Course Code – BED 2.3

Paper – Learning and Teaching (1st Half)

Unit – III

Faculty – Dr. Reshma Khatun

B.Ed – 2nd Semester

Department – Education

Cognitive learning of Gestalt

Nature /Concept of Gestalt Theory:

Max Wertheimer is generally considered to be Gestalt psychology's founding father. The other pioneers in this field are Kohler, Koffka and Wolfgang. 'Gestalt' is a German word whose equivalents in English are 'form' or 'pattern' or 'configuration'. Max Wertheimer has explained the term 'Gestalt' as, that the whole is greater than the parts. For example, a flower is just not a total of sepals, petals, calyx, corolla, colour, honey and fragrance but something more than that. The total of the parts is not equal to the whole. This is known as Gestalt view-point.

According to the view, "learning is the organization and re-organization of behaviour which arises from the interaction of a maturing organism and its environment. It is the bringing about through this interaction of new forms of perception, imagination, motor co-ordination and other organic behaviour." Sudden appearance of the solution is an essential characteristic of insight learning.

A sudden coherent pattern of solution appears at once. The individual does not perform random activities, but he perceives the situation as a whole, and intuitionally reaches the goal. Insight is the perception of relationship between at least three factors, an agent, a goal and intervening conditions or obstacles.

Insight is often called as the 'Aha' experience, the flash of understanding which comes to us all of a sudden. Main feature of learning by insight is an estimate of the whole situation and arrange the means in such a way so as to reach the desired goal. The individual discusses within himself all ins and outs of it before acting upon it.

The Gestaltians tend to place for more emphasis on the intrinsic organizing capacity in the grain of the individual, and they emphasize the dynamic interactions of the elements in the entire perceptual field.

Gestalt theory of learning essentially consists in problem solving by understanding the relative position of the elements in the entire perspective or situation. When a problem arises, it tends to disturb the equilibrium of the organism who seeks a balance and so the organism. Actually, Gestalt psychology began with the work of German Psychologists who were studying the nature of perception. We are all now well aware that the 'moving picture' is not a moving picture at all but, is a series of still pictures.

The realities of still pictures as flashed on the "movie screen" become our perception of moving pictures. The focal point of this theory is the fact that when two optical stimuli are perceived by the human eye in quick succession, the reaction is one of simultaneous patterning. Wertheimer called this the 'phi-phenomenon'. Out of these observations of perception there emerged certain principles that have implications for the general nature of learning. One principle is that the

human mind gives an organisation or pattern to the environmental world revealed to the organism through sense perception.

In other words, organization and re-organization are constantly occurring in the organism as it interacts with its environment. In other words, organization and re-organization are constantly occurring in the organism as it interacts with its environment. This activity of organization and re-organization of the organism has as one of its manifestations those changes in its responding that we call learning.

Principles of Gestalt Theory:

The Gestaltians have mentioned some laws involved in the learning. The age at which memory begins is determined chiefly by the development of a sufficient number of association fibres to bring about recall. There are different modes of connection or association among percepts and ideas.

Suggestive forces work according to certain laws given as under:

(a) Law of Similarity:

Makes the individual to grasp things which are similar. They are picked out as it were from the total context. Similar ideas and experiences get associated together. An object revives another object which resembles it e.g., seeing a man and remembering an intimate friend by some resemblance in his personal appearance, though never saw them together in the past. A photo reminds us of the person when it represents.

(b) Law of Proximity:

Makes proximate or near together things to be picked up first learned as to how many these are among the more distant things. In other words, perceptual groups are favoured according to the nearness of their respective parts. It tend to form groups if they are spaced together. For instance, the example of a triangle and a circle is enough to illustrate this point.

(c) Law of Closure:

The law of closure means that closed areas are more stable and satisfying than the unclosed ones. Closed areas more readily form in groups. This law also means that when the perception of the situation is incomplete, the individual is not able to solve the problem. The problem is solved when he is able to bring the separate parts of the situation together into a closed perceptual figure, consisting of the goal, and the means of achieving the goal.

