

Concept of Learning

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Abstract

This study explains the concept of learning in the light of the opinions of behaviourists, connectivists and humanists. The researcher focused on key points of difference among the behaviourists themselves and other schools of thought on the topic. For this purpose, the qualitative paradigm of research was used and method of content analyses was applied. According to the behaviourists learning is not an active but passive process of memorizing information that requires external reward. Understanding is merely seeing relationship or patterns and applications requires not more than transfer of training. According to the humanists learning is a personal act of individual to fully utilize his potential. It is essential that instructional activities should be based on the learners' basic needs for the success of the learning process. It is an unending curiosity that includes identifying, discovering, drawing in from the outside world and making that which is drawn in a real part of *Me*. Learning situation must allow the learner to move at a pace that best suited to him. It should provide opportunities for continuous assessment and utilization of the feedback as a part of learning. Connectivists believe that learning is a way of being. It is an ongoing pattern of attitudes and actions by individuals and groups which they employ to deal with the surprising, new/novel, messy, obtrusive events and situations. It occurs in different ways from the practicing communities, personal networks, and through completion of work-related tasks. It is a continuous process for a lifetime without separation from work related activities. They present a model of learning which recognizes that learning is no longer an internal, individualistic activity. It provides an insight and skills to the learners how to flourish and progress in a digital era of technology.

Keywords: Learning, Behaviourism, Humanism, Connectivism

1. Introduction

Learning has been defined by the educational psychologists in different ways and meanings. It has been explained as a quantitative increase in knowledge, memorizing of facts, skills, and methods that can be retained and used as necessary. It is also viewed as making sense or abstracting meaning, relating parts of the subject matter to each other and to the real world, interpreting and understanding reality and comprehending the world by reinterpreting knowledge. It is very difficult to decide what actually happens when an organism learns. It is also defined as adjustment, or adaptation to a situation or improvement. The questions about the nature of adjustments, adaptations or improvement for what and from whose point of view are unanswered. Learning in the context of problem solving does not answer the physical dimensions of a problem and of its solution? Is learning mean coming out of a puzzle box and strengthening of the bond? But the release from the box faster and faster is not learning rather it is merely a performance. These different interpretations of the concept of learning compelled the researcher to conduct a study on the topic to enlist the view points of behaviourists, humanists and connectivist in sequenced form to identify the differences and similarities.

2. Objectives of the Study

1. To explain the concept of learning in the light of the views of behaviourists, humanists and connectivists
2. To find out the differences in the views of behaviourists, humanists and connectivists on the concept of learning
3. To find out the similarities in the views of behaviourists, humanists and connectivists on the concept of learning.

3. Significance of the Study

The study is useful for the students and the teachers of all levels to get in-depth understanding of the topic. The knowledge and detailed awareness about the concept of learning will help them to accelerate the teaching learning process in the classroom. The students will be in a better position to solve their difficulties and hurdles in their way of learning. The teachers will be able to provide suitable environment for the success of the learning process and adopt the mode of operations that accelerate the learning of the students. The text-book writer will get insight to write the textbooks that best fulfills the learning needs of the students.

4. Methodology of the Study

The researcher applied qualitative paradigm of research to explain the objectives of the study in detail and obtained in-depth analyses. The method of content analyses was applied and the view points of Skinner, Thorndike, Pavlov, Watson, Roger, Tolman, and connectivists were analyzed in detail. The researcher focused on the differences and similarities of the above mentioned psychologists to explain the topic. For this purpose, the research utilized the material from different websites, course work of M.ED and PHD programmes and books on the topic. The following content material was selected for the analyses to respond the objectives of the study:

Insert table 1 here

5. Review of Literature

According to Thorndike (1928), learning is a permanent change in behaviour as a result of experience, and the behaviour includes both of the external and internal actions of the individual which are observed and remain unobserved by the outside world. It also includes the different ways in which people understand or experience or conceptualize the world around them. He conducted experiments on dogs and cats to discover whether they learn their tasks through imitation or observation. He compared the learning curves of cats who were assigned to observe others escaping from a box with those who had never seen the animals getting out of the box. He found no difference in the rate of learning between both of the groups. So, it was revealed that the process of learning depended upon the relationship between stimulus and response. The animal solved the problem not by reflecting and thinking over the action that was performed by them. It was rather done by a totally mechanical development of actions originally formulated by chance. He observed that the greater was the satisfaction or discomfort, the greater would be the strengthening or weakening of the bond.

