# ADVANCED DIPLOMA IN EARLY CHILDHOOD EDUCATION (ECE)

# ECE 104: LEARNING AND LANGUAGE DEVELOPMENT IN EARLY CHILDHOOD EDUCATION

# UNIT 1: DEFINITIONS AND TYPES OF LEARNING

# INTRODUCTION

Learning is a process that starts right from the womb and continues throughout one's life. This implies that learning is a lifelong, exciting experience that opens new opportunities for a person. Through learning, new insights and skills acquired lead to change, which will affect one's response to life situations. For this change to be effectively realized, therefore, certain things must be put in place. There are diverse ways of acquiring these new experiences and the experiences acquired are of different categories. Learning is a continuous process, which is brought about by interaction with external forces. Learning cannot occur unless certain events or other form of situation is present.

This unit is, therefore, focused on the concept types and theories of learning.

# **OBJECTIVES**

At the end of this section, you should be able to:

- 1. define learning;
- 2. list factors that cause a change in behaviour; and
- 3. discuss factors that cause changes in human behaviour.

# HOW TO STUDY THIS UNIT

- 1. Read through the section and note salient points raised;
- 2. Answer the activities that follow;
- 3. Go through the activities again if you have difficulty in answering the questions.

# THE MEANING OF LEARNING

Learning in any living organisms involves behavioural changes, which may be overt or covert. These changes occur as a result of some factors namely:

1.	-	Maturation
2.	-	Fatigue
3.	-	Reflexes
4.	-	Drugs
5.	-	Learning

*Maturation:* This leads to changes in behaviour in children when they are confronted with printed symbols when learning to read. Before children or any other person could read, certain maturational development has to take place, for example:

- (a) the development of fine muscles of the eye, and
- (b) the development of neuro-muscular apparatus which controls eye movements.

Another example of changes as a result of maturation is teaching how to control bowel movement in children. Many mothers embark on teaching their child this control at a very early age but children could not develop such a habit, even if they wanted to, until their body cells are matured to the point of voluntary rather than involuntary contractions. Therefore, teaching a child those skills before his body is physically ready will never result in any learning.

**Fatigue**: This causes changes in behaviour. For example, if you are asked to do as many Press-ups as possible, do you think the first press-up will look like the last one.? Definitely not. The changes come about as a result of fatigue rather than learning. Viewing learning in terms of changes in orgnism's behaviour is not enough because learning may not have taken place if such changes are attributable to maturation or fatigue.

**Reflexes:** These are innate and natural reactions in human organisms. They are present at birth and are never taught. Examples are sucking reflexes, tactile reflexes and withdrawal reflexes.

**Drugs**: The use of drugs usually makes people behave in a particular way. Such temporary changes in behaviour cannot be regarded as learning.

Learning: is another factor that leads to behavioural change. This type of change occurs as a result of individual's knowledge of his or her environment. Therefore learning can be defined as behavioural change resulting from experiences gained from the environment. A learning process is essentially the understanding of how we can influence others to behave in ways different from the ones they have adopted. This implies that learning takes place when the stimulus situation affects the learner in such a way that his performance changes from a time before the number is given.

A learning act follows a type of process, which consists of the segment or phases of a totality: behavioural change follows perception, which comes after the reception of stimuli. You can now see that learning cannot occur unless certain external stimulation are presented. Stimuli or external stimulations are the ideas, facts generalizations, books, suggestions, pictures, maps, graphs and so on which are the subject matters to be learned.

# GLOSSARY

Maturation	-	fully grown, or developed; ripe.
Overt:	-	not hidden, or secret; done openly

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Covert:	-	secret, not done openly
Voluntary	-	acting or done willingly without payment and without being forced
Fatigue	-	great tiredness, weakness or strain.
Stimulus	-	something that brings on a reaction in a living thing, something that rouses a person to action.

# ACTIVITIES

- 1. What does learning involve in any living organisms?
- 2. List three factors that cause change in human beings.
- 3. Which of the factors cause change, which do not result into learning?
- 4. What is learning?

#### SUMMARY

• In this unit, you have learnt the various factors that can cause a change in behaviour. Such factors include maturation, fatigue, reflexes, drugs and learning. Learning was defined and fully discussed.

# **UNIT 2: TYPES OF LEARNING**

# INTRODUCTION

In this section, we shall be discussing the different categories of learning behaviours as a result of modifications due to experiences. Also, we shall look at the conditions which lead to learning.

# **OBJECTIVES**

At the end of this section, you should be able to:

- 1. mention three domains of leaning; and
- 2. discuss the conditions that lead to learning.

# HOW TO STUDY THIS UNIT

- 1. Read through the section and note some difficult words.
- 2. Look up the meaning of the words in the dictionary.
- 3. Answer the questions provided in the activity.
- 4. Go over the section again to make sure you have answered the questions correctly.

# TAXONOMY OF LEARNING

The taxonomy of learning behaviours can be regarded as 'the goals of the training processes'. There are different types of learning. Benjamin Bloom identified three levels of educational domains. There are: (1) Cognitive (2) Affective (3) Psychomotor domains. These domains have also been categorized by Tennant as A.S.K.

- A: means attitude, which represents Affective domain.
- S: means skills, which stand for Psychomotor domains.
- K: means knowledge, which represents Cognitive domain.
- i. **Cognitive Domain:** Cognitive Domain deals with mental skills. It involves recall of data or recognition of knowledge and the development of intellectual abilities and skills. Skills in the cognitive domain are classified into five. These include:
  - (a) Knowledge for remembering information.
  - (b) Comprehension used for explaining the meaning of information.
  - (c) Application which means using abstractions in concrete situations.
  - (d) Analysis deals with breaking down a whole into component parts.
  - (e) Synthesis that is, putting parts together to form a new and integrated whole.

For example, in Nigeria, knowing the 1999 Constitution is knowledge. Explaining what the constitution means is comprehension. Application is illustrated when you know how the constitution applies to sections of people and individuals. Analysis is required to discuss the details of specific areas in the constitution. Finally, synthesis is

needed to develop policies and procedures for the generality of the people in response to the constitution.

The verbs or key words commonly used for the cognitive domain are: defines, describes, explains, distinguishes, applies, relates, shows, analyses, compares, creates, designs, appraises, justifies.

#### ii. Affective Domain

This domain involves the way we deal with things emotionally such as feelings, appreciation, enthusiasm, motivation and attitudes. The affective domain contains five categories. They include:

- (a) Receiving which involves awareness, willingness to hear.
- (b) Responding which involves active participation on the part of the learners.
- (c) Valuing which involves the worth or value a person attaches to a particular object or behaviour.
- (d) Organization which deals with organizing values into priorities by contrasting different values, resolving conflict between them .and creating a unique values system.

(e) Internalizing or Characterization - which h as a value system that controls learners' behaviour.

iii. **Psychomotor Domain**: This domain includes physical movement, muscular coordination, and the use of the motor areas. Development 0 f these s kills requires practice and it is measured in terms of speed, distance, procedures, or techniques in execution. This domain has seven major categories. They are:

(a)	Perception -	which involves the ability to use sensory cues
		to guide motor activities
b)	Sets -	This involves readiness to act
(c)	Guided Response -	This involves imitation and trial and error.
		Adequacy of performance is achieved by practising.
(d)	Mechanism -	This is the intermediate stage in learning a
		complex skill.
(e)	Complex Overt Response -	This involves performance of motor acts with
		complex movement patterns.
(t)	Adaptation -	This involves the development of skills and
		modification, movement patterns to fit special requirements.
(g)	Origination -	This is creating new movement patterns to fit a particular situation or specific problem.

# **CONDITIONS OF LEARNING**

This is another way of classifying learning. This type 0 f classification shows changes i n behaviour rather than the external differences. There are three types of conditions of learning. They are:

- i. Classical conditioning
- ii. Operant conditioning
- iii. Instrumental Conditioning

#### I. Classical Conditioning:

This is an association between two stimuli. A new stimulus is paired with stimulus that leads to a reflexive response. Newborn reflexes make classical conditioning possible in young infant. Once the baby's nervous system makes the connection between the two stimuli, then the new stimulus by itself produces the behaviour. Pavlov demonstrated classical conditioning after observing that dogs release saliva as an innate reflex when they are given food and even before they tasted the food. This experiment deals with dogs, buzzers and food which involved ringing of bell or sounding a buzzer. These are stimuli that ordinarily do not lead to salivation then immediately presenting the dogs with food, a stimulus that leads to salivation. Frequent repetition of the ringing of bell or sounding of buzzer alone, also elicit salivation. Classical conditioning helps children to recognize which events usually occur together in everyday world. This will make the children anticipate what is about to happen next, and the environment becomes more orderly and predictable. Now let us look at an example of a mother who gently strokes her infant forehead each time she settles down to nurse the baby. The mother notices that every time the baby's forehead is stroked, it makes active sucking movements. The infant has been classically conditioned.

### Do you know?

- (1) Before learning takes place, an unconditioned stimulus (UCS) must consistently produce a reflexive, or unconditioned response (UCR).In the above example, the stimulus of sweet breast milk (UCS) resulted in sucking (UCR).
- (2) To produce learning, a neutral stimulus that does not lead to the reflex is presented at about the same time as the UCS. That is, the stroking (Neutral stimulus) was paired with the taste of milk (UCS).
- (3) If learning has occurred, the neutral stimulus by itself produces the reflexive response. The neutral stimulus is then called a conditioned stimulus (CS) and the response it elicits is called a conditioned response (CR)

If the conditioned stimulus is presented alone without being paired with the unconditioned stimulus, the conditioned response will no longer occur. If the mother strokes the infant's forehead repeatedly without feeding him, the baby will gradually stop sucking in response to stroking. This is referred to as Extinction. This shows that learning has taken place. You will now see that babies can be classically conditioned when the association between two stimuli has survival value.

#### ii. **Operant Conditioning**:

As we have learnt in classical conditioning, babies build expectation about stimulus events in the environment, but their own behaviour does not influence the stimuli that occur. Operant conditioning is different from this. In Operant Conditioning, infants act or operate on the environment, and stimuli that follow their behaviour, change probability that the behaviour will occur again. A stimulus that increases the occurrence of a response is called a Reinforcer. Removing a desirable stimulus or introducing an unpleasant one to decrease the occurrence of a response is called punishment. Children increased their contact with a soft teddy bear that 'breathed' quietly at a rate reflecting their respiration whereas they decreased their contact with a non-breathing bear. In short, Operant conditioning has become a powerful tool for finding out what stimuli children can perceive and which ones they prefer. It also modifies parents' and infants' reactions to each other because the behaviour of each partner reinforces the other.

#### iii. Instrumental Conditioning

In continuation of our study on conditions of learning, we are going to discuss the third category, which is instrumental conditioning. It is a type of learning that is sometimes differentiated from operant conditioning, but may also be considered a part of operant conditioning. It refers specifically to those situations where a response is instrumental in bringing about reinforcement in children. The response is necessary in procuring or perpetuating a reward or in avoiding or diminishing a punishment which results in one of the following:

- . reducing or escaping noxious stimulation.
- . avoiding some noxious stimulus.
- . securing a positive incentive such as food or water.

As we have mentioned earlier on, the consequences of the conditioned response are to reinforce the response and these consequences are called reinforcer. The obtaining of these consequences is called Reinforcement.

#### Do you know?

Certain facts differentiate classical conditioning from instrumental conditioning.

- i. In classical conditioning, the response is well established, occurs regularly and is predictable upon the application of the unconditioned stimulus. This is not so in instrumental conditioning, response is associated with the conditioned stimuli through learning.
- ii. The unconditional stimulus in classical conditioning is readily identifiable, whereas in instrumental conditioning it is often quite difficult to identify.

Another procedure in Instrumental conditioning is called Escape training. The child or organism is placed in a situation where it receives a noxious stimulus which is terminated when the child or organism performs a particular act. Example of this is fear which can be viewed as a response to aversive stimulus.

- I. List three domains of learning.
- 2. Who identified these three domains of learning?
- 3. What is the meaning of A.S.K.

- 4. How many types of skills do we have in cognitive domain? List them.
- 5. When children are asked to draw, jump or paint, what skill are they demonstrating?
- 6 Mention the types of conditions of learning you know?
- 7. Which of the conditions of learning help children to recognize which events usually occur together in everyday world?
- 8. What is reinforcement?
- 9. is a powerful tool for finding out what stimuli children can perceive and which ones they prefer.
- 10. What is Instrumental conditioning?

