESCO) states thus: 'a wide variety of experiences across different contexts and settings which transform the perceptions of the learner, facilitate conceptual understanding, yield emotional qualities, and nurture the acquisition of knowledge, skills and attitudes' (IBE-UNESCO, 2013). It further added that in educational settings learning experiences are ideally challenging, interesting, rich, engaging, meaningful, and appropriate to learner needs; and the previous learning experiences are considered as the key factors in predicting further learning.

8.3.1 Meaning of Learning Experience

It is clear from the above statement by IBE that learning experience refers to 'any interaction, course, program, or other experience in which learning takes place. It may occur in traditional academic settings (schools, classrooms) or non-traditional settings (outside-of-school locations, outdoor environments). Besides, it may also include traditional educational interactions (students learning from their teachers) or non-traditional interactions (students learning through surroundings, games and interactive software applications)'. Curriculum designers have started accepting or considering that the course has limited and conventional inferences with the term learning experience which sounds more *inclusive*.

Furthermore, this term can also be understood as purposefully planned experience in selected situations, where learners participate and interact actively, and which also result in change in behaviour of the learners/students. Let us understand this through an example. You are aware of the multiple and diverse ways of new technologies in which learners can learn from and interact with teachers, in addition to the freedom of learning at their own pace. They can interact with their teachers and peers using different platforms like email, chats, video calls, and online classrooms. This interaction usually involves organization and exchange of learning materials like assignments, notes, class-works, etc. by using online learning-management systems like Google classrooms, Micro Soft Team, Google meet, Zoom, WhatsApp groups, and many more.

The concept of learning experiences is getting stronger in everyday classrooms. Numerous research and reflections by educators are clarifying the need and importance of pedagogical and technological shifts. For example, students have now started learning through recorded videos of teachers, chats, messengers, group learnings, discussions, flipped classrooms, and so on. These vivid and diversified learning experiences can be classified into certain types, which you will study in the next section.

8.3.2 Types of Learning Experiences

By now, you might have understood what learning experiences are and their diversified approaches. Learners can access the content through varied learning experiences that include multiple opportunities for transfer of knowledge, extending the application of knowledge and skill to new and novel contexts. Considering this, learning experiences can basically be divided into three types — individual learning experiences, group learning experiences, and blended learning experiences. Let us try to understand each of them in detail.

Case 1

While I was taking my class of B.Ed., I asked the learners if they had any query to ask or something to share. One of the learners told me that she was studying Piaget's theory from a reference book and found few points missing which were discussed in class. Another student shared her experience of learning the same theory through online videos available on YouTube. One more learner told me that he found the class-notes more beneficial because those were easy to understand.

The above case reveals that the three learners have varied individual learning experiences.

Learners learn at their own pace engaging individually without any interaction with other learners in their group. This type of learning experience may also be called as self-study. The study material is usually the same. However, it can be improvised by using varied learning resources like, learning through reference books, journals, educational magazines, newsletters, audio/video recordings, and many others.

Group learning experiences

Group learning experiences, as clear from its name, are gained by engaging in groups. Learners in this setting interact in groups with each other, teacher/facilitator, and the learning material. To create such learning experiences, courses should include such platforms like workshops, seminars and conferences, webinars, video conferences, and focus group discussions.

A very recent and well executed example to this group learning experience is online education during COVID-19. This type of education has been termed as Electronic and Far distancing Education (EFE) organizing through internet using varied online (Zoom, Google Meet, Webex) platforms. Learners have started using various communication platforms for learning in groups by joining numerous groups on WhatsApp, Telegram, Signal, and Facebook. They are gaining live learning experiences through online channels on YouTube just after subscribing the channel. These online call/conference platforms are also providing options for live chatting, recording of the lectures with the permission of the host, and sharing presentations. Participants share different resource links and discuss their projects, assignments, and achievements in online groups.

Blended learning experiences

Blended learning experience is gained when both face-to-face instruction and digital media are weaved together in formal educational settings. Such type of approach gives the learners more flexibility to customize their learning experiences.

For example, a flipped classroom (Figure 8.1) is a type of blended learning experience in which learners is introduced to a content at home and practice working through it in a formal learning environment like a school. At home, learners can study and interact with the materials as homework first, and then use class time to discuss the topic and put those ideas into practice. This is how flipped classroom represents an experience with blended learning model.

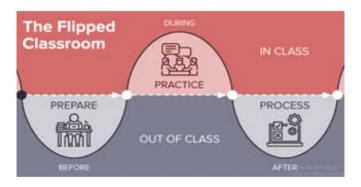


Fig. 8.1: Flipped Classroom

Source: https://cdn.lecturio.com/assets/flipped-classroom-v2.3.png.webp

These are the three different types of learning experiences which are making learning available to the learners in different modes like individual, group and blended.