According to Ali (2005), J. B Watson conducted learning experiments on animals (rats) and human beings in which he revealed that the law of effect has not as much importance in the learning process as has been emphasized by Thorndike. Watson discovered that once the animal was well trained at running the maze, it did so almost automatically. He explored animals' sensory abilities: for example their abilities to discriminate between similar stimuli. He rejected the law of effect and all that was important for him was the *frequency of occurrence of stimulus-response pairings*. Reinforcers might cause some responses to occur more often in the presence of particular stimuli, but they did not act directly to originate their learning. According to Axman (2005), Edward Tolman conducted studies and revealed drawbacks in the law of effect. For example, rats were permitted to explore a maze in which there were three routes/ways of different distance between the starting position and the end. The rats' behavior revealed that they have got a mental map of the maze when it was blocked. They prefer the routes according to their shortness. He discovered that the animals could use knowledge which they gained in running the maze. This result was developed further by Pandey (1988) who discovered that unexpected decreases in reward quantity caused rats temporarily to run a maze more slowly than normal while unexpected increases caused a temporary elevation in running speed.

Skinner (1955) conducted experiments on animals and developed the basic concept of operant conditioning. He claimed that this type of learning was not the result of stimulus-response learning. The basic association in operant conditioning was *between the operant response and the reinforcer*. The relation to a stimulus is different in the operant behavior, and the most operant responses may be emitted in the absence of what is regarded as a relevant stimulus. The operant behavior is essentially and entirely an emissive phenomenon. Latency and magnitude of response fail as standard/measures because they do not take this into consideration. They are concepts appropriate to the field of the reflex, where the all but invariable control exercised by the eliciting stimulus makes the notion of probability of response trivial.

According to Pavlov (1928), learning process is thoroughly depended on reflexes. It is outcome of a neutral stimulus when it is associated with part of a reflex. He believed that human behavior could be explained entirely in terms of reflexes, stimulus-response associations. There is no place for the mental terms like desires, goals,

interest, insight etc. At birth, there are a large number of ontogenetic, embryologic responses called reflexes. No reflex is involved in trial and error learning. A reinforcing or punishing event changes the strength of association between a neutral stimulus and an arbitrary response. The response is not the part of a reflex. Similarly, pairing noxious stimuli with undesirable behaviors can create learned distaste for the target behaviors. For instance, employing the principles of classical conditioning, we can show films that make drunk driving is a totally distasteful activity.

According to Brockett & Roger (1994), learning is a personal act of individual to make full use of his potential. It is a process of self actualization to its maximum level. The basic characteristics of self-actualizing people are: they have tolerance for ambiguity, acceptance of self and others, and *peak experiences* that lead to personal transformation through new insights. The success of the learning process demands that that the instructional activities must be based on learners' perceived needs. Without the fulfillment of the basic needs such as food, security, self respect, self esteem and intellectual curiosity, learning will not take place. It is recognized that there are various levels of perceived needs that ranging from felt needs or wants where the highest internal control is possible or externally mandated requirements where little internal control is possible. The human beings are not machines and cannot function in ignoring the basic needs of the individual.

According to Roger (1983), *Learning* is not memorizing of information, facts and ideas. Its sole purpose is not producing the stored information in the examination. No doubt, it is one of the elements that contribute for the success of the learning process but not a whole. According to him (Roger), it is an unfulfilled curiosity and urges that moves the learner to bring in everything he can see or hear or read about any type of machine or instrument in order to improve the efficiency and speed of it. It includes discovering, drawing in from the outside, and making that which is drawn in a real part of *ME*. It is something that has been done by the learner to understand the real world. It aims at information processing instead of information acquisition. Truths are imparted, procedures are only be inculcated, and while inculcation is a gradual and systematic process, imparting is somewhat sudden and of intuitive nature. It makes sense to ask at what moment someone became apprised of a truth, but not to ask at what moment someone acquired a skill. Therefore, it is the responsibility of the educator to work as a facilitator in the teaching learning process and also facilitates for the development of the whole person.