#### GLOSSARY

- Taxonomy	types.
Domain -	category, an area of interest or knowledge.
Recall -	to call back, to remember.
Motivation -	the act or state of being motivated.
Motivate - something.	to provide (someone) with a reason or cause for doing
- Cognitive	mental skill, knowledge.
Affective -	attitude, emotion.
Psychomotor -	manual or physical skills.
Reflex -	an unlearned action, unconscious behaviour.
Conditioned Stimulus	-a stimulus that initially does not elicit any response but that as a function of being paired with an unconditioned stimulus and ' its response, acquires the capability of eliciting that same response.
Unconditional Stimulus -	a stimulus that elicit a response prior to learning.
Conditional response -	a response that is elicited by a conditioned stimulus
Unconditional response -	a response that is elicited by an unconditioned stimulus.
Extinction-	the cessation of a response as a function of the withdrawal. of reinforcement.
Reinforcer -	a stimulus that serves as reinforcement.
Reinforcement -	the effect of a reinforcer, that which increases the probability of a response recurring.
Noxious stimulus -	unpleasant stimulus.
Aversive Control -	the control of human behaviours through the presentation of noxious (unpleasant) stimuli.

# SUMMARY

• The unit starts with taxonomies of leaning: cognitive, affective and psychomotor domains. It also presents three types of conditioning. These are classical, operant and instrumental conditioning. The unit establishes types of learning and their domains.

# **UNIT 3: THEORIES OF LEARNING**

### INTRODUCTION

Training, experience and practice can facilitate learning implied in teaching. Teaching preschool children is a difficult task because of their limited experience. Besides, children learn differently from adults, because they use their minds in a special way. Also, children learn best before they get to school. It is on this basis of various observations about the child's

learning that certain theories have been put forward as holding the key to the facilitation of learning among the pre-school or nursery children.

Learning theory is a general term for the psychological theorists that are concerned with the questions relating to how man learns, how he acquires information and how he behaves. It deals with behavioural changes and looks at the non-development adaptive behaviour, that is, the general principles that govern the acquisition of adaptive behaviour at any age.

The behavioural theorist is concerned with the explanation, prediction and control of behaviour. A theorist must assume, therefore, that behaviour is subject to certain rules, that it is affected in predictable ways by experience, and that it is not subject to erratic, random forces. The history of learning theory shows a progression from simple interpretations of human learning to increasingly complex ones. The contemporary divisions wi\thin learning theory reflect three different degrees.

These divisions are

- i. Behaviourism Theory
- ii. Cognitivism Theory
- iii. Humanism Theory

#### **OBJECTIVES**

At the end of this unit,. you should be able to:

- I. understand what learning theories are: and
- 2. explain the theories and what they entail.

#### HOW TO STUDY THIS UNIT

- I. Recall the conditions of learning which you have studied in unit 2.
- 2. Study this section carefully.
- 3. Reflect on the examples and illustrations used and then attempt to give your  $0 \ge 0$
- 4. Answer the questions provided.

#### i. Behaviourism Theory of Learning

Behaviourism denotes those theories that are concerned with the observables of behaviour, that is, with the visible aspects of behaviour - stimuli (that which leads to behaviour) and responses (the behaviour itself). The term was coined by J. B. Watson. He was inspired by the studies of animal Learning carried out by Pavlov known as **Classical conditioning** which was one of the conditions of learning studied in unit 2. Watson wanted to find out if classical conditioning could be applied to children's behaviour. Watson taught Albert, an 11 - month - old infant, to fear a neutral stimulus which is a soft white rat. The presentation of it several times with a sharp loud sound,

scared the baby naturally. Little Albert who at first had reached out eagerly to touch the furry rat, began to cry and turn his head away when he caught sight of it.

On the basis of these findings, Watson concluded that environment is the supreme force in child development. Adults could mould children's behaviour in any way they wished by carefully controlling stimulus - response associations. You can now see that development is a continuous process, consisting of a gradual increase with age in the number and strength of these associations.

Another behaviourist was B. F. Skinner who propounded the theory of operant conditioning which has already been discussed in **Unit 2**. This theory implies that the children organisms operate voluntarily or willingly on the environment and since no external stimulus is involved, the strength of an operant behaviour is measured by its intensity of frequency. The term 'reinforcement' is central to the understanding of Skinner's theory. Reinforcement is the strengthening of a response by a given reward or by a pleasant condition following the emission of desirable behaviour.

There are different types of reinforcement some of which are discussed below:

#### (1) **Primary Reinforcement**:

This refers to the presentation of rewards following immediately the emission of desirable behavour. This includes any stimulus which is capable of strengthening the probability of an operant behaviour.

#### 2) Secondary Reinforcement

This refers to a condition in which a stimulus that is not originally reinforcing is made to become reinforcing through being previously associated with a reinforcing stimulus. Skinner shows this secondary reinforcement when the rat pressed the bar and light appeared and was followed immediately by food. Later the light became a secondary reinforcer for eliciting the targeted behaviour after repeated presentation.

#### (3) **Positive Reinforcement**:

Positive reinforcement is the presentation or positive reinforcers after the emission of desired behaviour. Positive reinforcers are stimuli like food, water, gifts etc, which when added to a situation can strengthen the possibility of an operant response.

#### (4) **Negative Reinforcement**:

This refers to the strengthening of a response through the withdrawal of a positive reinforcer or through the application of an aversive stimulus.

Other behaviourism theorists are: Thorndike, who propounded trial-and-error theory and Guthrie who propounded the theory of one-trial learning.

# ACTIVITY I

- 1. What are the major concerns of the behaviour theorist?
- 2. The history of learning theory shows a .....to
- 3. Who was the father of behaviourist theory?
- 4. List and discuss types of reinforcement relevant to human learning.

#### ii. Cognitive Theory of Learning:

We have learnt about behaviourism and its emphasis on experience and observable behaviour. In contrast, cognitivists explain learning by focusing on changes in mental processes that people use in their efforts to make sense of the world. They, therefore, preoccupied themselves with the organization of knowledge, information processing and decision making behaviour. The cognitive point of view received its major current impetus from the Gestalt school of psychologists. They were interested in intelligent achievement. It is their claim that learning includes more than remembering. It is concerned not only with finding out how the successive performance depends upon the first but also how the first came about. The learning ~ process is conceived as a resolution of tensions set up in the learner because of the presentation of a problem.

A group of German psychologists were performing experiment to show that children and higher-order primates learn also through the development of insight. They viewed learning as the arrangement of previous ideas and experiences leading to new patterns of thought or insight. The Gestalt theorists believe that wholeness is primary. They held the view that the whole is more than the parts and that the significance of a situation or pattern of stimuli is revealed by its total pattern and not in the separate elements of which it is composed. Hence one should start with the total aspect of a learning situation and then move to particulars in the light of the whole.

The views of the Gestalt psychologists were supported by the experiments of Kohler in Germany in which he investigated the problem - solving abilities of chimpanzeesnamed Sultan. In one of the experiments, Kohler showed that, having learned to pull a banana into its cage with a short stick, Sultan could solve the following problem. Inside its cage was a short stick and outside it a banana which was beyond reach with this short stick. At the other end of the cage and just outside it was a long stick. The ape (Sultan) first tried to reach the fruit with the short stick, and he failed and became angry and frustrated. As he sat brooding, his eyes suddenly focused on the two sticks and the banana. He jumped up, ran over to the short stick, used it to rake in the longer stick and triumphantly raked in the banana. This is a rearrangement of the learning experience of Sultan's pattern of thought. It was the result of insight, of seeing the whole situation and then fitting them together in the mind. This awareness of 'way out' is a common experience in human learning. In the same vain, findings on children capacity to remember, imitate and categorize suggest that they can use what they know to solve problems more effectively. For instance, a mean-end action involving pulling a cloth to retrieve a toy placed out of reach on the end of cloth.

# ACTIVITY II

- I. If we think of learning as problem solving, we would probably refer to which school of thought?
- 2. Who is the father of insightful learning?
- 3. One view that is primary to the Gestalt theorists is.....

#### ii. Humanism Theory of Learning

We have discussed cognitive theory of learning and its changes in mental process that people use their efforts to make sense of the world. In the case of humanism, it is employed to describe an orientation that is concerned with the humanity of man with those characteristics of a person that are assumed to make him human. Humanists deal with, the affective (emotional) aspect of human behaviour. They are interested in explaining man's relationship to his world and to other people and in learning how an individual feels about things. The theory of Carl Rogers is an example of a humanistic theory.

The theory has been described by various authors in terms of three inclusive labels namely:

- (1) Client-centered Therapy
- (2) Phenomenology
- (3) Humanism.

#### (1) **Client-centered Therapy**

This label indicates that the theory is a therapeutic one to be useful for a counselor who deals with various behavioural and emotional problems. It highlights the major difference between this and other approaches to Counseling -namely that the counseling procedures revolve around the client. It proposes a client-centered as opposed to a directive approach to therapy in which the counselor is seen as only setting the stage for the client himself to define his problems, react to them, and take steps toward their solution.

#### (2) **Phenomenolog**y

This term denotes concern with the world as it perceived by an individual rather than as it may actually be.

Humanism has been concerned with the worth of man,\_ with his individuality, with his humanity, and with his right to determine his own actions. The development of human potential tends to be highly valued, while the attainment of material goal is deemphasized

# ΑCTIVITY ΙΙΙ

1. What parts of human behaviour do the humanists deal with?

# GLOSSARY

Behavioursim	-	A general term for those theories of learning which are concerned with the primary observable components of behaviour (stimuli and responses).
Theory	-	A body of information pertaining to a specific area, a method of acquiring or dealing with information.
Gestalt	-	German word meaning configuration.
Insight	-	The sudden appearance of a solution for a problem, power of looking into another and understanding clearly.
Experiment	-	A trial, test of an idea.
Therapy	-	Procedures or methods that are intended to correct undesirable situations whether in physical or in mental health.

#### SUMMARY

• This unit surveyed the various theories of learning. Major ones discussed were behaviourist, cognitive and humanistic theories of learning. These theories are crucial to effective learning at the early childhood levels. They must be given priority that they deserve.

#### ASSIGNMENT

1. Humanism has been labeled in three ways. Name them and write short notes on these labels.

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# UNIT 4 : MOTIVATION AND FACTORS THAT PROMOTE LEARNING

# INTRODUCTION

Infants and young children appear to be propelled by curiosity, driven by an intense need to explore, interact with and make sense of their environment. During this period, rarely does one hear parents complain that their pre-schooler is unmotivated. As children grow, their passion for learning seems to shrink. Learning often becomes associated with drudgery instead of delight. Many are physically present in the classroom but largely mentally absent.

Therefore, to motivate students to learn becomes a problem of concern for educators. Teachers even rank problems of motivation as one of the most serious problems confronting them in the instruction of pupils. Though students' motivation is an imposing task, it is very vital for the teachers to understand how students' attitudes and beliefs about learning develop and what facilitates learning for its own sake to facilitate effective classroom instruction and also to reduce student apathy.

# **OBJECTIVES**

By the end of this unit, you should be able to:

- 1. explain students' motivation on t he basis of behavioural, cognitive and humanistic theories;
- 2. state different theories of motivation;
- 3. explain the implication of motivation on classroom learning;
- 4. state factors that promote learning; and
- 5. explain these factors.

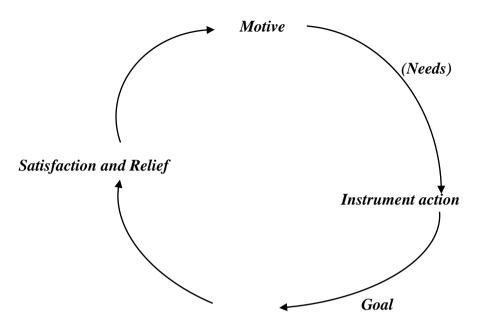
# HOW TO STUDY THIS UNIT

- 1. Read through this section and note all the salient points.
- 2. Take note of all unfamiliar words and check their meanings in the dictionary.
- 3. Answer all the questions provided in the activity column.
- 4. If you have any difficulty in answering any of the questions, read through the section again.