(d) Law of Continuity:

Makes the individual to grasp things which are joined together in a string or along the line which constituting a whole are grasped together than the dis-connected, dis joined or scattered. In other

words, experiences which occur together either simultaneously or in close succession, tend towards reviving one another e.g., the perception of a ripe mango suggests the idea of its sweet taste and flavour because they are perceived together in the past or the idea of inkpot suggests the idea of pen.

(e) Law of Contrast:

A perception or an idea tends to suggest its contrary opposite. For instance, adversity reminds a person of his days of prosperity. Similarly, the heat of summer suggests the cold of winter. In these laws of learning is brought out the Gestalt point of view that the organizational capacity of the brain makes to grasp the whole in priority with the parts.

Keeping in view these principles for learning the teacher should present all curricular material to his students in the form of simple, concrete and patterned units of experience which constitute a whole. Children should be taught tune or melody rather than separate notes, whole dance pattern rather than separate steps and simple meaningful sentences rather than discrete words and they should better be taught whole meaningful words than separate letters for alphabets.

Educational Implication of Gestalt Theory:

Gestalt psychology's contribution to education lies in its concepts of the organization of stimuli and of insight. The world of the classroom in which the child is living and learning is not just a body of discrete stimuli nor is his responses to it those of trial and error adaptions. The world is organized, it has meaning. The child can reach with understanding, he has insight.

Arithmetic is not isolated fact but a system of numbers. History is not names and dates but the sweep of events through time, with one thing leading to or following another. The child can respond to 3 to 4 because he can add three and four. Learning is meaningful. So say the educators and so says Gestalt psychology.

Gestalt psychologists suggest educators to conceive the problem of learning in more comprehensive terms. The teacher should organize the learning situations so that significant relations emerge and understanding of the material results. The learning experiences should be so arranged that the learner discovers and generalizes the relationship for himself. The subject matter should be organized into larger units or in meaningful wholes. The concept of unit-planning is based on the same.

The daily lesson plan is many times fragmentary. It may encourage mere accumulation of facts, principles, concepts and skills; the student does not get a clear cut picture of the whole. A lesson of prose may be taught in four or five steps or periods. But, if the matter taught on the first day and the last day fails to establish relationship on the part of the teacher, students get confused. They do not see any significance. It is thus said that whole is just not equal to its parts.

Whenever any students appreciate, the beauty of a poem, the sip of a soft drink or the beauty of a song or picture, he appreciates it as a whole. The flower is just not equal to its various parts. Similarly the taste of lemonade cannot be analysed into coldness and yellowness, etc. That is why it has been seen that for fuller aesthetic appreciation poetry should not be taught in the same manner as prose. It should be taught as far as possible as a whole, not for meanings, grammar or translation sake.

Briefly speaking, this type of learning is very important in education because it discards memoriser type of learning. It does not consume much time and emphasizes upon meaningfulness, organization and interpretation of the lesson, Here, the individual is engaged in problem solving attitude. It encourage reasoning, develops thinking and trains imagination and creative activity of the child. Learning by insight can be cultivated. Thus, the teacher should emphasize it by encouraging, helping and guiding the child. This aspect of teaching is also called for by Prof. Dewey and those who advocate creative activity, the Dalton plan or the Project method.

Social Cognitive Learning by Bandura

Albert Bandura is a leading psychologist who had contributed immensely towards the development of many fields of psychology, and made an outstanding work with his social learning theory. His social learning theory is underpinned by his findings in researching the determinants and mechanisms of observational learning through analyzing the fundamental aspects of human learning and the propensity of the learner to model their own behaviour on the behaviour of the 'observed other.'