According to Driscoll (2000), learning is a process of continuous change in human performance or performance potential. It must come about as a result of the learner's experience and interaction with the world around him. According to Vaill (1996), learning is a way of being. It is an ongoing set of attitudes/temperaments and actions by the individual and groups which they employ to keep abreast of the surprising, novel/new, ambiguous, obtrusive and recurring events.

6. Discussion and Analyses

Discussion and analyses has been done under the following headings

6.1 Views of Thorndike on Learning

The behaviourists were led by Thorndike, Pavlov, Watson, Guthrie, Hull, Tolman and Skinner. They believe that learning is a permanent change in behaviour as a result of experience (Thorndike, 1928). However, not all changes in behaviour resulting from experience involve learning. The concept of learning has been applied on those changes that got the capacity to generate new knowledge and prepare the learner to solve the problems of life. The behaviour includes both of the overt and introvert actions of the individual. It also involves the changes in the ways people understand or experience or conceptualize the world around them. The key point and the focus of behaviourists is gaining knowledge or ability through the use of experience (Ramsden, 1992).

According to Thorndike (1928), the process of learning depends upon the relationship between stimulus and response. He conducted many experiments on dogs and cats by designing a number of wooden crates that required various combinations of levers, strings and buttons to open them. He set the animal on the same task again and again and measured the time it took to solve it. He was interested in discovering whether the animals under the experiment learn their tasks through imitation or observation. He compared the learning curves of cats that had been given the opportunity of observing the escaping animals from a box with those who had never looked the box problem being solved. He found no difference in the rate of learning of both of the groups. He obtained the same results with dogs. He even showed the animals the methods of opening a box by putting their paws on the requisite levers, but he found no improvement in the performance. He revealed that learning is the result of trial and error. Sometimes, an animal performs an action by chance which solve the box problem and frees it from the box. The animal repeats the same action again when it find itself in the same position. The reward of freedom from the box somehow strengthens an association with the stimulus. He concluded from his

experiments that animal learns to solve the puzzle-box problem not by reflecting on possible actions and using insight but by a mechanical development of actions through trial and error which is originally made by chance. Among the responses made to the same situation to solve the problem those which beget satisfaction for the animal will, they are firmly connected with the situation. The greater is the satisfaction of the animal will or discomfort, the greater will be the strengthening or weakening of the bond between stimulus and response.

As a result of his experiments, he formulated this notion into the laws of learning that have lasting impacts for the coming educational psychologists. His primary laws include law of readiness, law of exercise, law of effect, law of belongingness and law of spread of effects. Thorndike maintained that, in combination with the law of exercise, the notion that associations are strengthened by use and weakened with disuse. *These laws include three major elements of learning: the stimulus element which involve environmental event, the response element that includes behavioural act and the formation of the connection or bond.* His theory of learning is named as connectionism, trial and error learning, learning by selecting and connecting and instrumental learning. The principles of learning can be used to teach children desirable behaviors like non-disruptive classroom conduct. For instance, rewarding positive peer interactions is likely to increase the frequency of such behavior whereas ignoring disruptive behavior is likely to decrease its occurrence (Joyce, 1997).