#### **MOTIVATION**

Motivation entails a serious consideration of the goals and motives that produce observed human behaviour. It is essentially an internal urge, drive or tension that spurs an organisrn into action. This urge is a need which pushes one towards achieving a goal. In other words, needs serve as the basis for motivation.

Motivation is a cyclic phenomenon where motive leads the organism to perform an. instrumental action which in turn leads to the attainment of a goal and the achievement of, at least, temporary relief and satisfaction



Morgan and Kings (1996) Model of the Motivational Pathway

A need arises when a desire to achieve or acquire something compels a person to act or feel in certain ways, and that satisfaction or deprivation of needs determines whether people grow or stagnate. It is worthy of note that when needs are satisfied, the person goes and seeks satisfaction of highly more complex needs, but that when need is not satisfied, the individual suffers emotional pain and even physical illness.

Many psychologists have propounded theories to explain motivation. Such theories include those of Atkinsan (1964, Hull (]943), Maslow (1968, ]970), McClelland (1955a, ]955b), Murray (1938), and Young (]966). Out of these theories, only that of Abraham Maslaw and Henry Murray will be discussed here.

# ABRAHAM MASLOW'S THEORY OF MOTIVATION

Maslow asserted that human activities are goal-oriented. He based his theory of behaviour on the principles that:

- i. man and other organisms are permanently wanting and needy;
- ii. total satisfaction is almost impossible;
- iii. needs are graded by the organism in their order of importance;
- iv. as soon as a more urgent and pressing need is satisfied, another higher need immediately emerges, assumes great importance and automatically becomes the active determinant or organizer of behaviour; and
- v. a currently satisfied need becomes unimportant and under-estimated by the organism and no longer controls and determines behaviour.

Maslow identified seven very important human needs and categorized them in their order of urgency as follows:

- i. physiological needs;
- ii safety needs;
- iii. love and affection needs; IV. achievement needs;

- v. self-esteem needs;
- vi aesthetic needs, and
- vii Self-actualization needs.

These needs will be described briefly in this section.

#### **Physiological Needs**

Physiological needs, otherwise called biological or survival needs, dominate and control the whole hierarchy of human needs. When they are in force, all other needs become relatively unimportant. For example, a hungry person directs all his attention towards hunger-satisfaction and temporarily forgets all his other ambitions which now assume only secondary importance. This category includes the need for food, water, oxygen, sex, and the elimination of waste products. They are directly necessary for survival. In short, if all of a person's needs are unsatisfied, priority attention would be paid to biological needs, and all other needs would become pushed to the background until the more potent biological needs have been fulfilled.

#### **Safety Needs**

Human beings need self-preservation, security and protection from danger: The vital need for safety is felt by infants, children and adults alike. Everybody detests panic and unmanageable, unfamiliar or chaotic situations. An infant's reactions to danger are easily noticeable. He cries and manifests anxiety if something suddenly drops; it is disturbed, frightened by loud noise, dazzling light or other forms of perceived threat. In such situations, safety considerations become. the most dominant controller of human behaviour.

#### Love and Affection Needs

This is man's need for cordial and reciprocal relationships with other people, such as members of the 'immediate and extended family, peers, workmates, fellow students, and the neighbourhood. This need is otherwise called the belongingness needs or intimacy needs. It should be noted that when this vital need is obstructed and thwarted, adverse psychological reactions or pathological behaviours (maladjustment) could result despite satisfaction of basic physiological needs.

Extended family structure is another concrete demonstration of the belongingness need within the African culture. It is a supportive system that tends to buffer emotional stress; psychological trauma and despair inherent in human existence, especially those arising from misfortunes, such as death of relatives, illness, poverty and other vicissitudes of life. The love and affection need runs all through the life cycle from infancy to old age.

#### **Achievement Needs**

This is human desire for great personal strength, adequacy and freedom. It affords a person to earn and enjoy respect from other people on the basis of his demonstration of real capacity. It motivates and fuels human curiosity and continuing human struggles for knowledge, exploration and mastery of the immediate and distant environment. Self-Esteem Needs.

#### Achievement Needs

This is human desire for great personal strength, adequacy and freedom. It affords a person to earn and enjoy respect from other people on the basis of his demonstration of real capacity. It

motivates and fuels human curiosity and continuing human struggles for knowledge, exploration and mastery of the immediate and distant environment.

#### Self-Esteem Needs

Human e go and psychological satisfaction demand t hat an individual should be accorded recognition and respect and that he should be able to exercise considerable influence and enjoy a feeling of being important in his society. If this condition is satisfied, there is a positive feeling of self-confidence and high self-esteem. Failure to meet this need leads to feelings of inferiority, weakness, and loss of ego integrity.

#### Aesthetic Needs

Normally, human beings have a strong attraction towards beauty, decency and orderliness of arrangement. People generally wish to admire and possess beautiful things. The huge investments on interior and exterior decoration of private homes and public institutions are testimonies and responses to this psychological goat

#### **Self Actualization Needs**

When man's fundamental needs have been satisfied, he is ultimately dominated by a strong desire to attain rare heights, to break new grounds... to be extra-ordinary. He wishes to be the best of whatever he is; to be at the peak of his profession. This is desire for self actualization. Self actualization implies abundant self-confidence, being your own person, self reliance, positive self-concept and living a life of inner peace and security. It entails freedom from external locus of control, gaining mastery over our lives and shaping our existence.

#### Henry Murray's Theory of Motivation

Like Maslow, Murray proposed a hierarchical theory of human needs with two broad divisions namely, (i) Viscerogenic needs and (ii) psychogenic needs.

#### Viscerogenic Needs

These needs, otherwise called biological or physiological needs, correspond with the physiological needs in Maslow's stages. They are primarily the needs to satisfy hunger, thirst and sleep; need to respire and to excrete waste products. These viscerogenic needs can be categorized into two parts:

- (a) Need to take in materials such as need for feeding, drinking and for respiration
- (b) Need to remove undesirable or harmful substances like the need for defecation, urination, perspiration, and removal of carbon dioxide. This category is also called the eliminative need.

#### **Psychogenic Needs**

These correspond with the remaining needs in Maslow's theory. They are also referred to as psychological needs. These are human needs for security, achievement, prestige, affection, respect, acquisition of wealth, need for dominance and knowledge, as well as need to avoid inferiority or debasement and punishment.

Murray explained that his motives or needs can be stretched and expanded to 40 out of which 12 will be physiological needs, while the remaining 28 belong to the psychogenic group. He admits that viscerogenic needs are of a higher order and of greater importance than the psychogenic needs. Like Maslow, he maintained that in the event of competing human needs, the more fundamental categories will take priority. For example, if someone wants to drink

and at the same time wants to fight, the usual trend is for him to drink first and fight later.

# ΑCTIVITY Ι

1. 'Man's needs are arranged in order of importance and urgency'. Discuss.

# THE CLASSROOM IMPLICATIONS OF MOTIVATION

The psychology of motivation seems to have close links with the psychology of learning. The ways the knowledge of motivational techniques all the hierarchy of human needs could be applied in the classroom to stimulate effective learning are discussed in this section.

- I. The teacher should know the order of children's needs and which should be satisfied first before learning can take place. For example, a hungry, thirsty or sleepy child cannot learn effectively.
- ii. Appealing to children's sense of honour and self-pride during teacher-pupil' counseling will motivate them to want to learn.
- iii. Students often aspire to certain professions or careers. Awareness that certain school subjects are vital to their success in the chosen field could generate efforts in the right direction.
- vi. Pupils are normally sensitive to adults' attitudes, remarks and observations about them. Adult should, therefore, endeavour as far as possible to give them positive feedback as a way of leading them to greater achievement and success.
- v. Students should be given recognition as well as positions of responsibility in the home, school and larger community in order to build up their self-esteem and self-reliance.
- vi. The teacher should allow free and genuine interactions with the students and be accessible to them because of the inherent human needs to be loved and regarded.
- vii.. The teacher should individualize his teaching, where possible, in order to cater for students at various ability levels. The larger number of pupils in a single class sometimes prevents the teacher from realizing these goals but frank efforts should be made;
- viii. Co-curricular activities like games, school debate, drama and field strips should be organized for pupils to demonstrate their other talents, apart from academic and derive satisfaction obtained by so doing. It is well known that some pupils who remain un-interactive and passive in class all day may perform at their best during games and should be given this opportunity.
- ix. Teachers should endeavour to motivate learners' interest by introducing variety and novelty. These obviously call for creativity, talent and consci0us planning on the part of the teacher, but it is certainly rewarding.
- x. The award of prizes to students who have demonstrated special ability should be explored. This could serve as an incentive capable of producing healthy competition among class mates.

# GLOSSARY

**Curiosity** - strong desire to find out

MODULE 4		Learning and Language Development in ECE (ECE 104)		
Motivate Urge	- -	to cause someone to act in a certain way. to drive, to try to persuade.		
Physiology	-	the study of the way in which human bodies work e.g. blood circulation digestion etc.		
Esteem	-	to think highly of.		
Aesthetic	-	of beauty.		
Psychology	-	the study of the human mind.		

# ACTIVITY II

- 1. Briefly explain the theory of Henry Murray.
- 2. List some of the classroom implications of motivation.

# FACTORS AND CONDITIONS THAT PROMOTE LEARNING

As you learnt in the last unit motivation generated within the person himself is one of the most important factors to be considered if learning will be effective. These factors must exist under certain conditions like right type of teaching environment, right materials and right teaching methods that enhance optimum learning situations in this unit, factors and conditions that promote learning are discussed.

#### **Factors That Promote Learning**

- i. Learners should know the goals toward which they are working. Learning progresses much faster when goals are clear. A knowledge of the goal enables the learner to see the problem as a whole and in a coherent pattern.
- ii. Teachers should be familiar with the learning curve as it applies to individuals. Learning curves are not always constant, and they are different for each individual. A learning curve depends on the person, the material being learned and the conditions surrounding the learning. Teachers should take such conditions that perhaps the instruction is inadequate or that the individuals in the class are not quick to learn.
- iii. Education is a doing phenomenon, thus a person learns by doing. Individual learns through his own responses through practice or a repetition of the act.
- iv. The leadership provided determines, to a great extent, how much learning will take place. Verbal guidance helps the learner to get a clearer picture of what he is to do. The teacher should be continually alert to detect mistakes in the learning process and correct them promptly. This is a stimulus to more success.
- v. Learner should know the progress he is making. The knowledge that one is progressing towards a set goal is encouraging and will promote a better learning situation. When learners are aware of the progress they are making, either through charts or other media, the learning process is stepped up and learner enjoys his work to a much greater degree.
- vi. The materials presented for learning should be appropriate to the proper maturation level of the learner. Maturation is growth that takes place without any special training, or stimulus, it just happens. Therefore, the material must be adapted to individual maturation levels.

- vii. Individual differences: There are differences that are innate and differences that exist as a result of one's environment. There are differences in regard to intelligence, which have implications for the way the mental processes function. There are emotional differences that have to do with drives, attitudes, and ideas. A11 these must be taken into consideration by the teacher.
- viii. Learning is effective when learner has a motive for wanting to learn. Motivation is an inducement to action. Usually, the greater the motivation, the more rapid is the learning. Motivation should be of the intrinsic rather than the extraneous type. Rewards, awards and marks should not be a means of motivating activity. The worth of the activity in itself should be the motive.
- ix A :learning situation will be improved if students diagnose their own movements and discover the errors they are committing. Self-criticism is much more conducive to learning .than teacher- criticism. If students .discover the it" own mistakes, they are corrected much more rapidly than if discovered by someone else. A good teacher should develop teaching situations that will lead students to self-criticism.
- x. There must be optimum condition for efficient learning -- distracting element should be eliminated from the setting. The proper mental set should be established in the mind of the students. Also, the proper equipment and facilities should be available.
- xi. Audiovisual aids enhance favourable learning situation. Movies, slides, filmstrips, pictures, charts, tape recorders, posters and other audio-visual aids may be used to help give the learner a clearer concept of what he is striving to attain.
- xii. Reinforcement enhances learning. One of the most fundamental laws of learning is reinforcement. The sense of satisfaction resulting from achievement or success is an excellent form of intrinsic reward. Therefore, the best-planned learning situation will provide for an accumulation of success. The reinforcement (reward) should follow the desired behaviour almost immediately and should be associated with the behaviour in order to be more effective. Repetition plus reinforcement will provide an optimum learning situation.