Check Your Progress 1
Notes: (a) Write your answers in the space provided after each item.
(b) Compare your answers with those given at the end of the unit.
1) What is meant by learning experiences?
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2) Why is the term learning experiences considered as inclusive?
3) Which type of learning experience benefits you more and why?
c,

8.3.3 Elements of Effective Learning Experiences

By now, we have discussed the meaning of learning experiences in different contexts along with its types. In recent times, we are getting these learning experiences through online learning modes. Videos, puzzles, games, recorded lectures, hyperlinks, assignments — all are acquainting us with distinguished learning experiences. Some of these are interesting and innovative, while others are just ordinary. So, we need to ask ourselves, how can these learning experiences be made prodigious and more influential?

Let us discuss certain elements which can make prodigious and influential learning experiences.

A prodigious learning experience focuses on being effective first

A learning experience needs to be effective first because if it is not effective then it is said to be failed at being a learning experience. For example, it is important for learning experiences to be virtually rich, interactive and enjoyable, but they should be used to enrich learning rather substituting it.

An effective learning experience adds value to the learner

A learner should feel that whatever is being learnt or experienced, that should be purposeful. This means to help them understand the content in an easy manner which they could not understand earlier. As a matter of fact, the needs of the learners are required to put first for an effective learning experience.

A great learning experience promotes further thinking

Great learning experiences should inspire the students to become lifelong learners (Sebastian, 2016). Learning just to pass an exam is one of the miserable consequences that education can have. Therefore, learners are supposed to be encouraged to pursue education beyond the prescribed syllabus. The hardships while experiencing learning make it great and can promote advanced and critical thinking. These are certain elements which are just a step forward for effective learning experiences. However, there are certain key learning experiences which we are going to discuss in the next section.

8.3.4 Key Learning Experiences

As the term is revealing its meaning, the key learning experiences are those experiences which leave a significant or memorable impact on you. These experiences may be any event or moment or innovative approach or a new beginning which leave us with lifetime memories. Such memories make our key learning experiences. Learning experiences can be from any field of your life, be it personal or professional. For example, these experiences may include volunteering, employment, hobbies, training, education, responsibilities of family, and few other arenas.

Che	eck Your Progress 2
Not	es: (a) Write your answers in the space provided after each item.
	(b) Compare your answers with those given at the end of the unit.
1)	Why is it important for learning experiences to be great?
2)	Share your memory of a significant learning experience. Why is it significant?

8.4 NATURE OF LEARNING EXPERIENCES

'The convergence of the social and practical elements in learning by saying that the most significant moment in the course of intellectual development occurs when speech and practical activity, two previously completely independent lines of development, converge...'

- Vygotsky (1978)

As you all know that learning experience can be gained effectively when the learning occurs as an active process. This means that the learners should learn to discover concepts, principles, and facts for themselves, as suggested by the social constructivist approach towards learning. Therefore, the learning based on institution and guesswork has its own importance. Learners can also gain experience by extracting the meanings from their interaction with one another and with the environment in which they are living in. Hence, the nature of learning experience is an active social process.

This learning experience becomes more dynamic when the interaction is held among the learner, instructor, and the task. Here, the role instructor's culture and values become an essential part of the interplay between the learners and the tasks in shaping the meaningful outcome. From here we can conclude that the learning experiences can be both subjective and objective because the learners and the instructor develop an awareness of each other's viewpoints

and then investigate their own beliefs, standards, values, and culture. Therefore, the learning experience has a nature of being dynamic in interaction which can be both subjective and objective at a time. Few examples of such learning approaches that make learning experiences interactive in nature are peer tutoring and collaboration, reciprocal teaching, problem-based instruction, web-quest, cognitive apprenticeship, and other approaches that involve effective interaction.

Furthermore, the nature of learning experiences can be iterative, and this process includes discursive, adaptive, interactive, and reflexive qualities (Green and Gredler, 2002). This leads us to another conclusion that the main focus during learning process should be on the relationship between the learners and their instructor. By this time, you might have understood that the nature of the learning experiences should be learner-centred, structured, and well-designed, profoundly personalized, inclusive, and social.

8.5 RELATIONSHIP AMONG LEARNING OBJECTIVES, LEARNING EXPERIENCES, AND EVALUATION

The responsibility of a teacher is to develop the personality of her/his students. This responsibility is carried over by framing the learning objectives for providing activities which nurtures the skills and competency among them. These learning objectives help and determine the extent of development of the learners with the available learning experiences. Selection of appropriate learning experiences is performed after defining the specific aims and objectives. Now, the attainment of learning objectives is evaluated by formulating and applying the relevant and appropriate evaluation tools. Furthermore, based on the obtained learning outcomes through applied evaluation method, the objectives can be modified, if necessary, and therefore, the teaching-learning process continues.