6.2 Views of Watson on Learning

The founder of the American school of behaviourism, J. B Watson conducted learning experiments on animals (rats) and human beings in which he discovered that the law of effect has not as greater importance in the learning process as has been highlighted by Thorndike. Watson found that once the animal was well trained at running the maze, it did so almost automatically. The start from the stimulus of the maze transforms its behavior into series of associations between movements rather than stimuli in the outside world. He explored animals sensory abilities through the development of well-controlled behavioral techniques, for example their abilities to discriminate between similar stimuli. He rejected the law of effect, denying that pleasure or discomfort have nothing to do with the stimulus-response associations to be learned. The importance for Watson is the *frequency of occurrence of stimulus-response pairings*. Reinforcers might cause some responses to occur more often in the presence of particular stimuli, but they did not act directly to cause their learning. He even proposed that thought processes might be checked by monitoring movements in the larynx. He believed that mental problem was the result of faulty habits which might be caused by chance (fortuitous) learning of inappropriate associations. It influences a person's behaviour and promotes more abnormality. He tested this hypothesis on a baby named Albert who apparently showed no fears or phobias about anything except from sudden loud sounds. He put a tamed white rat in the baby's lap who happily played with it. On a subsequent occasion He also made a loud noise while placing the rat in Albert's lap. After seven days time Albert showed fear, fret and anxiety when the rat was showed to him.

6.3 Views of Skinner on Learning

Skinner (1955) conducted experiments on animals and developed the basic concept of operant conditioning. He claimed that this type of learning was not the result of stimulus-response learning. He emphasized that the basic association in operant conditioning is *between the operant response and the reinforcer*. In the operant behavior the relation to a stimulus is different. Most operant responses are emitted in the absence of what is regarded as a relevant stimulus. In some cases, the response is likely to appear before the presentation of stimulus. Latency and magnitude of response fail as measures because they do not take this into consideration. They are concepts suitable in the field of the reflex, where the all but invariable control is exercised by the eliciting stimulus. It makes the idea of probability of response less important. Classical conditioning illustrates the concept of learning in the sequence of **S-->R** learning where as operant conditioning is often viewed as **R-->S** learning. The consequences that follow the responses clarify whether the response is likely or unlikely to occur again. It is through operant conditioning that voluntary responses are learned. It incorporates the concept that responses cannot occur without an environmental event preceding it. The distinctive characteristics of operant behaviour are that it operates on the environment and generates consequences. It is a behaviour emitted by the organism rather than elicited by stimuli. According to Skinner (1955), the behaviour is the movement of organism itself or by various external objects or fields of force. While the antecedent stimulus in operant conditioning does not elicit or cause the response as it does in classical conditioning.

According to Pandey (1988), the term reinforcement here means a stimulus or an environmental event which follows the emitted response and increases its probability to reappear. The Reinforcement process is consisting of two aspects: negative and positive reinforcement. In other words the primary reinforcement is connected with the basic physiological needs of the organism such as hunger, food, sex, safety etc. The secondary reinforcement

is connected to the external needs of the individual that are gradually associated with the primary reinforcement. For example, the child greets the visitor and gets appreciation from his parents. In this way, the operant greeting has been strengthened, and it more likely to occur. In operant conditioning the learning process has not been restricted in terms of trail arranged by the experimenter as is emphasized by Thorndike. The organism is free to perform what it likes and when it likes. The control is maintained only through the power of reinforcement. The beginning and the ending have both been determined by the organism. *As a result different types of learning are possible such as reward learning, omission learning, escape learning, discriminative operant learning, discriminated omission learning, active avoidance learning, discriminated punishment learning and punishment learning.* There are some common principles preached by the behaviorists by different names such as *law of effect* has been equivalent to the *reinforcement of Skinner*. The emphasis on practice is common of the three exponents: Thorndike used the term *law of exercise*, Pavlov considered *repeated pairing of CS and US* and the stress of the Skinner on *operant as contingent on the reinforcement trail*. The *shaping and chaining* are very important term used by Skinner. Skinner (1953) says that operant conditioning shapes the behaviour as sculptor shapes the lump of mud/clay. It consists of learning in gradual phases or steps, where each consequent step needs a response that is more similar to the required performance. Chaining is a process in which a set of responses, habits are linked together. For example, if rat is to obtain food, he has to jump upon a platform, turn up or down a wheel and then press a button or bar. The three responses must be linked and chained together.

