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EC-202 : Educational Psychology
Unit-V : Learning & its Theories

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LEARNING

Episode : 1

(20 Minutes)

Introduction: Learning occupies a very important place in our life. Most of what we do or do not do is influenced by what we learn and how we learn it. Learning, therefore, provides a key to the structure of our personality & behaviour. An individual starts learning immediately after his birth or in a strict sense even earlier in the womb of the mother. Experience, - direct or indirect is found to play a dominant role in moulding and shaping the behaviour of the individual from the very beginning. When he touches a burning matchstick the child gets burnt, and the next time, when he comes across a burning matchstick, he immediately withdraws himself from it. Here he learns to avoid not only the burning matchstick but also all the burning things. When this happens we say that the child has learnt that if he touches a flame, he gets burnt. In the same way from some other experience, he may conclude, in later stages, that barking dogs seldom bite, a stitch in time saves nine. Etc. All these conclusions derived from experiences, direct or indirect, bring about a change in the behaviour of the individual. These changes in behaviour brought about by experience are commonly known as learning. In this way, the term learning, broadly speaking, stands for all those changes and modifications in the behaviour of the individual which he undergoes during his life time.

Meaning

Learning means to bring changes in the behaviour of the organism (individual). It is very difficult to give a universally acceptable definition of learning, because various theories developed by psychologists attempt to define the term from different angles.

Let us take some of the definitions of learning for better understanding :

1. Melvin H. Marx : "Learning is a relatively enduring change in behaviour which is a function of prior behaviour (usually called Practice)".
2. Colvinn: "Learning is the modification of reaction of an organism through experiences."
3. Gates & others : "Learning. is the modification of behaviour through experience and training".
4. Guilford : " Learning is any change in behaviour resulting from behaviour".
5. B.F. Skinner : "Learning is a process of Progressive behaviour adaptation".
6. G.A. Kimble : "Learning refers to more or less change in behaviour which occurs as a result of practice".
7. Crow & Crow says, "Learning is the acquisition of habits, knowledge and attitude. It involves new ways of doing things, and it operates on an individual's attempts to overcome obstacles or to readjust to a new situation."

From the above definitions we may define learning as the process of modifying man's behaviour in the environment. In short, Learning can be defined as the change or modification of behaviour including attitude, skill and cognitive abilities which enables a person to adapt & adjust in any situation in the environment. Thus we can conclude that learning means change or modification of behaviour.

Nature of Learning : Nature of learning can be discussed as below:

1. Modification of behaviour : Learning is a modification of behaviour through experience and training.
2. Progressive Change in behaviour : Learning brings progressive Change in behaviour as the individual reacts to the situation.
3. Growth & Adjustment : Learning is growth & adjustment. We always aspire to learn more & more. So our mental & physiological tendencies grow. The individual also tries to adjust himself physically, intellectually, and socially with his environment.
4. Dependent upon Maturation : Learning is dependent upon maturation. Maturation acts as a modifier of our behaviour which finally leads to learning. Learning is not possible without proper physical & mental maturation.
5. Developmental Process : Learning is a developmental process. The individual acquires the capacity of development through adequate amount of positive Learning.
6. Universal in nature : Learning is universal in nature. All men & animals learn.
7. Goal oriented & Purposive : Learning is goal oriented & purposive.
MURSELL is of the view that a strong purpose and definite aim leads to successful learning
8. Continuous life-long Process : Learning is a life-long continuous Process. It starts from the time the child is born & continues till death.
9. Rate of Individual difference : Learning differs from individual to individual. Individual differences are found in the rate or amount of learning due to differences of intelligences, experience & training.
10. Learning may be Positive or Negative development : Learning leads to changes in behaviour, but this does not necessarily mean that these changes always bring about improvement or Positive development. One has an equal chance to drift to the negative side of human personality.

THEORIES OF LEARNING / (Methods of learning) :

Introduction : A theory Provides detailed systematised information of an area of knowledge. It serves as guidelines to conduct further research in the area. It produces new facts or supplements the previous facts. A theory gives an organised explaining, synthesizing and integrating empirical laws and relationship for maximum clarifications.

In simple words, the learning theory “ means the formulation of laws and conditions of learning, A learning theory is a body of Principles which explains as to how we learn or how one learns.

Psychologists have developed various theories of learning.

Some of them are discussed in the following :

Trial & Error Theory of learning/Stimulus-Response Bond Theory.

The Famous psychologist Edward L. Thorndike(1874-1949) was the initiator of the theory of trial & error learning based on the findings of his experiments on chickens, rats & cats. According to Thorndike, learning is the formation or strengthening of bond or connection between Stimulus (S) and Response (R)

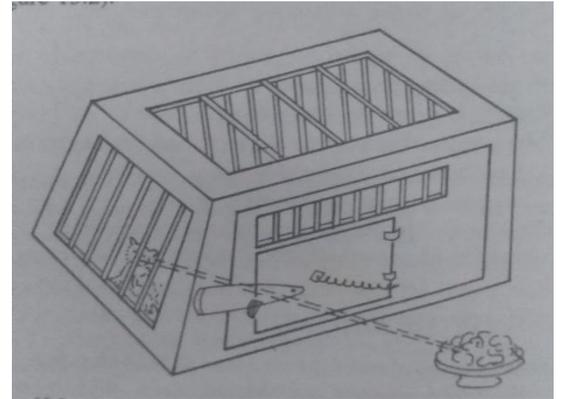
Under this theory of learning, Thorndike experimented the trial & error learning on a cat.