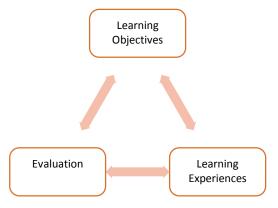


Fig 8.2: Relationship among learning objectives, learning experiences, and evaluation

As you can see in figure 8.2, there is a triangular relationship among the learning objectives, learning experiences, and evaluation. Let us understand this relationship with the help of an example. A teacher plans the science lesson with primary objectives of developing interest and scientific attitude



along with the motivation of applying scientific methods/principles in daily life. So, the teacher selects certain teaching methods that help in fulfilling the expected learning experiences where students must have attained skills like knowledge, understanding, and application keeping in view the primary objectives. Now the effectiveness of the learning experiences provided is to be evaluated. So, the science teacher would have to design or select certain continuous and comprehensive evaluation tools like check lists, observation schedule or any other suitable tools to measure and assess the interest, scientific attitude, motivation of applying scientific principles in daily life gained by the students. If the teacher finds that the evaluation is not verifying the learning experiences provided, then the evaluation tools would be modified.

Check Your Progress 3
Notes: (a) Write your answers in the space provided after each item.
(b) Compare your answers with those given at the end of the unit.
1) Why is the relationship among learning objectives, learning experiences and evaluation triangular in shape?
2) The nature of learning experience is dynamic. Justify the statement.

8.6 SELECTION AND ORGANIZATION OF LEARNING EXPERIENCES

In our previous section, we have tried to explore the relationship among learning objectives, learning experiences and evaluation. This triangular relationship also plays an important role in the process of developing curriculum. As you can see in figure 8.3, the process of curriculum development involves selection of aims, goals, and objectives, selection of learning experiences, and content, organization of learning experiences and content, and evaluation. The learning objectives are selected to provide the

desirable learning experiences. And these learning experiences are further evaluated to determine whether the objectives have been attained or not. So, the link between the learning objectives and the evaluation is learning experiences. Therefore, in this section we are going to discuss about the concept, criteria, and principles for selection of the learning experiences along with the concept and elements of the organization of learning experiences.

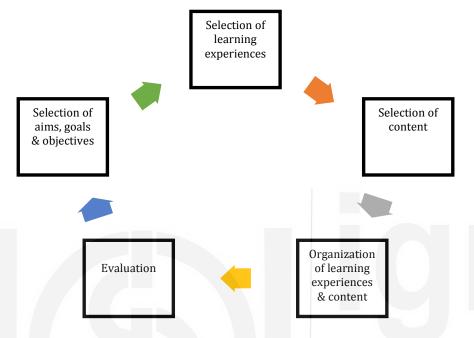


Fig.8. 3: Process of Curriculum Development

8.6.1 Concept of Selection of Learning Experiences

The selection of the learning experience depends upon objective taken up in a lesson. For example, the objectives of a lesson could be imparting the knowledge about something or the acquisition of a skill or development of aesthetic sense. Therefore, appropriate content should be selected from the curriculum keeping in mind the objectives taken up. This content must include both the theory and practical part of the curriculum. Who is responsible for the selection of these learning experiences? It is the same person who frames the learning objectives, i.e., the teacher.

The teacher would select the learning experiences both for the theory and the practical while in the process of curriculum development. Hence, what is important is that these learning experiences should be selected according to the course, unit and lesson. Moreover, such a planning and selection of expected learning experiences would help in attaining the pre-determined objectives with the help of continuous and comprehensive evaluation, thus leading to the process of curriculum development. But, the question arises on what basis are these learning experiences selected? What are the criteria for their selection? We will try to find out the answers to these questions in our next section.

8.6.2 Criteria for the Selection of Learning Experiences

Every concept has its foundation and so is the case for learning experiences, too. This foundation also helps in setting and shaping of the learning experiences. How can learning experiences be selected? The learning experiences should be selected keeping in mind that these should be useful in attaining the selected and pre-determined objectives. Therefore, the criteria for the selection of the learning experiences are discussed in the next paragraph.

Learning experiences should be varied and flexible. This means that a single objective can be attained through a wide-range of learning experiences. For example, an objective of enabling the learners in writing skill can be attained through various learning experiences like writing a report, application, article, letter, essay, paragraph, summary, and many more. Secondly, these experiences should provide opportunities for the development of independent thinking, critical study, decision-making, good judgement, intellectual creativity, self-discipline, etc. Thirdly, there is a need of organizing these learning experiences in a manner that provides steadiness, sequential development, logistic manner, correlation and integration of theory, practical and skilful learning experience which will enable effective learning. Fourthly, learning experiences are structured to attain general and specific objectives that are pre-determined by the teacher while planning a course, unit or lesson plan. These should also be in same sequence as are the learning objectives. Fifth, learning experiences should be designed keeping in mind that maximum senses of the learners are used during teaching-learning process. For example, teaching any content using an audio-visual resource can promise a better and effective learning experience. Last but not the least, the selection of learning experiences should be made for maximizing the responsibilities of the learner, creating interest in them and making the learning desirable.