The concept of operant conditioning has been applied in different training situation which are mainly helpful for behaviour modification with reference to children, adults and cases of disorder behaviour. Skinner developed an instructional technology, Programme instruction as a result of this theory of learning. This technology fully applies the concept of shaping, chaining and reinforcement in the process of learning. As a result, the instructional programme has been divided into *frames* and linked together through chaining. It has also paved the basis of individualized process of learning. The reinforcement principal was applied by providing the result of correct and incorrect responses at the end of the frame. The role of the teacher is builder or an architect in the learning process.

6.3.1 Schedules of consequences

Stimuli are presented in the environment according to a schedule of which there are two basic categories: continuous and intermittent. Continuous reinforcement simply means that the behavior is followed by a consequence each time it occurs or originates. Intermittent schedules are based either on the passage of time (interval schedules) or the number of correct responses emitted (ratio schedules). The consequence can be delivered on the same amount of passage of time or the same number of correct responses (fixed) or it could be based on a slightly different amount of time or number of correct responses that vary around a particular number (variable). This results in four classes of intermittent schedules.

6.4 Views of Humanists on Learning

The humanist school has been led by Maslow and Roger who believe that learning is a personal act of individual to utilize his/her full potential. It is a process of self actualization to its highest level. Maslow (1970) explained the concept of self-actualization as the maximum use and exploitation of talents, capacities, potentialities, etc. He recognized a set of characteristics of self-actualizing people. They have tolerance for ambiguity, acceptance of self and others, and *peak experiences* that lead to personal transformation through new insights and experiences. Patterson (1973) stated that the aim of education is to develop and nurture self-actualizing persons. Hiemstra, Ralph Brockett & Roger (1994); Maslow (1970); Patterson (1973) say that it is a necessary condition for the success of learning process that the instructional activities should be based on learners needs. Learning does not take place without the fulfillment of the basic needs such as food, security, self respect, self esteem and intellectual curiosity. We recognize there are various levels of perceived needs ranging from felt needs or wants where the highest internal control is possible, and prescribed or externally mandated requirements where little internal control is possible. The human beings are not machines and cannot function in ignoring the basic needs of the individual.

Hiemstra & Brockett (1994) say that it is important to empower the learner to take personal responsibility of his own learning. The major aim is to promote greater self-direction. Self-direction means that one is free to choose and then learns from the consequences. He gets complete control not only learning but also on the evaluation process. It is dynamic view of the learning process based on the involvement of the whole person. It makes an important difference between learner self-direction and self-directed learning. Learner self-direction refers to those attributes within an individual that predispose one toward taking primary responsibility for personal learning endeavors. It is probably best understood in terms of personality dimension. The characteristics of

learner self-direction are found in basic principles of humanistic philosophy. Self-directed learning refers to the teaching-learning process in which the learners take the responsibility of the planning, implementation, and evaluation of learning activities independently on personal decisions. It is the responsibility of the educators and trainers to actively implement strategies that will allow them to humanize the instructional process.

The roots and the basis of modern humanist thought can be explored to the ideas of such individuals as the Chinese philosopher- Confucius, Greek philosophers- Protagoras and Plato, Aristotle, Erasmus and Montaigne, Renaissance period, and the Dutch philosopher- Spinoza (Elias & Merriam, 1980; Lamont, 1965). Humanism is linked with beliefs about freedom and autonomy of man. The proponents of humanism strongly believe that human beings are capable of making important personal decisions and choices within the limits imposed by heredity, personal history, and environment (Elias & Merriam, 1980). The major assumptions underlying humanism are: (i) human nature is inherently good (ii) individuals are free and autonomous, thus they are capable of making major personal choices; (iii) human potential for growth and development is virtually unlimited (iv) self-concept plays an important role in growth and development; (v) individuals have an urge toward self-actualization; (vi) reality is defined by each person; and (vii) individuals have responsibility to both themselves and to others (Elias & Merriam, 1980). They have the opinion that learning should focus on practical problem solving in which the past experiences should be utilized. Learning environment should allow the learner to proceed at a pace best suited to the individual according to his/her mental capacities and interests. He must have the opportunity to continuously assess his progress and make feedback a part of the learning process.