According to Ormond (1999), Social learning as a theory concerns with learning that occurs within a social context. The foundational understanding of the theory is based on the consideration that human beings learn from one another through observational learning, imitation and modelling. Below is Ormond's further assumptions as regards to social learning theory :

Learning can occur through people observing the behaviour of others and the outcome of such behaviours. Learning can occur without a change in behaviour. What this it suggests that even though the Behaviourists had maintained that learning results in a permanent change in behaviour, the social learning perspective's claim that learning can occur through observation alone means that learning may not necessarily be signified either in performance or represented by a change in behaviour.

Cognition is a basic key in learning. Social learning theory is grounded on the interpretation of human learning from the cognitive index. It suggests a link between behaviourist learning theories and cognitive theories.

Bandura's social learning perspective also suggests the assumption that modelling is reinforced by the environment, for instance where the model behaviour leads to consequences that reinforce it. It is evident that the behaviours that people learn from others are sometimes resulting in satisfying or reinforcing experiences. Bandura's Bobo doll experiment was used to illustrate how vicariously the behaviour we learn from others can be reinforced whereby the model being copied reinforces for a response. The Bobo doll experiment shows a model child hitting an inflated doll – the Bobo doll. A group of pupils were shown the model being praised for hitting the doll. The effect was that without being reinforced themselves, the pupils began to also hit the Bobo doll.

However, in contemporary times, emphasis on the social learning perspective have tended to dwell on reinforcement and punishment, angling more towards cognitive interventions on learning and behavioural change. Contemporary approaches to social learning perspective suggest that; Reinforcement and punishment, even though are not the main cause of learning, do have an indirect effects on learning.

Both reinforcement and punishment impact on the level and extent of which the behaviour learnt is exhibited by the learner. And that the learner's anticipation of a form of reinforcement cognitively impacts on the processes of learning.

Social Learning Theory (SLT)

Social learning theory is increasingly cited as an essential component of sustainable natural resource management and the promotion of desirable behavioural change. (Muro & Jeffrey 2008). This theory is based on the idea that we learn from our interactions with others in a social context. Separately, by observing the behaviors of others, people develop similar behaviours. After observing the behaviour of others, people assimilate and imitate that behaviour, especially if their observational experiences are positive ones or include rewards related to the observed behaviour. According to Bandura, imitation involves the actual reproduction of observed motor activities. (Bandura 1977).

SLT has become perhaps the most influential theory of learning and development. It is rooted in many of the basic concepts of traditional learning theory. This theory has often been called a bridge between behaviorist learning theories and cognitive learning theories because it encompasses attention, memory, and motivation. (Muro & Jeffrey 2008). However, on this regards, Bandura believes that direct reinforcement could not account for all types of learning. For that reason, in his theory he added a social element, arguing that people can learn new information and behaviors by watching other people.

According to the elements of this theory there are three general principles for learning from each other. The principles of social learning are assumed to operate in the same way throughout life. Observational learning may take place at any age. In so far as exposure to new influential, powerful models who control resources may occur at life stage, new learning through the modeling process is always possible.

SLT points that people learn from one another, via:

- Observation;
- Imitation; and
- Modeling

Based on these general principles, learning can occur without a change in behavior. In other words, behaviorists say that learning has to be represented by a permanent change in behavior; while in contrast social learning theorists say that because people can learn through observation alone, their learning may not necessarily be shown in their performance. Learning may or may not result in a behavior change. Bandura demonstrated that cognition plays a role in learning and Over the last 30 years social learning theory has become increasingly cognitive in its interpretation of human learning.

Educational implications of Social Learning Perspective

In classroom settings, the social learning approach can impact on learning in many ways. A summary of the implications of the social learning perspective for the learner are given below;

Learners often learn through observing other people.

Clear distinction between behaviours and their consequences can effectively result to increase in desired behaviour from the learner and decreases in the undesirable behaviour. In the classroom, involving the learners in discussion on the rewards for and consequences of desired and the undesirable behaviours can be used to facilitate the learning process.

Though modelling can be an effective alternative to shaping by providing a quicker and more easily responsive means for teaching new behaviour. However, to achieve effective learning through modelling, the four essential conditions must exist; attention, retention, motor reproduction, and motivation.