Major factors in selecting learning experiences

- *Validity:* The stated learning experiences should be relevant to the stated goals in the curriculum.
- Relevance to life: Learning experiences must be related to the learners' real-life situations in and out of the school.
- *Variety:* Learning experiences must satisfy the needs of different types of learners by providing different types of learning experiences.
- **Suitability:** These must be suitable to the present condition, level, and characteristics of the learners.
- *Cumulative:* Even though the experiences provided may be different, they should all lead to the attainment of same goal and the consequent learning experiences should be built on previous ones.
- *Multiple learning:* A single learning experience may bring out multiple outcomes and thus, they are important for their multiple benefits.

8.6.3 Principles followed in Selection of Learning Experiences

The essence of the section 8.6.2 is that the criteria for the selection of the learning experiences should provide a sense of satisfaction among the learners and the teachers during the process of attaining the objectives. There are certain principles that are supposed to be followed while selecting learning experiences.

Principle of purposes and objectives

The purposes and objectives are to be kept in view of course content. In fact, one learning experience can fulfill different objectives. For example, when a learner is 'learning about the volcanic eruption through a working model', s/he attains many objectives like- to explain the term volcano, to classify the types of volcanoes, to identify the reactive gases, to demonstrate how volcano is erupted, etc.

Principle of learning activities

Learning activities related to life situation are to be selected where the students are expected to practice after being qualified. For example, the demo lesson plans by the teacher trainees before facing placement interview or job interview.

Principle of integration

The principle of integration suggests that there must be an integration of learning experience between theory and practical. For example, the final year student of B.A. Education is sent to a real classroom situation to experience why is it necessary to plan a lesson first and then execute.

Principle of focusing on selection of learning activities

The focus of selecting learning activities should be the need and demands of the learners, community, nation, and the world. Moreover, the focus should also be on managing and organizing evaluation tools and hands-on learning.

Principle of developing skill in thinking

Learning experiences must develop skill in thinking. This may include finding the problem, analyzing it, collecting data, framing hypotheses, testing the hypotheses, and drawing conclusions.

Principle of developing problem-solving ability

Learning experiences should be helpful in providing the basis for effective problem-solving methods which include the process of acquiring information. This information must be worth remembering. Therefore, to enhance learners' memory such learning environment needs to be created so that such information can be constantly applied in different context. These

principles are important in the selection of learning experiences so that these can be further organized appropriately and in an effective manner.

Points to remember while selecting learning experiences.

- Learning experiences must be related to the learning objectives.
- These should be helpful in developing social attitudes by creating or building such a co-operative and collaborative learning environment for nourishing learners' attitudes.
- Learning experiences must work for developing the interests among learners for gaining desirable outcomes.
- These should be multi-sensory.
- For effective learning experiences, technology should be used as often as possible.
- Gaining of learning experiences must be organized as fun for the learners.

Check Your Progress 4

Notes: (a) Write your answers in the space provided after each item.

- (b) Compare your answers with those given at the end of the unit.
- Design any one learning experience for attaining skill in verbal communication.

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8.6.4 Concept of Organization of Learning Experiences

Until now, we have discussed the different criteria and key principles in the selection of learning experiences. These selected learning experiences now need to be organized appropriately and effectively so that desirable learning outcomes can be achieved. The organization of learning experiences firstly involves the identification of learning activities. These selected activities are then grouped in such a way that a responsible interactive relationship can be established. This relationship is established between learning activities (performed by the students) and learning situation (surroundings and different types of learners) so as to attain desirable learning experiences (figure 8.4).

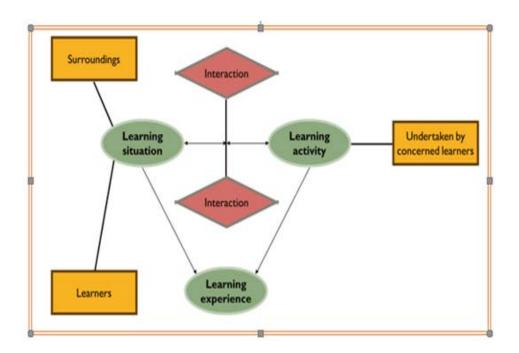


Fig.8.4: Organization of learning experiences

It is clear from figure 8.4 that organization of learning experiences has to be done with great responsibility because it is very important; to attain the learning objectives so that desirable learning outcomes can be obtained. Therefore, for effective instruction it is necessary to organize learning experiences carefully, systematically, and sequentially.