# GLOSSARY

Phenomenon	-	thing that appears to or is perceived by the senses. that which persuade/influences.
Inducement	-	not related to the object it is attached.
Extraneous	-	draw away a person's attention from something.
Distracting	-	draw away a person's attention from something.

# ACTIVITY III

- 1. List some factors that the teachers must bear in mind in order to promote learning.
- 2. Discuss these factors.
- 3. List some factors learners must bear in mind so as to promote learning.
- 4. Explain these factors.

#### SUMMARY

• This Unit has been able to expose you to Maslow's and Henry Murray's theories of motivation. It has also shown you the classroom implications for motivation as well as factors and conditions that promote learning. If some of these theories are appropriately applied, early childhood learning will be enhanced.

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# **UNIT 5: MODELS OF LEARNING**

### INTRODUCTION

Now that you have learnt about motivation and those factors that promote learning, it is very necessary to learn about learning models. In this unit, different types of learning models will be discussed.

# **OBJECTIVES**

At the end of this unit, you should be able to:

- i. discuss generative model of learning;
- ii. enumerate some activities that generate meaning from information presented in class;
- iii. explain Essen Learning model;
- iv. describe the Harvard Business school learning model; and
- v. explain collaborative learning model.

# HOW TO STUDY THIS UNIT

- i. Read the section thoroughly and note all unfamiliar words;
- ii. Check the meaning from the dictionary;
- iii. Answer the questions provided in the activities; and
- iv. Go through the section again to confirm your answers.

# A GENERATIVE MODEL OF LEARNING

In a generative model of learning, people learn by generating meaning from the information presented to them and by actively generating relationships among ideas.

These self-generated relationships can be both visual and verbal. If for example, two groups of students were instructed to elaborate activities. One group received instructions to draw a picture of what they had read, followed the next day by instructions to write one- or two sentence summaries about the story, and finally, to create an analogy or metaphor about the story they had read. This group was called the imaginal to verbal group because they performed first image elaboration and then verbal elaboration

The second group was instructed in reverse order: from *verbal to imaginal*. Two other groups received no instruction in elaboration. The elaboration instruction resulted in higher scores in reading comprehension. In both experimental groups, the students created appropriate and relevant elaborations; the more elaborations the students had created, the higher the student's score on the reading comprehension test (more so for the group who moved from images to verbalization).

# **USING A GENERATIVE MODEL OF LEARNING IN TEACHING**

Here are some activities you can use to help them generate meaning from information presented in class.

- i. Note taking is effective for this purpose. The act of taking in new spoken or written information and transforming it into short notes helps student understand the information and retain it for a long time.
- ii. Summarizing requires students to consider the most important aspects of a body of information and reiterate them.
- iii. Underlining forces students to judge the importance of a given sentence or sentence fragment. Making judgments forces students to consider the relationship between the information presented in the sentence and other related ideas.
- Outlining compels students to organize incoming information in a hierarchical manner and consider the relationship between ideas: is idea Y a subordinate idea to idea X? Is Idea Y distinct and separate from idea X? Outlining imposes an organization on a body of information.
- v. Adjunct .questions. are used to –signal important .information to readers; They can be used as pre-reading questions, -inserted questions, or. Post-reading questions. Students who use adjunct questions retain more information than students who do not. Post questions are most valuable because they encourage students to review material for clarification of their understanding. However, pre-questions help students focus immediately on the most important or the most general ideas.

# ACTIVITY I

1. Explain what is meant by Generative Learning Model.

# THE ESSEN LEARNING MODEL (ELM)

The Essen Learning Model is a development model to ensure the overall quality of the development process of learning environments on different levels. The use of development models, originating from the field of software engineering, is a first step towards quality management and assurance.

# **ELM Merits:**

- Analyze and plan your curriculum efficiently:
- Manage your educational projects.
- Manage heterogerteous teams.
- Develop innovative learning environments.
- Integrate your business and learning processes.
- Specify standardized specifications of your learning resources for' easier retrieval.
- Distribution and marketing.
- Develop learning environments.
- Improve the quality of education.

#### Demerits

Software development models do not include didactical concepts adequately.

# ACTIVITY II

1. List and explain some activities that students can use to generate meaning from information

# HARVARD BUSINESS SCHOOL – THE LEARNING MODEL

Success in business comes from experience and knowledge, from the ability to analyze and reflect, from observing and interacting with others, and learning from these encounters.

Harvard Business School's learning model is based on these principles. [t is a process of inductive learning that goes beyond facts and theories-a process that teaches individuals not only how to manage organizations, but also how to continually grow and learn throughout life. A process that empowers our students to be architects of their own future.

### A Collaborative Learning Model

Learning is intertwined with multidirectional activities such as work and play, and that learning is essentially a social activity. This position on learning argues that the process of acquiring knowledge cannot be separated from the process of applying it, because knowledge is temporary, developmental, socially and culturally mediated. Thus, learning is a nonobjective entity. A key challenge in supporting individual learning is to promote reflection-in-action processes. As knowledge is continually changing, students need to learn and relearn how to recognize potential cognitive gaps in situated action while solving personally relevant problems. Therefore, we must constantly apply new knowledge to overcome cognitive breakdown. The Collaborative Learning and Teaching (COLT) model was developed jointly by th~ College of William and Mary in Virginia and Keio University in Japan. It requires that students conduct their own research for knowledge creation at local sites and connects students with different cultural backgrounds for direct cross-cultural interface.

The students employ a much wider range of communication tools (i.e. International videoconferences, chat, e-mail, trans-:Pacific file exchange, Web-page creation, bulletin boards, PowerPoint presentations and film-archive retrieval); The collaboration for co knowing is international;

#### Advantages:

- i. The COLT model allows collaborative groups to execute tasks that are too complex for one individual to undertake.
- ii. It provides opportunities for students to participate in cross-cultural group dynamics.
- iii It helps students to articulate and defend their ideas and hidden motives.
- iv. It also helps their work to flow amid a high degree of uncertainty about how the project should be done.
- v. It also enables them to receive ample opportunities to navigate themselves in the sea of cognitive and emotional dissonance.
- vi. They are also encouraged to think about their own cognitive, affective, social, and conceptual learning styles and modes of thinking.
- vii. The students are engaged in critical reasoning and self-reflection, and they learn how

to transform their present mental scheme to a new level of knowledge.

viii. The students learn the joy of sharing cognitive and emotional understanding and of developing friendships with people thousands of miles away.

# ACTIVITY III

1. Briefly explain the term 'ELM'. What are the merits and demerits of 'ELM'

#### Disadvantages

- i. They sometimes face power inequity as they deal with someone else's dominant perspectives.
- ii It intentionally creates a learning environment where participants need to manage uncertainty and uncertain knowledge

### GLOSSARY

Analogy Metaphor	-	a likeness, resemblance in certain ways a way of describing something by suggesting that it is or has the qualities of something else
Utilization	-	to make use of
Heterogeneous	-	different, unlike, made up of different kinds.
Retrieval	-	to get back, to search for and fetch
Interwined	-	twist together
Dynamics	-	the scientific study of movement and force
Navigate	-	to direct, pilot a ship on its course.
Dissonance	-	disagreement
Inequity	-	injustice, unfairness
Perspective	-	point of view
Multidirectional	-	connected with many directions in space
Didactical concept	-	having to do with teaching of moral lesson

#### SUMMARY

• In this Unit, you have been exposed to different models of learning. Can you list these without looking at the study guide? Indeed, these models are practicable. Try them while studying these units. Practice them with your students.

#### ASSIGNMENT

- 1. Success in business comes from experiences and knowledge. Using this as a criterion, what can you say about Harvard Business School Learning Model?
- 2. Briefly explain Collaborative Learning Model?
- 3. What is COLT?

4. What are the advantages and disadvantages of COLT?

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# UNIT 6: LANGUAGE AND LANGUAGE ACQUISITION IN EARLY CHILDHOOD

#### INTRODUCTION

Language is the most awesome of universal human achievement. It develops with extraordinary speed during the early childhood years. Language is essential as a medium for social interaction. It also serves an individual function by acting as a means of regulating and reflecting on children's thinking. Using language is a part of human behaviour that makes man different from all other animals. This is because language is used as a tool by which we make our ideas, wishes, feelings, motive, and problems known to our fellow men. In order words, language is the repository of all of man's knowledge and wisdom.

There are some principles, which are innate that makes language as an interactive tone possible. Children from varying background seem to learn to speak at about the same age because all humans are genetically 'wired' to learn language and that exposure to language triggers this development. This implies that a normally developed child will possess a Language Acquisition Device to learn a new language. Language Acquisition Device (LAD) is agenetic set of language processing skills t hat enable children to understand the rules governing others' speech and to use these in their own speech. In this Unit, we are going to look at the concept 'Language' and why language is been learnt.

#### **OBJECTIVES**

By the end of this unit, you should be able to:

- i. define the concept of language;
- ii. give reasons for learning language; and
- iii. state factors that motivate children learning language.

# HOW TO STUDY THIS UNIT

Read through the section and note some difficult words.

- i. Look up the meaning of the words in the .dictionary.
- ii. Answer the questions provided in the activities.
- iii. Go over the section again. to make sure you have answered the-.questions correctly.

# THE MEANING OF LANGUAGE

The term 'language' is used to refer to speech behavior but more specifically, it refers to those systems through which people communicate with one another. The systems are those based on the use of the voice in the articulation of patterns of sounds, words and signs representing particular element of experience. The systems of language include words that make up a vocabulary, and a set of rules that governs 1he way in which words are ordered and how they relate to one another, that is, grammar. Speech is the medium through which children first learn to use language. Language is the most versatile means through which people communicate with one another.

# ACTIVITY I

1. Define the term 'Language'

# REASONS FOR LEARNING LANGUAGE

There are a number of reasons for learning language. These reasons are:

- i. Language is an essential part of cultural environment. The physical and cultural environments feature prominently in the curriculum. We learn about trees, towns, the weather, our shared history and so on. It is important to let your children understand and appreciate the world in which they live. In the same vein, we need to explore and identity aspects of our linguistic environment. Because language is a medium through which we experience the environment, and a medium through which we interact with it, learning about language, which is a means of describing that environment becomes imperative.
- ii. The world would be a better place if people could use language to talk coherently about many problems, which arise, in cotemporary society. Language is used to generate feelings. This is because people's sense of personal and social identity is strongly bound up with their ways of speaking and writing. Language competence is also seen as a key to personal advancement and social. mobility. Unfortunately strong feelings cloud clear thinking. For instance, some people assume that certain varieties of spoken English are superior to other varieties, others assumed that the language of formal writing (standard language) is the yardstick against which to judge all language use, spoken or written. What all these views about standard of 'correctness' fail to account for is the fact that sId1led speakers and writers have access to a range of languages from which they .select as appropriate, to meet the needs of different situations and audience. Standard language is a particularly powerful variety, and all children deserve access to it. The study of language should allow expression of diverse opinions and equip learners to use language to di.spel ignorance or prejudice based on course evidence. This can make an important contribution towards the creation of a more tolerant society.
- Language performance is helped by the systematic discussion of language in use. While there are some research studies into the effectiveness of formal grammar learning, there has so far been insufficient research into the link between reflection on language and competence. Reflection is also fruitful in generating knowledge about language when pupils use one mode of language to explore another. E.g. transcribing of spoken words. When opportunity for transforming", o,I1(}...mode .1n~Q another.. ("8 chapter of a novel into a radio play, alternative version of well known stories) are added to these, the comparative insight generated becomes particularly rich.

# ACTIVITY II

1. List reasons for learning language and discuss them.

#### **Factors That Motivate Language earning**

- *i.* **Imitation**: Imitation assists language learning, especially at the level of vocabulary acquisition e.g. naming of toys by adult which will be associated to the toy by the child.
- ii. Correction or Reinforcement of Speech: Parents and older child's reactions to correctness of children' s speech. The more positive the reinforcement, the more

facilitative the language learning process.

- iii. **Imitation in reverse**: Adult expression may provide important data for language learning child.
- iv. **Interactive dialogue between adults and children**: This is essential for language learning. It will also provide for natural informal use of expression.
- v. **Maturational Factors**: Language in young children is controlled by this factor. Since children have a natural ability to learn language, all that is needed is the ample presence of language around them. Language will continue to grow but it will develop more quickly under optimal condition of adult-child interactions.