According to social and situational school of psychology, learning is an interaction of the individual in social contexts. Social norms and practices have lasting impacts on the learning process of the individual. It is a relationship between people and environment. Bandura, Lave and Wenger, Salomon practiced and promoted this view. The basic purpose of learning is to prepare the individual for full participation in communal practices and utilize them for their development. The basic responsibility of the educator is to establish an environment in which the students share the ideas in communal settings. They learn and practice the role which they are going to play in future life.

6.5 Views of Connectivists on Learning

Technology has reorganized and left significant impact on how we live, how we interact, and how we learn since the last two decade. According to Gonzalez (2004), knowledge is growing at such high pace in all the fields, and the life of knowledge is now measured in days and months. The quantity of knowledge in the world has doubled in the past 10 years and is continuously doubling every 18 months (American Society of Training and Documentation (ASTD)). The educationists are trying how to deal with the problem of half-life of knowledge. To combat these problems, educationists and organizations are trying to develop new methods and trends in learning. It is observed that the great numbers of learners are moving into a variety of unrelated fields and informal learning is becoming very important. Learning experience occurs in different ways in the form of communities of practice, personal networks, and through work-related tasks. The scope of formal education is shrinking and learning is becoming continual process that last for a lifetime. There is no separation between learning and work related activities. There is increased need of knowledge management and linking the individual and organizational learning. The processes handled by learning theories can now be supported by the technology.

Connectivism is an integration of the principles identified by chaos, network and self-organizational theories. Connectivists believe that decisions are based on rapidly changing foundations and the new information should be continually gathered. The learner must be empowered to make distinctions between important and unimportant information. He should also be able to identify and know when the new information changes the intellectual landscape established on the decisions made on the past ideas and information. The connectivists believe that learning and knowledge resides in diversity of opinions, connecting specialized nodes or information sources. It may rests in non-human appliances and commodities and the capacity to know more is more critical than what is currently known. The learner must be equipped to see connections between fields, ideas, and concepts and go for the continuous search of up to date knowledge (currency). The learner should be able to understand the meanings of new information from the lens of speedily changing reality.

Information flow within the organization plays an important role in the organizational effectiveness. The key activity of the organization should be creating, preserving, and utilizing information flow. The health and appropriateness of the learning environment of the organization depends on effective nurturing and promoting of information flow. The pipe that carries information is more important than the content within the pipe. Ability to learn what we need for the future is more important than what we know today. The real challenge for any learning process is to apply the known knowledge. Knowledge which is needed, but not known, the ability to

plug into sources to meet the needs becomes a very important skill. As knowledge continues to grow and evolve, access to what is needed is more important than what the learner currently possesses. Connectivism presents a model that recognizes the shifts in society where learning is no longer an internal or an individualistic activity. The learner should be prepared to use the new tools for plugging into the sources to meet the requirements of tomorrow. Connectivism provides insight into learning skills and tasks needed for the learner to flourish and progress in the digital era of technology.

7. Conclusions

Learning has been defined as a quantitative increase in knowledge, memorizing of facts, skills, and methods, abstracting meaning, relating parts of the subject matter to each other and to the real world. It is also defined as adjustment, or adaptation to a situation or improvement. We feel sure that the learning process itself is continuous, orderly, and beyond the accidents of measurement. Thorndike believes learning is the result of trial and error. He discovered from his experiments that reflection, memory, background experiences and intelligence have nothing to do with the learning process. He has formulized this notion into laws. These laws include three major elements of learning: the stimulus element which involve environmental event, the response element that includes behavioural act and the formation of the connection or bond. The principles of learning can be used to teach children desirable behaviors, like non-disruptive classroom conduct.