8.6.5 Organization of Learning Experiences for Effective Teaching-Learning Process

Until now, you might have understood that whether it is the selection of learning experiences or their organization is important all should be in systematic and sequential manner. Herein too, the organization of learning experiences requires two essential aspects to be covered. One is grouping the subject matter for learning experiences under headings like science, arts, humanities, commerce, medicine, etc. And second is placement of learning experiences into total curriculum. This refers that all the elements in the curriculum should be related to one another. Few other elements of organizing learning experiences include the following:

Preparation of master plan for curriculum: A master plan provides a clear picture in front of the teacher about what (subject matter), when (in which year or grade or standard), why (age-appropriateness, cognitive level, uniqueness) and how (direct learning, vicarious/indirect learning, or symbolic/imagery learning experiences) to teach.

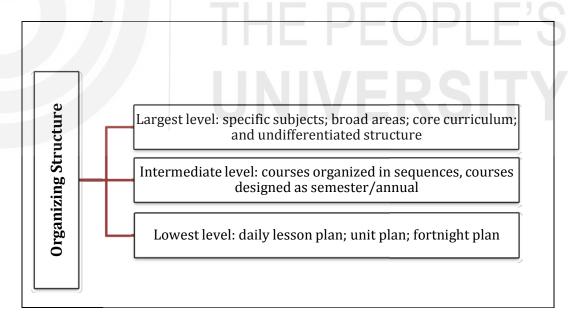
Organization of real experience: This is also a significant element because it is intended to provide the learners with teaching-learning experience in education. This element also determines the extent and quality of experience for the students in terms of course content and its application in real life.

Establishing correlation: The correlation is established with a purpose of identifying and organizing the relation among different courses of study, various subjects, and educational experience in total curriculum.

Teaching system: Organizing the teaching system refers to the teaching of various subjects in different ways. These ways are determined keeping in mind the selected learning experiences. To achieve them, the teaching system is organized.

Some additional information on organization of learning experiences

- ♣ The organization of learning experiences can be classified into typesvertical (learning experiences are organized over the time) and horizontal (learning experiences are organized from one area to another).
- Criteria of organization of effective learning experiences can be categorized as *continuity* (training of one skill at a particular span of time), *sequence* (gradual increase in difficulty level), and *integration* (relating the specific skill to other disciplines or skills).
- → Principles of organizing learning experiences can be as many as you can design, for example, logical organization, psychological organization, philosophical organization, sociological organization, psycho-social organization, etc.
- Levels of the organizing structure.



This is how the selection and organization of learning experiences is carefully, systematically, and sequentially performed.

Organizing Learning Experiences

Check Your Progress 5
Notes: (a) Write your answers in the space provided after each item.
(b) Compare your answers with those given at the end of the unit.
1) What is meant by organization of learning experiences?
2) Explain the structure of organizing learning experiences with example.

8.7 DESIGNING LEARNING EXPERIENCES

The teaching-learning process needs to focus more on the experiences gained by the learners rather the completion of the tasks assigned. The focus on experiences instead of the tasks is important for creating exceptional learning programs. Hence, the designing of learning experiences is important for making the learning pleasurable and meaningful. Designing learning experiences is a process of designing desirable human experiences and is centred around achieving the desired learning outcome with as much joy as possible. Designing of learning experiences depends on the principles of usefulness, usability, and desirability to create certain learning activities that can engage the learners. These learning experiences are designed with a purpose of keeping the learners at the centre of the experience. For this, all the cognitive elements are designed to enhance learner's retention and application of the concepts.

8.7.1 Importance of Designing Learning Experiences

Effective designing of learning experience can create relevant, engaging and memorable educational experiences. Such type of designing can successfully help in solving the challenges of our learners in higher education. The learners reaching to higher education are adults and therefore they tend to have a better insight. They want to understand what they are going to achieve after attending the selected course. Therefore, it is important to design a purposeful path of learning which they can experience throughout their

educational journey. They will respond positively to those learning objectives which have been clearly defined and meaningfully planned according to the activities they are participating in.

Learning experience design is also important because this can help in managing the limited time available with the learners for its efficient use. For example, in recent years it has been came into our observation that the youths attending higher education prefer doing part-time jobs to support their education. So, they have little time to participate in teaching-learning process. In such circumstances they wish to have such an approach in this process which can support their studies and work simultaneously. Therefore, a clearly designed learning experience can help in justifying the direct link of learning objectives and activities. Furthermore, the efficient designing of learning experiences is also important because it is intended to link the previous experience to the new one. Apart from this, its principle of usability and usefulness increase its significance of linking the educational material or course content to real-world situations. Such learning experiences can act out of the real-life situations that learners have encountered or will encounter, providing speedy, targeted, specific feedback on the decisions they make. This creates a high level of engagement, relevancy and information retention.