# GLOSSARY

Interaction	-	to act on one another
Extraordinary	-	Not usual, exceptional.
Language Acquisition Device (LAD)	-	innate mode for picking up language which permits utterance and which enable children to combine word into grammatically consistent and to understand the meaning of sentences they hears.
Speech	-	The power of making sound which have meaning for other people, a way of speaking.
Articulation	-	explaining thoughts or work clearly.
Vocabulary	-	the stock or range of words used by a person or a group.
Versatile	-	Useful in different ways.
Imitation	-	a copy, made to look alike.

# SUMMARY

• This Unit discussed the meaning of language. Can you define language? It also outlined for you the reasons for learning a language. Language is an important tool, which a child must acquire very well.

# ASSIGNMENT

1. Some factors motivate language learning list and discuss them.

# UNIT 7: COGNITIVE DEVELOPMENT AND STAGES IN SPEECH DEVELOPMENT

#### INTRODUCTION

This unit is about cognitive and speech development of a child. Cognitive refers to the inner process and products of the mind that lead to knowledge. It includes all mental activities, namely remembering, symbolizing, categorizing, problem solving, creating, fantasizing and even dreaming. Cognition is an integrated set of reasoning ability that develops together: and can be applied to any task. Major cognitive advances take place as children act directly on the physical world, discover the shortcomings of their current ways of thinking and revise them to create a better fit with external reality. By stages of speech development, we mean the processes that a child passes through while acquiring the skills to communicate with the social world.

# **OBJECTIVES**

By the end of this unit, you should be able to:

- 1. list the stages of cognitive development;
- 2. explain each stage briefly;
- 3. associate language development to each of the cognitive stages;
- 4. identify children's pre-speech form; and
- 5. list the essentials of learning to speak.

# HOW TO STUDY THIS UNIT

- 1. Peruse through this section and note the important points
- 2. Answer the activity that follows
- 3. Read through the sections again if you have difficulty in answering the question.

# **STAGES OF COGNITIVE DEVELOPMENT**

Cognitive ability, which makes understanding possible, involves stages namely:

- 1. The sensory-motor stage
- 2. The Pre-operational stage
- 3. The stage of Concrete Operation, and
- 4. The stage of Formal Operation.

These stages are not separate and distinct but are sub-division of a continuous pattern of cognitive development.

#### i. The Sensory-motor Stage

This is the first stage of cognitive development. At this period, children begin to develop an understanding of themselves as separate and distinct from the environment, causality, time and space. Among the child's major achievements during this period are the developments of language, the development of the concept of objects. They do not know that physical objects remain in existence even when out of sight at early stages. The development of control of schemas (reflexes) and the recognition of cause and effect relationships are included at this stage. The verbal notions of rules at this stage corresponds to the child's behaviour. He knows no rules and plays according to none. This period extends from birth to the time when children are two years of age.

#### ii. The Pre-operational Stage

This is the second stage of cognitive development, which extends from 2 to 7 years of age. This stage is divided into two sub-stages: (i) the pre-conceptual (2 to 4 years) and (ii) the intuitive (4 to 7 years). During this time, children are capable of using language and symbolic thinking. It is a time of egocentric thinking in which children are unable to take the views of others.

#### iii. The Stage of Concrete operation

This is the third stage of cognitive development, which extends from 7 years of age to II or 12 years old. At this time, the vague and nebulous concept of the preschool years becomes concrete and specific. This enables children to begin to think logically, to form concepts of space and time and to categorize objects.

#### iv. The Stage of Formal operations

The fourth and the last stage of cognitive development is formal operational stage, which begins around the age of 11 or 12 years and extends onwards. At this stage, children are able to consider all possible ways of solving problems from different points of view. They can take many factors into consideration when solving problems. Children's thinking becomes more flexible and concrete and they are able to combine information from a number of different sources. This shows that children at this stage can examine abstract problems systematically and generalize about result.

# GLOSSARY

Peruse -	read carefully
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**Egocentric** - inability to assume the point of view of others

# ACTIVITY

- 1. What is cognition?
- 2. List the mental activities in cognitive development or cognition
- 3. List and discuss the stages of cognitive development.

# STAGES IN SPEECH DEVELOPMENT

The cognitive development stages discussed in 'the previous section can easily be translated to how children convey meanings when they are Just entering the social world or human communication. Much 'of the helplessness of newborn infants stems from their inability to. communicate their: needs and wants in forms that 'others can understand and their inability to understand the words and gestures used by others. They remained undaunted in their effort as they follow what seems to be an inborn desire to communicate. Ability to speak is an important need in children's life. Children's position is marginalized in the social group because they communicate by means different from speech. Therefore, the early years of children's life are critical for speech development.

#### THE DISTINCTION BETWEEN LANGUAGE AND SPEECH

Before we proceed to the pre-speech form of communication, it is imperative to distinguish between language and speech. This is because many people use the terms interchangeably and the two are not synonymous. Language encompasses every means of communication in which thoughts and feelings are symbolized to convey meaning to others. Language include different forms of communication, such as; writing, speaking, sign language, facial expressions, gestures, pantomimes, and art. Speech is a form of language in which articulate sounds or words are used to convey meaning.

# ACTIVITY II

- 1. What causes helplessness for the new born infants?
- Children's position is.....because they communicate by means different from speech.

# **PRE-SPEECH FORM OF COMMUNICATION**

Learning to speak is a long and complicated process and until the child is maturationally ready to learn, nature has provided some stop gap forms of communication. These stopgaps reduced the period of children's helplessness because most children do not say their first word until they are 12 to 15 months old. Therefore, children use these pre-speech forms of communication until they have mastered sufficient linguistic skills to use meaningful words that can be understood both by the child and others. Children use four types of pre-speech form of communication: They are (1) Crying (2) Babbling (3) Gesture and (4) Emotional expressions.

#### i. **Crying**

Crying is one of the first ways in which the infant is able to communicate with the world at large. Through cries, babies make known their needs for someone to relieve their hunger, pain, fatigue, and other unpleasant bodily states and to satisfy their desire for attention. Some parents are able to distinguish various cries because nature has provided for such differentiation in the tonal quality of the cries. For instance, pain is expressed by loud shrill cries interrupted by groaning and whimpering, while hunger cries are loud and interrupted by sucking movements.

#### ii. Cooing and Babbling

The second pre-speech form of communication is 'cooing or" babbling'.

- (a) **Cooing**: Otherwise known as voluntarily produced comfort sound. These sounds are unlearned and are universally found even among the deaf. They are not used as a form of communication hence they are regarded as playful activities, which give the baby enjoyment. Many of these cooing sounds disappeared while some developed into babbling.
- (b) **Babbling**: Babbling is the stringing together of consonant and vowel sounds,

at first, in simple repeated sequences e.g. "mama", "ba-ba". "da-da". Many of the consonants in babbling are ones that occur in the language to which the child is being exposed. At times, there are ones that belong to other world languages or perhaps to none.

Babbling has a long-term value for communication for three reasons:

- (i) It is a verbal practice that lays the foundations for developing the skilled movement required in speech. It hastens the learning process by providing the basic skills needed to control the vocal mechanism for the more highly complicated skills of speech.
- (ii) Babbling encourages the desire to communicate with others.
- (iii) Babbling helps babies to feel that they are a part of the social group. This feeling is intensified when members of the group talk to them or babble in response to their babbling.

#### iii. Gestures

The third preliminary form of communication consists of gestures. Gestures are movements of the limbs or the body which serve as substitutes for, or supplements to, speech. As a speech substitute, an idea is conveyed to others by meaningful movements of the limbs or some parts of the body. A speech supplement emphasizes the meaning of spoken words. Therefore, gestures have the serious purpose of communication just as crying.

The repertoire of gestures expands quickly and, by the end of the second year, children can wave bye-bye, push objects away as an expression of rejection, request to be picked up by raising their arms, point at objects and at people, show or offer objects to people, and shake their heads in a conventional negative gestures.

#### iv. Emotional Expression

The fourth pre-speech form of communication is the expression of emotions through facial and bodily changes. There are pleasant and unpleasant emotions. The pleasant emotions are accompanied by pleasant vocalizations in the form of cooing, chuckling sounds and laughs, while unpleasant emotion are accompanied by whimpering and crying. Happiness is expressed by relaxing their bodies, waving their arms and legs and smiles appearing on their faces. This is accompanied by pleasant vocal sounds. On the other hand, anger is expressed by tensing their bodies, by slashing movements of the arms and legs, by tensing expressions of their faces, and by cries of anger.

# **ESSENTIALS IN LEARNING TO SPEAK**

Learning to speak will be delayed and quality of speech will be below the child's potential and below the level of speech of age-mates if anyone of these essentials is missing:

(1)	Physical Readiness to Speak:	This depends upon the maturation of the speech mechanism
2.	Mental Readiness to speak:	This depends on the maturation of the brain, especially the association areas of the brain. This readiness is between the age of 12 and 18 months, known as "teachable moment

3.	A Good Model to Imitate:	If children are to learn to pronounce words correctly and later to combine them into correct sentences, they must have a model of good speech to imitate.
4.	Opportunity for Practice	If deprived the opportunity to practice speaking for whatever reason, children become angry and frustrated when they cannot make others understand them.
5.	Motivation:	If young children discover that they can get what they want without asking for it and if substitute for speech such as crying and gestures serve their purposes, their incentive t. learn to speak will be weakened.
6.	Guidance	The best ways to guide learning to speak al first, to provide good model, second, to say words slowly and third, to provide help in following this model by correcting any mistakes children may make in imitating the model.

# GLOSSARY

Communicate	-	to make known
Synonymous	-	having the same meaning
Stopgap	-	something which is used in an emergency until something
		better is found.
Whimpering	-	crying with a low whining voice, sobbing sound.
Repertoire	-	the range of works that a performer is ready to perform

### SUMMARY

• This Unit took you through different cognitive developmental stages of children Can you list them? The Unit also exposed you to different stages of speech development Some of these are pre-speech and learning to speak stages. The unit is important the development of early childhood education.

# ASSIGNMENT

- 1. Differentiate between language and speech.
- 2. List and explain the four stages of pre-speech form of communication..
- 3. What are the essentials of learning to speak?

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# UNIT 8: CHILDREN AND LEARNING ENVIRONMENT

### INTRODUCTION

This unit is concerned with the way our learning environments are made a place where children feel secured and where they are able to play freely with other children. With these in mind, the activities provided should be varied and safe enough to enable children to learn effectively. A learning environment is a place where children feel well cared for arid safe. It is a place where children are valued as individuals and where their needs for attention, approval, and affection a re supported. It is also a place where children c an be helped to acquire a strong foundation in the knowledge and skill needed for school success.

The key structure in the learning environment where teaching and learning take place is the classroom. Classroom learning environment can be physical or abstract. The physical environment includes the location, amount of light, furniture, the arrangement of the furniture, instructional materials and ventilation. The abstract environment has to do with non-physical structures like the teacher factor (personality, student-teacher relationship), noise control and population of students. The quality of the environment can lead to variations in the achievement of pupils. Also the knowledge of classroom environment can provide teachers with meaningful information that can serve as tangible basis for improving classroom activities.

This unit discusses children and learning environments under the basic layout/space of the learning environment and the influence of the encouragement on learning.

# **OBJECTIVES**

By the end of this unit, you should be able to:

- 1. identify different areas for various activities;
- 2. provide an uncluttered and safe learning environment;
- 3. differentiate between physical and non-physical learning environment;
- 4. identify the impact of physical and non-physical environments on learning;
- 5. identify and state the influence of home and school environments; and
- 6. identify and state safety measures in the learning/learning.

## HOW TO STUDY THIS UNIT

- 1. Read this section thoroughly and note an the unfamiliar words.
- 2. Check up the meaning of all the unfamiliar words.
- 3. Answer the questions provided in the activity column
- 4. If you have any difficulty with any of the questions, read through the section again.

## **BASIC LAYOUT/SPACE OF THE LEARNING ENVIRONMENT**

We begin this section by defining environment simply as surroundings. You as an early childhood instructor should see to the proper layout of learning environment. You must make sure that the setting provides the necessary conditions for both physical and intellectual growth.

The layout of the setting should be divided into areas where children can enjoy a variety of activities. There must be space between the activities so that both children and adults can move freely and safely. Smaller areas will encourage children to focus on activities and communicate in pairs or small groups. It is important to consider where activities are placed. For example, it may not be a good idea for a paint area to be placed next to a computer, but perhaps it would be helpful for it to be close to the cloakroom or to a sink, where these are available.