EXPERIMENT

He put a hungry cat in a cage. The door of that cage could be opened by turning a knob. The food (Fish) was placed outside the cage just near the door. The Cat in order to get the food, made various attempts randomly. By chance her paw strikes against the Knob and the cat comes out of the cage and eats her food. Again this procedure is repeated. This time the attempts of the Cat are lesser in number, She has to face lesser failure in getting the food. After some trials, the cat established learning of opening the door. In this way, gradually, the cat has learnt the art of opening the door. It is the opinion of Thorndike that one can establish learning by trial or repetition and committing many mistakes or errors.

From this experiment we may note down some points :

1. Food (Fish) is the drive (force)
2. To get the food is the goal.
3. The Cage is the block.
4. Trials are the random movements
5. Opening the door is the chance success
6. Manipulating the Knob (Latch) is the selection of proper movement
7. Correct way of opening the door is the fixation.



Educational Implications of Trial & Error Theory

Trial & error theory of learning has the following educational implications.

1. Various skills like typing, swimming, gymnast, cycling & other motor skills and activities can be learnt through this theory.
2. Many scientific inventions, machines & mechanical works are improved by the use of trial & error method.
3. Habit formation is also based on this method of learning.
4. Many problems can also be solved through this method.
5. In some situations, more repetition drill and practices are required. This method is most suited in such situations.
6. This method is good for children in learning multiplication table, dictation, poems, etc.
7. Trial & error method is best suited for young ones.

Limitations :

Some of the limitations of this method are :

1. This method of learning consumes more energy.
2. It takes too much time.
3. This method is not so applicable for arithmetic and grammar

THEORY OF LEARNING BY INSIGHT

Learning by insight is the method or theory of learning by perceiving the whole situation or understanding the relationship on the part of the learner. In other word, learning by insight means to solve the problem. Learning by insight method was propounded by three German Psychologists named MAX WERTHEIMER, KURT KOFFKA and WOLFGANG KOHLER. These Psychologists used a term called GESTALT. The basic idea of this theory is that a thing cannot be understood by the study of its constituent parts but only by the study of it as a totality or whole. Learning by insight is occurred by forming one's insight that Perceives the whole situation and understanding the relationship.

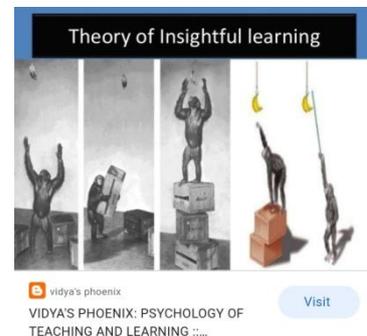
According to Kohler, " Learning by insight is a process of discovering and understanding a relationship and organising and finding the significance of sensory experiences aroused by external situation."

Learning by insight is a higher and intelligent form of human learning. It discourages blind imitation and mechanical method of trial and error that lacks in understanding and insight. It trains one how to proceed in a planned way in solving the problems.

It improves his power of perception & organisation of the parts in solving the problem. All the innovative ideas and inventions are the products of learning by insight.

EXPERIMENT OF LEARNING BY INSIGHT

Gestalt Psychologist named Kohler conducted his experiment on a clever chimpanzee, named Sultan. In the first situation of one experiment, Sultan was put in a room and a bundle of bananas was suspended from the ceiling of the room. Two wooden boxes were also placed around the floor of the room. It was observed that the Chimpanzee could not get the bananas only by standing and jumping up. The Chimpanzee looks around the room and sees the whole situation. Suddenly a flash in the mind comes to the Chimpanzee and she took the box and kept it but it was not possible to get the bananas. Again she took another box and kept one on the other and thus got the bananas. Under this situation insight came to the chimpanzee and the problem of getting the bananas was solved. This is the process of insight. In this way the Chimpanzee learnt to get the bananas.



This experiment demonstrated the role of intelligent & cognitive abilities in higher learning such as problem solving. Once the situation is perceived as a whole & the perceptual field is properly organised, a problem becomes solvable through flashes of insight.

Educational applications/implications/Utility of learning by insight

1. This theory saves a lot of time. The child is able to understand the situation & solve the problem.
2. This theory leads to the development and betterment of the power of imagination and intellect. These two qualities are needed for education
3. This theory is very helpful in creative and constructive activities.
4. It also leads to the development of the power of reasoning of the students with the results that they are able to draw the conclusions and find out solutions.
5. In order to understand a difficult subject, this method has proved to be very useful.
6. When the students start learning to use insight, they are able to exercise self control.
7. This theory is very useful for inventions & discoveries
8. It is necessary for the teacher to develop his insight with the help of the project & Montessori methods of education.
9. Students should also be encouraged to do new things.

REFERENCES

1. Mangal, S.K.(2014) : *Advanced Educational Psychology*, PHI Learning Private Limited, New Delhi.
2. Chauhan, SS(1998) : *Advanced Educational Psychology*, Vikas Publishing House Pvt. Ltd. New Delhi