Check Your Progress 6
Notes: (a) Write your answers in the space provided after each item.
(b) Compare your answers with those given at the end of the unit.
1) Analyze the importance of designing the learning experiences.

8.7.2 Principles of Designing Learning Experiences

In the earlier section, we have tried to understand the importance of designing learning experiences. However, we still are exploring the ways to give the best shape to the experiences that help individuals learn. So, there have been explored certain principles for designing learning experiences. What are the important principles of designing learning experiences?

• **Principle of active learning:** Students do the learning. In other words, they actively participate and perform the learning task rather than only receiving direction or information via readings and/or lecture. Tasks are hands-on and involve a variety of senses (listening, seeing, touching, etc.).

Organizing Learning Experiences

- **Principle of learner-centered teaching:** The instructor facilitates the learning experience rather than leads it. This principle reflects learner-centred teaching where the focus of the class shifts from the instructor as the singular source of knowledge and authority towards a more communal atmosphere that enables students to take responsibility for their own learning.
- **Principle of breaking down:** Big assignments/assessments are first broken down by the competencies and/or skills necessary to complete them. Then they are broken down into smaller, achievable tasks that allow students to scaffold their learning and receive feedback at each stage of learning and development.
- **Principle of course content:** Course learning goals and outcomes are continually revisited and reinforced, so students experience them from different approaches and/or angles. This allows students to build on their knowledge towards more complex understandings of course content. Essentially, the big picture is always present as is the relevancy of the task(s) to the big picture.
- **Principle of self-assessment:** Time and room for self-assessment and focused reflection is included. Students can evaluate their own learning and progress without the fear of impacting their grade. They can identify what areas need improvement and create their own personal learning goals.
- **Principle of working in group:** Group work is included at some point. Whether the group work is formal or informal, groups require students to communicate their understanding, listen to others' understandings, negotiate their understanding with others' understanding, and create newer and more nuanced understandings.
- **Principle of students' progress:** Student progress is evaluated throughout via low-stakes (formative) assessments. The learning experience is adapted based on the results of these assessments and evaluations.
- **Principle of safe learning environment:** Measures are taken to ensure a safe learning environment. A safe learning environment means that students can make mistakes in learning and learn from these mistakes without fear of repercussion, ridicule, or shame. They can test old ideas and new ones. The main purpose of a safe learning environment is for students to understand that learning is a continuous process of relearning.

(Source: The above mentioned principles are adapted from Edmund J. Hansen's (2011). Idea-Based Learning: A Course Design Process to Promote Conceptual Understanding and Grant Wiggins and Jay McTighe's Understanding by Design).

8.7.3 Best Practices in Designing Learning Experiences

By far, we might have understood that while focusing on designing learning experiences one should not forget its basic criteria such as usability, desirability, continuity, sequence, and integration. On the basis of these criteria we can extract certain best practices in designing learning experiences.

- Planning the design of learning experience: As we all know that planning is really very important for everything. Learning experiences should also be designed with proper planning. This planning must include all the necessary steps that are required for reaching the desirable learning experience like plan of action, needs of the learners, use of visual resources, usability of design, etc.
- *Understanding the learners:* Every individual is unique and have their own needs. It is the responsibility of the teacher to understand the needs and abilities of his/her learners so that the designing of learning experiences should be approached accordingly. For example, if there is a student with giftedness in the classroom, then a teacher need to include such strategies where s/he can use the talent of that student for the help of those students who are underachievers. These strategies may include peer tutoring and cooperative learning.
- *Motivating the learners:* A task can be effectively performed if the task performer has appropriate and effective motivation. For example, any competition has rewards as motivators for which the participants give their best to achieve that. Similarly, motivation is very important for the learners to energize, direct, learn, and gain from the course. The designing of the learning experiences therefore, should focus on unleashing the intrinsic motivation of the learners by including elements such as inspiring story, any experience from teacher's life, team games, etc.
- *Understanding limitations:* The efficient and trained designer of the learning experience also considers few important factors like budget, time, current and old knowledge, and technology.
- Making wireframes: The learning experiences need to be designed by making wireframes before filling them up with more and complicated stuff. Instead, create low level of wireframes or outline for the course which can be changed easily and without too much cost.
- *Consistency:* There should be a consistency throughout the design of a learning experience. This will help in the efficient use of learner's ability to meet learning objectives. For example, while developing a module or self-learning material for the learners the presentation and formatting of the content must carry a consistency throughout the module in terms of font, line spacing, image titles, table headings, etc. For example, if the



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title to the first image in the module is mentioned at its bottom then the same pattern should be followed for all the images in the whole module.