Outdoor play areas must also be uncluttered and safe and the layout should be given equal consideration. It should support the children's development as fully as the indoor area.

# ΑCTIVITY Ι

1. What is a learning environment?

Outdoor and indoor space and features should be used to their best advantage. Displays can be mounted on beams, walls, windows and ceilings. Play areas must not be used:as points of access. Children should each have a place to hang a coat and place personal objects. Large areas must be available for activities such as drama and large construction. Smaller areas, sllch as the home corner, provide a necessary link between the early years' setting and home.

Indoor surfaces should be safe and soft surfaces will allow children to crawl more comfortably. As much as possible, it should be located in a cozy environment. Soft or carpeted surfaces will also absorb more noise. Washable surfaces must be available where messy play is to take place.

For outdoor surfaces, there should be a softer a safer surfaces for placing larger equipment. For example, a grassed area is always useful. Consideration should also be given to areas where children play quietly, although they must always be clearly viewed by adults.

# ACTIVITY II

1. What is the key structure in a learning environment?

The layout of any early years learning environment is the responsibility of the supervisory team, but here in Nigeria, it is the responsibility of the proprietor or the body that establishes the centre. Another important factor that influences the way the furniture and other equipment will be laid out is availability of space. You should note that everything in the layout must have a purpose and there should never be useless or unsafe objects in an early childhood learning environment.

# ACTIVITY III

- 1. Explain the two categories of learning environment.
- 2. There are two main areas in learning environment, name them.
- 3. Describe the setting in an indoor area.
- 4. Who is responsible for the layout of early years of learning environment in

# INFLUENCE OF ENVIRONMENT OF LEARNING

Environment influences learning in a number of ways, either positively or negatively.

#### (A) **Physical Environment**

- **Home:** The quality of children's home is very significant. Home environment can be divided into three: the Literate home, the wealthy home and non-literate home. In a literate home where they have a history or tradition of fornJ~11 education and modern influences, children's learning will progl~5s positively. This is because they value education, and as such, all relevant books and other instructional materials will be provided. Also in a wealthy home, it will not be difficult to procure all the necessary instructional materials like books. Newspapers, DSTV and so on. Also it will not be difficult for them to send their children to lessons or extra-mural classes. But in a non-literate home, they may not be able to equip their children enough to make them excel in their academics. Therefore the gadgets, resources facilities in both types of home will influence the learning process of children born to these homes.
- **School:** The Primary objective of the school is to impart knowledge. A number of things can inhibits this:
  - a) **Weather:** If the weather is unfavourable learning can be disturbed. For example if the weather is too hot or too cold.
  - b) **Illumination**: If the lighting condition is poor. it disturbs the eyes and if the light is too bright it causes glare and therefore impairs learning.
  - (c) **Insects**: Biting insects such as tsetse flies, mosquitoes and so on can be very disturbing in the reading environment. If learning is to be maximized, the environment for learning should be devoid of insect.
  - (d) **Noise:** It can hamper communication. It is a kind of environmental interference on learning. It is (or these reasons that schools are not cited in or close to the market places, factories or motor parks.
  - (e) **Dressing**: If our shoes, belts, or dresses are too tight, it tends to disturb concentration.
  - (f) **Appearance of an object during learning**: Human being, vehicle or animal that is passing by tends to distract learner's attention.
  - (g) **Friendly environment**: Teacher is very important in dictating the classroom environment by his verbal and non-verbal communication. If the teacher creates a friendly environment that is motivating to the learners, cares for them as individuals, listens to their problems, understands their needs and is patient with them, learning can be greatly enhanced.
  - (h) **A rich environment:** Where there are very good instructional materials, modern gadgets, visuals, television, over-head projectors, slides, multimedia etc, learning is enhanced greatly.

## **ACTIVITY IV**

1. What are the physical factors that facilitate and inhibit learning? List them.

### (B) Abstract or Non-Physical Environment:

The abstract or psychological environment of the learner is also important. This is largely emotional and has to do with the nature of reactions, feedbacks, and responses, which the child receives from other people. Such treatment or feedback could be cordial, motivating and conducive to learning e.g. a child absorbs a lot of useful information about the world through questioning and discussion with adults and so he grows in knowledge and skills. On the other hand, a child could encounter a hostile and frustrating social environment where he is confronted with rules, regulations and restrictions. This type of environment is adverse and hinders effective learning.

Hunger is another non-physical environment. An adage says an empty stomach has no ear. If one is hungry, concentration will be impaired. Illness such as headache or any other ailments can be very disturbing to learning.

# ACTIVITY V

- 1. What are the traits to be put forward by the teacher so as to motivate children to learn?
- 2. List the three types of home mentioned in this section?
- 3. List the non-physical factors that inhibit learning?
- 4. Noise is an inhibiting factor to learning. Explain.

# SAFETY IN THE LEARNING ENVIRONMENT:

Now that you are familiar with the influence of environment on learning, another thing you should know is safety of learners in learning environment. In the learning environment for the young children, the following basic environment must be ensured: These include:

### i. Heating:

- (a) Temperature in the setting should be 15 18 degrees or 20 22 degrees for babies to give them enough warmth required.
- (b) Fireguards in front of fire.
- (c) Radiators and pipes covered.
- (d) Smoke alarms and emergency equipment must be available.

### ii. Lighting and Electricity

- (a) All areas in the setting should be well lit for full visibility.
- (b) There must be current breakers for all electrical equipment.
- (c) All plugs must be covered.

#### iii. Ventilation

- (a) Windows should be opened when necessary to give room for air to circulate.
- (b) There should be no draughts.
- (c) There must be locks and toughened glass.
- (d) There must be enough windows for cross ventilation.

### iv. **Doors and Gates**

- (a) All the external gates and doors should be locked at all times and coded as appropriate.
- (b) Handles and locks must be out of reach of children.
- (c) Safety gates must be to the local authority's standard.
- (d) Toughened glass should be provided, where necessary

# ACTIVITY VI

1. Identify where safety is required in learning environment setting. Explain three out of the six basic environments where safety is required.

# ACCESS POINTS

These must be kept clear, unlocked and made known to all children and adults including visitors, in the case of emergency evacuation

### v. **Outdoor and indoor Surface**

- (a) It must be stable.
- (b) It must not be slippery.
- (c) It must be soft under climbing equipment
- (d) It must be easily cleanable.

# **CARE OF ENVIRONMENT**

It is very important to encourage children to feel that they belong to their setting. One way of doing this is by giving them some responsibility for their surroundings. Here are some examples of the way in which children can take responsibility for their environment.

- i. Laying and clearing tables.
- ii. Putting toys into boxes, posting shapes back into boxes.
- iii. Placing books on shelves.
- iv. Tidying the home comer.
- v Maintaining a nature table, with careful adult supervision.
- vi. Cleaning and feeding small animals with adult supervision.
- vii. Labelled drawers.

- viii. Helping to plant and maintain a small garden.
- ix. Being involved in preparing and making displays.
- x. Placing their personal belongings in personally labeled drawers.

### SUMMARY

• The effort in this unit is to take you through a series of topics related to children and learning environment, basic layout in the learning environment, influence of environment on learning and safety measures in the learning environment. The unit has been able to stress the importance of conducive, well-planned and safe learning environments. You should ensure these in planning and implementary .early childhood education.

### ASSIGNMENT

- 1. While all other gates are locked, name the particular entry that must be left open at all times.
- 2. Why is ventilation necessary in learning environments?
- 3. Do you think early childhood planners and proprietors in Nigeria adhere to these safety measures?
- 4. How can you encourage the children to take responsibility of their surroundings?
- 5. Enumerate some of the ways by which children can take care of their environment?

### GLOSSARY

Excel	-	to do very well.
Glare	-	an unpleasantly bright light.
Illumination	-	the act of illuminating, a decorative display of lights.
Devoid	-	Empty of, free from.
Environment	-	Surroundings, circumstances in which a person lives.
Physical	-	of the body, of things that can be seen or felt.
Structure	-	the way the part of anything are arranged.
Abstract	-	existing only as an idea, not as the real thing.
Variation	-	a change, the extent of a differences or change.
Cozy	-	warm and comfortable.
Temperature	-	degree of heat or cold
Fireguard	-	a framework of iron placed in front of a fireplace for safety.
Emergency	-	an unexpected happening, requiring quick action.
Visibility	-	the clearness with which objects may be seen, the extent or range of vision as affected by for or rain.
Ventilation	-	the apparatus used for passing into and around a room, of fresh air,

**Toughened** - to become tough.

Access - entry

**Evacuation** - to make empty.

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# UNIT 9: EFFECTIVE LEARNING IN YOUNG CHILDREN

### INTRODUCTION

One pertinent question you as an early childhood instructor should be asking yourself is how to put across to the child everything you have to teach without wasting too much time, without placing unnecessary strain on yourself or on your learners, and without letting the many things you must teach interfere too much with each other. You are, therefore, faced with the problem of efficiency in learning. When learning is effective, skill or knowledge taught will ,turn out to be useful in the future and in as many circumstances as possible. To make learning effective, a number of things must be considered. These factors will be discussed In this unit.

# OBJECTIVE

By the end of this section, you should be able to:

- 1. explain Ausubel's meaningful verbal learning;
- 2. identify steps in expository teaching;
- 3. apply Bruner's idea to learning;
- 4. explain transfer of learning;
- 5. explain the term "retention"; and
- 6. list and discuss factors affecting retention.

# HOW TO STUDY THIS UNIT

- I. Read the section thoroughly and note all the salient points.
- 2. Take note of all the unfamiliar words and check their meaning from the dictionary.
- 3. Answer the questions provided in the activity column.
- 4. Go over the section again to ascertain the correctness of your answer.

## PLANNING INSTRUCTIONAL STRATEGIES

The most important decision teacher makes is how to plan and present new instructional materials. There are three approaches in developing instructional strategies. These are Ausubel's model of learning strategies. Bruner's model of discovery learning and Gogne's model of events within lesson.

### Ausubel's meaning verbal Learning

Ausubel ,.advocates the use of active interaction between teachers and students in what he calls meaningful verbal learning. He stresses expository teaching, in which teachers present material in an explicit and fully organized manner which. will allow the students to receive a well-ordered set of ideas In an efficient way. Ausbel's model depends on deductive reasoning, in which people first learn principles and then learn to recognize specific instances of those principles. This approach assumes- that people learn best when' they understand general concepts and proceed deductively from rules or r principles to examples.

This model relies heavily on dynamic verbal interactions between the teachers and students.

#### **Advance Organizers**

To apply Ausubel's ideas of Advance Organizers, the following must be considered

- i. **Plan an advance organizer**. Suppose you are teaching a history class and wish to introduce the causes of World War II. Develop an advance organizer that taps students' prior knowledge about wars or conflicts. Select a broad concept that pertains to the upcoming lesson on World Ward II, such as the scarcity of resources, territoriality, or nationalism. Now plan an introduction that shows students how their prior knowledge relates to the concept. You might begin with a conflict that students have experienced or recently read about.
- ii. Use examples. Elicit examples from the students that relate to the concept. List some of the examples that you will offer if students do not respond, such as other wars, or other events in which nations have argued for territorial rights, as in Arab-Israeli conflict. Plan .questions that will lead students to ether examples. These might include questions about their -familiarity with Europe and Asia, maps and globes of different countries that were involved in the conflict, and changes that occur in the distribution of resources before and after wars.
- iii. **Prepare similarities and differences.** Write out some of the similarities and differences that you expect to encounter in your discussion with students. Use a chart to record similarities and differences so that students can see relationships among concepts. '

Teachers use advance organizers to activate students' schemata (their existing understandings), to remind students of what they already know, and to help them recognize the relevance of their existing knowledge. Advance organizers introduce new knowledge in a global way that students can use as a framework for understanding details contained in the new information. You can use advance organizers to teach any subject matter.

# ΑCTIVITY Ι

1. Explain Ausubel's meaningful verbal learning and Advance Organizers.

## **STEPS IN EXPOSITORY TEACHING**

After presenting an advance organizer and using examples, the next step is to point out similarities and differences. Teachers present the lesson and then ask students questions and help them understand the ideas subsumed under the broader concept and to reconcile differences between what they knew before and what they have learned. Ausubel's model incorporates Bruner's idea of active student involvement once the conceptual framework has been laid out.