J. B Watson discovered that the law of effect has not as much importance in the learning process as has been emphasized by Thorndike. For Watson, all that was important was the *frequency of occurrence of stimulus-response pairings*. Skinner revealed that the basic association in operant conditioning is *between the operant response and the reinforcer*. The operant responses may be emitted in the absence of what is regarded as a relevant stimulus. Whereas the classical conditioning illustrates **S-->R** learning, operant conditioning is often viewed as **R-->S** learning. Learning is not the outcome of the association on the basis of reflex action of the organism as is viewed by Pavlov. It incorporates the concept that the responses cannot occur without an environmental event preceding it. The term reinforcement here implies a stimulus or environmental events. The Reinforcement process is consisting of two aspects: negative and positive reinforcement. In other words the primary reinforcement is connected with the basic physiological needs of the organism. The secondary reinforcement is connected to the external needs of the individual that are gradually associated with the primary reinforcement. Here the learning process has not been restricted in terms of trail arranged by the experimenter as is emphasized by Thorndike. According to behaviourists learning is passive in which students must learn the correct response through trial and error that may require external reward. Knowledge is merely remembering of information and understanding is only noticing existing set of patterns. Applications require transfer of training in which the role the instructor in is not more than a manager or director of the learning process and delivery system. This approach places great importance on the role of teacher. It gives no importance to interpersonal relationships, reflection, and use of insight in the process of learning. The behaviorist models tend to focus on the outcomes of learning as compared to the humanist approach which places great importance on the process of learning.

According to humanist, learning is a personal act of individual for self actualization. It is not cramming or memorizing of information, facts and ideas. Its sole purpose is not producing the stored information in the examination. It is an insatiable curiosity or questioning attitude that urges the learner to absorb and utilize the things he can see or listen or read or write about the process or machine in order to improve and promote its effectiveness and efficiency. It includes identifying, discovering, drawing in from the outside world, and making that which is drawn in a real part of Me. Its focus is on information processing instead of information acquisition. Therefore, it is the responsibility of the educator to work as a facilitator in the teaching learning process and also facilitates for the development of the whole person. It is important to empower the students to take personal responsibility for their own learning. The major aim is to promote and foster greater self-direction. Humanists believe that learning should focus on practical problem solving in which the previous experiences should be fully utilized. Learning environment may allow each learner to proceed at a pace that best suited to the individual learner. He has the opportunity to continuously assess his progress and utilize feedback as a part of learning. Patterson (1973) says that it is essential for the success of learning process that the instructional activities should be based on learners' basic needs. Without the provision of the basic needs such as food, security, self respect, self esteem and intellectual curiosity, learning will not take place. Human beings are not machines and cannot function in ignoring the basic needs of the individual.

According to connectivists learning and knowledge resides in diversity of opinions. The skill and capacity to know more is more important than what is currently known. Nurturing and maintaining the connections of different informal sources of knowledge should be the part of the learning process. Ability and skill to see

connections between fields, ideas, concepts and theories is a core skill and currency of connectivism. Shifting reality must be utilized as a base for choosing what to learn and explaining the meaning of incoming information. It should be recognized that the right answer of today may become wrong and absurd solution of tomorrow. Learning is no longer an internal, individualistic activity for searching permanent solutions. The thinking and working patterns of people are greatly influenced by the tools produced by the technology. The education system should be geared up to recognize and utilize both the impact of new learning tools and the environmental changes in which the future learner is placed to learn. It provides insight into learning skills and tasks needed for learners to flourish and progress in a digital era of technology.

7.1 Recommendations

Following are the recommendations of the study:

1. The teachers may be trained to know and employ the different concepts of learning in teaching different subjects in the class room.
2. Teacher Training institutions may organize workshops to train the teachers to use the *reinforcement technique* appropriately for improving teaching learning process in the classroom.
3. The curriculum at Elementary and lower secondary level should be formulated on behaviouristic approach where as at upper secondary and higher level the humanistic approach may prove more productive.
4. The role of the teacher should be facilitator, organizer, motivator and coordinator in the learning process instead of being an authoritative agent in the classroom.
5. Policy makers at national levels may take steps for the provision of basic needs to the students for bringing success to the teaching learning process in the classroom.

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Table 1.

S,No	Level/ Item	Topics
01	B.ED	Learning Theories included in the course work
02	M.ED	Learning Theories included in the course work
03	Books (03)	Educational Psychology written by Pandey, K.P. (1988); Advanced Educational Psychology and Learning Theories
04	Internet Research Studies	123 research studies from the internet