• Checking the validity of the design: Sometimes in a course, it is not possible to design the desired learning experience. Therefore, it is especially important to test the learning course with a small group of actual learners as pilot testing. After collecting the data from this test, analyze the results to find out whether the pre-determined learning objectives can be attained. Note the feedback and avoid using those issues for future designing of the learning experiences for any other courses.

Cho	eck Your Progress 7	
Not	tes: (a) Write your answers in the space provided after each item.	
	(b) Compare your answers with those given at the end of the unit.	
1)	List the important principles of designing learning experiences.	
	,	
	THE DE	
2)	What are the best practices for designing the learning experiences?	
	what are the sest practices for designing the rearning experiences.	

8.8 ENGAGING LEARNERS IN LEARNING ACTIVITIES

Learning experiences are selected, organized, and designed for the learners. These learning experiences are the combination of learning situation and learning activities (fig.8. 5).

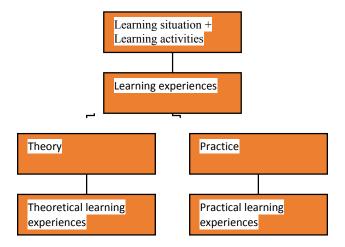


Fig. 8. 5: Relationship between learning situation-activities-experiences

As you know that if the learners are not engaged in learning activities, they will feel indifferent in teaching-learning process. As we have studied earlier, the selection and organization of the learning experiences should be learner-centric. Therefore, it is important to design learning activities according to the interest of the learners. Before designing these activities, the teacher should keep certain factors in mind that may influence their own learning experiences, like interactive teaching techniques, effective peer tutoring, encouraging social integration, etc. Understanding these influencing factors, can lead a teacher to frame learning activities to engage the learners.



Fig.8.6: Process of engaging in learning activities.

In the figure 8.6, the first step is beginning process. In this stage, the learners can access the content mostly through unvaried learning experiences. The engaging activities may be basic, repeated, and inappropriately focused on lower cognitive levels that lack precision and accuracy. The beginning of the learning activities direct the learners to a developing path where they can now access content through diverse learning experiences still with basic and/or repeated (previous knowledge based) activities. Further in this process, the learner needs to keep practicing these activities with an access to content through varied learning experiences. From now on, the learning activities will include multiple opportunities for transfer of knowledge, extending the application of knowledge and skill to new and novel contexts. The learner is now at the level of achieving the desired learning experience. The learning activities now will be little advanced including the more precise and accurate cognitive activities across the curriculum. This phase will also provide with greater opportunities for transfer of knowledge through accurate, significant, and rigorous learning activities.

Check Your Progress 8
Notes: (a) Write your answers in the space provided after each item.
(b) Compare your answers with those given at the end of the unit.
1) What is the relationship among learning situation, learning activities, and learning experiences?

8.9 LEARNING EXPERIENCES FROM THE COMMUNITY

Learning experiences aren't a matter of classroom delivery. It can really help to see learning experiences as something that happen everywhere and not just in a formal classroom situation.



Fig.8.7: Learning experiences from the community

Source: https://jpsommer.files.wordpress.com/2014/04/online-learning-community.jpg

The learning experiences gained from the community can be huge and uncountable. What we experience from community help in building our social attitudes. In fact, it is also important for the educational institutions to build an environment in which unified social attitudes can be developed among learners. Apart from this, figure 8.7 clearly depicts that a learner can gain experience from any interaction from the surroundings including family, friends, institution, books, system, economy, audio, video, internet, media, and many more. Moreover, meaningful community engagement is important to enrich the learning experience and is reflected through the psycho-social behaviour of the learner.

Every community has its own intrinsic educational resources and assets like history, literature, cultural heritage, local institution, and natural environments. By using the 'community as a classroom', teachers can improve knowledge

retention, skill acquisition, and preparation for adult life because learners can be given more opportunities to apply learning in practical, real-life settings. For example, studying a local ecosystem or volunteering at a non-profit organization that is working to improve the world in some meaningful way. There are basically four approaches from which learners can gain learning experiences from the community which are discussed below: (https://www.edglossary.org/community-based-learning/).

Instructional connections: The connections with the community in terms of the instructions from the teacher would be of great help in enhancing learners' engagement in learning process. For example, establishing purposeful connections between the materials taught in the classroom and local issues, contexts, and concepts like national political system is taught connecting with the local political process.

Community integration: The institutional management or the teacher can invite some experts from the community for guest lectures, training workshops, panel discussion, or for mentoring students. For example, inviting a special educator to share the real-life students situation with the children with special needs.

Community participation: Learners can also gain learning experiences by actively participating in their community. For example, volunteer teaching to the children living in slum areas, volunteer at a local NGO to spread awareness about health and hygiene, visits to special or inclusive setting school for participatory or non-participatory observations, joining internship programmes relevant to your course content, and many more.