### **Bruner's Discovery Model**

Bruner'is model of instruction assumes that students learn best when they discover information and concepts on their own. In the discovery model, students use inductive reasoning to derive principles underlying a set of examples. For example, a teacher maydescribe to students the invention of the light bulb, the camera, and the gramophone. These may "later on be contrasted With inventions, discoveries (e.g., electricity, nuclear fission, and gravity). The students may then derive for themselves what constitutes an invention and how it differs nom a discovery.

In discovery learning, students "discover" the basic concept or overarching principle by engaging in activities that demonstrate the concept. Bruner believes' that students "own" their knowledge when they discover it themselves and that giving students responsibility for their own learning increases their motivation to learn.

#### **Problem Solving**

Discovery learning begins with the presentation of a problem. Teachers then guide students through a problem-solving process to generate their own questions by hypotheses. Students then test the hypotheses and draw conclusions nom their experimentation. Discovery learning focuses on process, not product. The teacher stimulates inquiry and provides examples that students examine or manipulate to arrive at a general idea or principle. In discovering learning, students often benefit nom making mistakes; wrong answers generate problems solving which can help lead to the discovery of the right answer.

#### **Guided Discovery**

In a guided discovery approach, teachers give students some directions to help them avoid blind alleys. They ask stimulating questions or pose dilemmas that need solutions, furnish appropriate and interesting materials, and encourage students to generate and test hypotheses. The guided discovery approach changes the role of the teacher from the provider of information to the facilitator of learning.

#### **Applying Bruner's Ideas**

When using Bruner's model, it is best to present both examples and non-examples of the concepts you want students to learn. For example, if you are teaching a third-grade class how environmental factors determine how people live, you want them to discover the impact of the environment on the choices people make. You might carry out the following steps:

- i. **Present students with a particular stimulus**. Begin by showing pictures of people living in various kinds of homes and asking what the pictures tell us about how people live.
- ii.. **Provide data and materials for problem solving**. You might give students data about the climate in various geographic locations. Students will then select areas of the world to study and begin to gather information about the living conditions in various locations. They can then identify the homes that people build, the food they eat, and the clothes they wear.
- iii. **Ask guiding questions**. Eventually you will want to stimulate inquiry by asking some important questions, such as what kind of work do people do, how do they get their food, and finally, how do various environmental conditions (climate, geography, etc.) determine how they live.
- iv. **Encourage intuitive thinking**. If students do not have ready answers, encourage them to make calculated guesses based on what they have read or discussed. At the end of . the section students can share their information and conelu4e how environmental factors affect the way people live.

#### Gagne's Events of a Lesson

Gagne developed a model based on information processing theory that views instruction in terms of nine sequential events:

- i. **Gain student attention**: You can gain students' attention by bringing up a recent event in the news that occurred on another continent (e.g. a war, an earthquake) and ask students if they have heard about it.
- ii. **Provide students with the goals or objectives of the lesson**: Explain that the purpose of the Lesson is to help students understand where these events are occurring relative to where they live by understanding the locations of different continents.
- iii. **Retrieve prior knowledge**: Have students retrieve prior knowledge by asking "who knows where Nigeria is"? Where is Nigeria on this map? What do you know about Nigeria?
- iv. **Present stimulus material**: Introduce new information by showing students some of the countries such as Togo, Cameroun, Ghana, on the map and name them.
- v. **Guide learning**: Ask students to define country, based on the examples you have shown them. Ask students how a country differs from a state.
- vi. **Elicit student responses**: Ask: "What other countries do you see on the globe? Why isn't Kano a country?
- vii. **Provide feedback**: If students identify Cameroon and Nigeria as countries acknowledge their correct responses, but if they identify Kaduna or Ilorin as a country, explain why it isn't.
- viii. **Assess performance** : Assess students' performance by having them apply their knowledge. For example, on a map of Africa, have students label the seven countries themselves and write, in their own words, a definition of country.
- ix. **Enhance retention and transfer:** To enhance retention and transfer, ask students to name, famous people who came from the different countries or ask them, "On which country does Nelson Mandela live?" "Where does Jerry Rawlings come from?" You may also review the concept, "country" and name the different countries at the beginning of the next lesson and occasionally thereafter.

# ACTIVITY II

1. Discuss Bruner's discovery model and Four ways the model can be applied.

### GLOSSARY

Advance Organizer	-	General information presented about a new topic before. instruction to help student relax new information to what they already know.
Deductive	-	Conclusion reached .by reasoning from general laws to a particular case.

MODULE 4		Learning and Language Development in ECE (ECE 104)
Inductive	-	Method of reasoning, which obtains or discovers general law from particular facts or examples.
Expository teaching	-	An instructional approach that relics heavily in teach explicit instruction.
Discovery learning	-	an instructional approach through first hand experience

## ACTIVITY III

- I. List Gagne's event of a lesson.
- 2. Explain Gagne's model on effective learning.

## RETENTION

The Students' failure to remember one item is due largely to the interference from other learning. Some interference comes from the things he learned before he came across the item in question. Additional interference comes from the things he learned after he experienced that item. The student's failure to remember may also come from active repression of material that is unpleasant, uncongenial, or threatening to the ego. A person is more likely to remember things that are flattering or that boost his ego than things that are derogatory.

### **Factors affecting Retention**

i. **Speed of Learning**: In the world at large there is a belief that the rapid learner learns quickly and forgets quickly. This same belief holds that the slow learner has, superior retention. People often remark, "It takes me a long time to learn any thing, but once I do get it, I never forget";

What is the truth about this hare-and-tortoise philosophy? If we take different people we find that the fast learner tends to retain things better. But the fast learner is also a better learner in 'the, first place. He gets more out of a single practice than the slow learner. That is what makes him a fast learner. Consequently, the fast learner begins his forgetting with more to go on. He could forget more and still come out ahead. If we allow for this difference in original mastery, and arrange things so that the fast learner and slow learner start their forgetting at comparable levels, we find little difference in the rate of forgetting. All in all, there would seem to be no advantage in encouraging any given child to learn at a slower rate.

ii. **Meaning or Structure**: Of all the factors which affect memory, meaningful structure is, perhaps, the most important for the teacher. If the material is sufficiently meaningful, there may be no forgetting whatever. An important government principle, like the old idea of the conservation of energy, may so help us organize the rest of our ideas that it stays with us for life. Content that is not so brilliantly structured, but has much meaning, will be remembered in proportion to its meaning. Nonsense material is headed for extinction before the last syllable is uttered. Much of the advantage of meaningful material may come from the fact that it is better learned to begin with. The more the Student can be made to see the material as an organized group of large governing principles, the better he will remember.

# ACTIVITY IV

- 1. Explain the term retention.
- 2. List and discuss factors affecting retention.
- ii. **Motivation**: The motivation that is present during learning has a marked effect on retention. Students who learn material under a high degree of ego- involvement show a higher level of retention throughout than students who learn under. More prosaic motivation. But it is the motivation that is present during learning that count, and not the motivation that the student feels after the learning is over. After a student has finished his study, it does little good to tell him that he should expect to be tested. Such a statement before he begins his study, however, may well increase his retention.
- iv. **Over learning**: Retention is clearly affected by the amount of practice during learning. If we have spent much time practicing one set of material and little time on another comparable set, we shall find that out retention at a later date 'will be in also direct proportion to the amount of practice.

For both the teacher and student, it is important to realize that practice carried on after we have first reached mastery of the material is of great value of retention. This additional practice is called over learning. Students who have achieved mastery are reluctant to go on practicing. When a student has studied a number of foreign word~ until he has gone through the list, once without a mistake, it is :most natural for him to assume that the job is done. He will not be happy about any suggestion of further practice. In spite of his feeling, however, he should not .stop, here. If he will go. over the list many more times-even spending as much time after learning as he did before, he will have a much better chance of remembering the list in the future.

v. **Review**: It is to be expected that the review of material learned will aid retention. Review may be of two general types. It may c0'1sist of a test in, which the student is required to recall what he has studied. On the other hand, it may be a restudy of the material.

We repeat here what we have previously said about the most efficient use of these two types of practice, Both types of review will help retention. Each method, however, has its own special value. Immediately after learning, there should be a recall test in which the student is required to reproduce the material or to answer questions about it. At this stage, such a test will be more valuable than a mere re-reading or restudy of the material, although the latter will be of some use. Later on, the test becomes less useful as an aid to retention. When as much as two weeks have gone by, it will be better to use the method of rereading or restudying ill9rder to secure maximum retention.

# ACTIVITY V

1. Speed learning and over learning helps retention. Discuss.

## **GLOSSARIES**

Retention	-	retaining or being retained.
Interference	-	the act of interfering.
Interfere	-	to take part in what is not one's business, meddle

#### SUMMARY

• This unit has been able to show you the importance of effective learning, which involves describing t he I earning models of Ausubel, Bruner and Gagne. Retention and factors affecting retention are also discussed. For the early child educator, the issues raised in the unit are of prime importance.

### ASSIGNMENT

1. "Meaningful structure affects memory", explain.

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# UNIT 10: RULES FOR EFFECTIVE LEARNING AND FACTORS IMPEDING LEARNING

### INTRODUCTION

There are some factors or rules that affect learning, either positively or negatively. These rules embody t he general principles of learning. You will definitely find these rules very useful in your own study. You can also use them to provide the help your students will so often need.

## **OBJECTIVES**

By the end of this unit, you should be able to:

- 1. enumerate the rules for effective learning;
- 2. expatiate on the rules for effective learning;
- 3. identify types of learning impediments; and
- 4. list factors that impede learning at the point of perception.

### HOW TO STUDY THIS UNIT

- 1. Read the section thoroughly and note an the salient points.
- 2. Note an the unfamiliar words and look-up at their meaning in the dictionary
- 3. Answer the questions provided in the activity columns.
- 4. Read through again to ascertain the correctness of your answers.

### **RULES FOR EFFECTIVE LEARNING**

- i. Adopt an active role: Study is not the simple process of letting your eyes wander over the printed page-as you might do while perusing a magazine in a doctor's waiting room. It is more like the directed effort you feel when trying to get to your friend's house and fearing that you are lost, you reread the letter which sets forth the directions. In the latter case, the level of activation may be a bit too high, but for the most part, study should be more like this active search for information and less like casual browsing.
- ii. **Set specific immediate goals**: Your general motivation is probably fairly high. You want to succeed in college or to get a good grade on this course. But these goals are rather remote and general. They are not as immediate as the need of the motorist to get to his destination. Divide your long-term goals into small units-to master a certain number of pages each week.
- iii. Get an early grasp of the general structure (SURVEY). Try to understand the general pattern of what you are reading. When starting a book, look over the Table of Contents and see if you can get a picture of the over-all pattern of what is covered. When you about to read a chapter or part of a 'chapter, study the headings of each section.

Try to organize the different headings into a group. Try to guess the general pattern of what will be said.

iv. **Devise questions to be answered (QUESTIONS).** Our lost motorist had a very definite question to answer. He was actively reading with a purpose in mind. To develop such a set in yourself, try to phrase questions that you could answer from the material being studied. The easiest, routine way to do this is to turn the 'heading ;of' each section into a question. If the heading says, "Origins of Children's Needs," you could turn this around and say, "What are the origins of children's need?' Now READ the section, trying to get answers to your question.

After you have read the section, you may find that the question you first formed out of the heading is not a very appropriate question. In that case, you might well try to work out a new and better question. Write this down, either in the book itself or in a notebook you keep for this purpose. If you use a notebook, be sure to note the page in the text to which the question belongs. The very effort of trying to phrase anew question may help you turn the section into a new and better structure. The very act of phrasing the question should help even if you do nothing further with it-but, of course, you should do something further with it.

- v. **Answer the questions** (RECITE). Here we urge you to give up the comfort of guidance and to plunge into the uncongenial trial-and-error stage of learning. With the text covered, try to answer the question you have phrased, and then jot down a few cues or key phrases to remind you of the answers. Write them clearly and arrange them systematically, but don't try to make them complete. Keep them brief and in the form of cues that will bring the complete answer to your mind' when you look at them later. After you have written down the cues, check to be sure that they suggest the right answers. If they do, enjoy the reinforcement you get. If not, absorb the guidance you got by looking them over, then cover the book and try again. Check over your notes or cues to see if they need to be corrected.
- vi. **Review:** After you have gone over a few sections in the way suggested, go back over the whole group, recalling the questions, if convenient, or looking at the questions, if necessary, and for each question, try to recall all the answers you can. Whenever you seem to draw a blank, keep trying to recall for a few moments and then, if you are still' stuck, look at the cues you have written in your notes. People often refer to the system as SQ3R. This may serve as a convenient cue or mnemonic device to help remember the rules.
- vii **Practice even where understanding is incomplete**: By all means seek out the meaning in your new material. Try to see the general process and the rationale underlying t he task you are a about to attempt. Get a general picture of the dancing steps you are to learn, of the words you are about to pronounce, of the problems you are to solve. But do not insist on perfect understanding before you begin to practice. Get a reasonable a mount of familiarization. Then plunge in. If you are learning to dance, get up on the floor and try to dance. If you are studying mathematics, start doing the exercises even though you do no~ understand everything the text says. Understanding often follows manipulation. In writing an English exercise, do not wait for the muse to visit you with a perfect theme. Start to write. At first, you will probably write, rubbish, but it may get you into-the swing of writing, and anyway,

you may be able to .salvage something from it when you correct it later on. People who insist on a perfectly complete understanding of the underlying reason before they make a single move often fail to make that first move.

viii. **Handle distractions systematically**: Do not use up too much time or energy in trying to overcome distractions by sheer will power. Physical distractions may often be avoided altogether. Try to find a place where you do not hear other conversations, speeches, or plays from the radio or television. Casual music probably will not bother you a great deal. Neither should meaningless noise unless it is too intense or unpleasant.

It is not only with physical distractions that you will have to cont end. Most people probably lose more time through the intrusion of their own irrelevant ideas than from outside physical distractions. There is no single, method for handling these internal distractions. One way of overcoming such distraction is to jot it down in a notebook.

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1. List the points you would use to advise a student on how to undertake effective study. Explain these points.

# GLOSSARIES

Perusing	-	act of reading.
Activating	-	to start (something), working.
Uncongenial	-	not having the same or a similar nature, uncommon interests
Plunge	-	to throw oneself (into water), to dive.
Salvage	-	goods saved from destruction or waste, the act of saving a ship, cargo.
Jot	-	to write down hurriedly.

# ACTIVITY II

- I. Explain how you will solve the problem of distraction while reading.
- 2. Questioning method enhances learning. Discuss.

## FACTORS WHICH IMPEDE LEARNING

You will remember what we discuss about learning in the first unit of this module. We discussed that learning involves behavioural change. This behaviour is a function of perception. Perceptions follow the reception of stimuli and stimuli are the subject matter of experience.

Using the analysis about the learning process enumerated above, it should be possible now to look at each of the segments of learning process. Certain things may impede learning at each segment of the process. Stimuli may be reduced in ,number of quality. Physical defect may impair the reception process. Many psychological forces operate to destroy or deny perception. Many people know one thing but do another, they have not really learnt at all. This section, explores the forces, which work against learning.

#### Learning Impeded at the Source of Stimuli

Because learning starts with the nature and extent of stimuli available, anything, which diminishes either their number or quality, impedes the process. Children whose early years are spent in homes or communities barren of stimuli begin theirs schooling with a distinct disadvantage.

Readiness tests in reading, for example, assess a youngster's threshold point in that subject. What such tests really measure is the extent and nature of his previous experience as these relate to learning to read. Those students who have had more experience with symbolic stimuli and their manipulation, including contrived, intricate relationships, are "more ready" than those who have not. Children who grow up in homes where there are pictures, magazines and books, games, toys, and other stimuli develop a background of experience which they can take with them to school to help them learn to read. Young people whose environments lack these stimuli cannot gain such experience hence are "less ready".

In as much as the richness and availability of stimuli are the seed bed of experience, an individual who grows up in a situation characterized by personal aspirations which are hedonistic and immediate, a lack of concern for ideas, and deprecation of the abstract, has experience 'loaded'' against success in school. The sequence in which stimuli are made available has profound influence on the degree and quality of learning.

Historical events have their own logical sequence in that they occur under certain circumstances at certain times and in certain places. In learning history, however, the logical sequence of events as they occur and the psychological sequences of stimuli as they should be made available to the learner are not necessarily identical. The logic of events and the logic of the mind are not the same. The ordering of stimuli for learning is a very important consideration in teaching. The research in programmed learning demonstrates this point forcefully.

Repetition of stimuli is another factor which affects learning. Repeated exposure to a stimulus facilitate learning, if each experience is meaningful. "Practice makes perfect,'at least practice which the learner feels is worthwhile and in which he gets feedback about his accomplishments.

Stimulus deprivation impedes learning. Desired behaviour patterns are built out of different stimulus patterns. Anything which teachers do which limits stimuli restricts learning. To discourage discussion of controversial issues deprives students the opportunities to perceive, and thus to learn. Using just one textbook impedes learning when the stimuli are beyond the capacity of some youngsters. Students whose reading level is below the level of the text are unable to give meaning to the unfamiliar symbols. Stimuli presented in a sequence, which has no relation to a student's psychological needs cannot be perceived, and" this. cannot affect learning.

## ACTIVITY III

- 1. Stimuli can affect learning positively or negatively. Discuss.
- 2. Do you think environment in relation to stimuli can inhibit learning? Explain.

## LEARNING IMPEDED AT THE SENSES

Since the blind cannot see, they cannot learn from visual stimuli. Many things may affect the sensory receptors and these affect learning. If the cornea of the eye is misshapened or the optic nerve degenerated, learning is impeded. Anything which affects sensory receptors so that they are less effective in forwarding stimuli to the central nervous system impedes the

learning process.

Those children whom we call "handicapped" are generally youngsters afflicted by blindness, deafness, cerebral palsy, etc, whose perceptual apparatus has been impaired. Clearly, anything which restricts the flow of stimuli along the neutral fibers restricts learning.

### **GLOSSARIES**

Manipulatior	1 -	the act of handling or managing skillfully, cunningly or dishonestly
Intricate	-	complicated.
Contrived	-	to plan, to bring about (with difficulty), manage.
Hedonistic	-	that pleasure is the most important thing in life, the living a life of $\$ . pleasure.
Deprecation	-	act of showing disapproval, condemn as bad.
Logical	-	according to the rules of logic or sound reasoning.
Sequence	-	the order (of events) in time, a number of things following in order. the same in all details.
Identical	-	the act of depriving, the state of being deprived.
Deprive	-	to take away.
Cornea	-	the transparent covering of the eyeball.
Mishappen	-	badly, abnormally shaped.
Optic	-	having to do with the eye or sight.
Cerebral	-	of the brain.
Palsy	-	a loss of power and feeling in the muscles.

# ACTIVITY IV

- 1. Explain how sequence of available stimuli could impede learning?
- 2. Do you agree that blind learner cannot learn from visual stimuli, explain?
- 3. Do you think that learning could be impeded if anything affects sensory receptors? How?
- 4. Do you think that the type of stimuli available in our schools are enough to aid effective learning? Give reason for your answer.

### LEARNING PROBLEMS AT THE POINT OF PERCEPTION

Although reducing the number of quantity of stimuli and impairing the function of sensory receptors negatively affects learning, an even more important place in which learning is impeded is at the point of perception-within the central nervous system. Even if stimuli are received, they are often not perceived. Stimuli are sometimes so misperceived that a completely false idea is created. Certain forces operate to impede learning at the point of perception.

First of all, there may be certain types of brain damage, such as lesions or hemorrhage or

hypoxia, which have affected the way in which the brain process the stimuli received. Many children incur minor brain damage at birth, generally in the form of limited oxygen supply to the brain which results in mild cases of aphasia and similar maladies sometimes not even apparent to the physician. In such cases, reading difficulties, for example, almost inevitably arise. The central pathways in the brain cannot function adequately, and the experiences necessary to learn to read (i.e., see a reality, hear a sound, see a symbol, and say a word) are garbled because of the damage within the brain where perceptions occur.

Other factors such as threat, aspirations and values held, an individual's image of himself and his personal needs, all affect perception in a much more extensive way.

# ACTIVITY V

1. What happens when a stimulus is misconceived? List some of the brain damage you know.

# THREAT LIMITS PERCEPTIONS

Threat in an educational context produces the same result that stimulus-deprivation creates. A child who is afraid of his teacher is less able to assimilate subject matter because his perceptual apparatus is attuned to the threatening object (the teacher) rather than the information to be acquired. If teachers threaten students, this demands the students' attention, but in a way that simultaneously restricts their perceptual field and limits learning.

The way an individual sees himself also affects his perceptions and his learning. Those whose experiences have enabled them to £ee themselves in essentially positive terms are less defensive and more open to experience than those whose concept of themselves is negative. Those who hold less positive self-concepts, who are insecure, afraid, feel incompetent or inadequate, are threatened, and their perceptions are therefore limited.

In a classroom, a student whose concept of himself is generally negative, who may feel unwanted, stupid, disliked, unimportant, or slow, may be so preoccupied with his low valuations of himself that he feels it is useless to try to learn. Such a child denies himself the practice and experience he needs to learn. When he does not learn, his teacher evaluates him as "doing poorly." Unless the student himself feels such an insight, outside judgment will make no difference.

Self-concept works in circular fashion, forcing back into the self-observations which substantiate the original convictions. The process works both positively and negatively. The student who feels he is competent, intelligent, desirable, and worthy approaches each new opportunity to learn with these positive images of himself. And these bring him into contact with the essential stimuli. Because he does experience the stimuli, and because his teacher also sees him make the effort, he is rewarded with positive valuations, "good work, keep it up" which confirm his first concept of himself. Some children, however, seldom have the kind of experiences which build up self concept in the positive sense.

The way an individual sees himself affects the way he perceives other stimuli. If he feels threatened or inadequate in any way, his perceptions are limited with resulting deficiencies in learning. If he feels no threats but is able to cope with his environment without being overwhelmed by it, his perceptions are expanded and learning increases.

Need structure affects perception, too. Man's needs are many and varied, but they all influence the interpretations he gives to stimuli. All needs affect perception.

Because the human organism *is* organized and organizing, man's basic need is to preserve and enhance the self. However, man is also. part of a larger whole-he belongs to a family, a

community, a nation-and this larger whole also consists of organized entities. He has both a physical and a psychological self, and his basic need is to preserve and improve them. Driven by this need, his pcrcOptual energies are brought to bear upon stimuli seen' as threatening or enhancing to the self An stimuli are interpreted within this context. Those which are threatening are denied admission or distorted to complement the self of the perceiver. Those which are non-threatening and hold promise of satisfying the organism's needs are given meaning which builds the total self. Man's needs affect perception while they motivate his actions.

Any stimulus which threatens an individual's self concept or is seen as being contrary to his basic values, impedes learning. If the need to preserve and build the self is endangered, learning is also affected. Just as the body endeavors to rid itself through vomiting or expulsion of any foreign substance harmful to the physical self, so the psychological self strives to receive and 'process only those stimuli helpful and beneficial to its continued existence.

"Underachievement" is predicated upon these factors. The aspects of an individual's being which cause him to do' less well than expected are inextricably related 0 n t he perceptual inhibitors described. above. A child's ability is probably a less significant determiner of his achievement than his own concept of his ability. Furthermore, any element of the educational context which is seen as threatening limits the learning potential, regardless of the teacher's intentions. What a teacher' means is always less important than what the student thinks the teacher means.

# **GLOSSARIES**

Lesions	-	a wound, the form of working of a dangerous change in a part of the body
Hemorrhage	-	bleeding in great quantity.
Aphasia	-	the loss of the ability to speak or to understand speech. Maladies- illness, diseases.
Garble	-	to mix up, muddle.
Assimilate	-	to take in.
Dogma	-	an opinion accepted or fixed by an authority, opinion that is not to be

# ACTIVITY IV

- 1. What causes aphasia in many children?
- 2. What type of learning difficulty will happen to a child having aphasia?

## SUMMARY

• The last unit in this module deals with the SQ3R rules for effective learning. What does this mnemonic stand for. The last part of the unit is about the psychological and non-psychologic~1 factors that can facilitate or impede early childhood learning. Some of these originate at the sources of stimuli and at the senses.

### ASSIGNMENT

1. Explain how threat and personal needs of an individual can impede learning.

2. State briefly how man's needs affect perception.

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