Citizen action: This approach would be considered by some experts and educators to be the most authentic realization of community-based learning experience. Learners not only learn from and in their community, but they also use what they are learning to influence, change, or give back to the community in some meaningful way. For example, making a short documentary on impact of online education on learners, sharing their own blogs on local issues via social networking sites, helping local authorities during crisis, and so on. This is how we learn from our community and enhance our experiences for becoming an efficient learner and responsible member of the society.

Check Your Progress 9

Notes: (a) Write your answers in the space provided after each item.

- (b) Compare your answers with those given at the end of the unit.
- 1) Have you ever gained a learning experience through community participation? If yes, share your experience. If no, then share your choice of community participation for a desirable learning experience.

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8.10 LET US SUM UP

In this Unit, we have come across extensive information related to learning experience in terms of its concept, selection, organization, and designing. The concept of learning experiences made us realize that these are interaction, course, program, or other experience in which learning takes place. Learners can access the content through varied learning experiences that include multiple opportunities for transfer of knowledge, extending the application of knowledge and skill to new and novel contexts. Considering this, learning experiences can basically be divided into three types — individual learning experiences, group learning experiences, and blended learning experiences. We have also discussed certain elements which can make prodigious and influential learning experiences along with the key learning experiences that leave an unforgettable influence on learner's life. Therefore, the active nature of learning experience also makes it dynamic because of the interactions between learners and the environment. Furthermore, we also tried to understand the triangular relationship among learning objectives, learning experiences, and evaluation.

After understanding the concept of learning experiences, we explored the different criteria for selection of learning experiences like variety, flexibility, validity, relevance to life, cumulative, suitability, and multiple learning. The principles for selection of learning experiences included the principle of purposes and objectives, learning activities, integration, focusing on selection of learning activities, developing skill in thinking, and developing problemsolving ability. After this selection, learning experiences need to be organized. This includes mainly the grouping of subject matter for learning experiences and placement of learning experiences into total curriculum. Moreover, the designing of learning experience is based on certain principles like active learning, learner-centred teaching, breaking down, course content, self-assessment, working in group, student's progress, and safe learning environment. This designing of learning experience also requires certain essential practices like planning, understanding the learners, motivating the learners, understanding limitations, making outline, consistency, and checking the validity of the design.

The learning experiences can be attained effectively if the learners are made to engage in learning activities which include a process of four steps-

beginning, developing, practicing, and achieving. This has also been observed that the learners gain learning experiences not only in formal classroom environment but also from their community with instructional connection, community integration, community participation, and citizen action.

8.11 UNIT-END EXERCISES

- 1) What makes learning experience effective?
- 2) What elements do you use in your own work to gain key learning experience?
- 3) Explain the different principles of selecting learning experiences.
- 4) How will you organize the learning experiences for effective teaching-learning process?
- 5) Design a learning activity to engage learners from beginning till achieving.
- 6) Evaluate the approaches for gaining learning experiences from community.

8.12 REFERENCES AND SUGGESTED READINGS

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8.13 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1) Learning experiences are a wide variety of experiences across different contexts (refer section 8.3.1)
- 2) The term learning experience sounds more inclusive because it does not have limited and conventional inferences (refer section 8.3.1)
- 3) Write your own answer.

Check Your Progress 2

- 1) Learning experiences need to be great for promoting further thinking (refer section 8.3.3).
- 2) Write your own answer.

Check Your Progress 3

- 1) The relationship is triangular because these are interconnected. Learning objectives are connected to learning experiences through teaching methods; learning experiences are connected to evaluation through tools of measurement; and evaluation is linked to learning objectives through remedial measures (refer section 8.5).
- 2) This learning experiences are dynamic in nature because of the interaction held among the learner, instructor, and the task (refer section 8.4).

Check Your Progress 4

1) Write your own answer.

Check Your Progress 5

- 1) The organization of learning experiences is meant to maintaining the interaction between learning situation and learning activities by considering surroundings, learners, and the activities undertaken by the concerned learners (refer section 8.6.4)
- 2) The organizing structure includes the largest level, intermediate level, and the lowest level (refer section 8.6.5)

Check Your Progress 6

1) Effective designing of learning experience can create relevant, engaging and memorable educational experiences (refer section 8.7.1).

Check Your Progress 7

- 1) The designing of learning experience is based on certain principles like active learning, learner-centred teaching, breaking down, course content, self-assessment, working in group, student's progress, and safe learning environment (refer section 8.7.2)
- 2) The best practices in designing of learning experience are planning, understanding the learners, motivating the learners, understanding limitations, making outline, consistency, and checking the validity of the design (refer section 8.7.3).

Check Your Progress 8

1) Learning experiences are the combination of learning situation and learning activities.

Check Your Progress 9

1) Write your own response.