UNIT – 2 : THEORETICAL PERSPECTIVES ON LEARNING

Unit 2: Theoretical perspectives on learning Perspectives on human learning: *Behaviourist (conditioning paradigm in brief), cognitivist, information-processing view, humanist, social-constructivist (drawing selectively on the ideas of Skinner, Piaget, Rogers, Vygotsky). – Concepts and principles, applicability and Relevance, Role of learner in various learning situations, Role of teacher in teaching-learning situations:*

Perspectives On human learning

Definition

Behaviorism (or behaviourism) is a systematic approach to the understanding of human and animal behavior. It assumes that the behavior of a human or an animal is a consequence of that individual's history, including especially reinforcement and punishment, together with the individual's current motivational state and controlling stimuli. Thus, although behaviorists generally accept the important role of inheritance in determining behavior, they focus primarily on environmental factors.

Behaviorism combines elements of philosophy, methodology, and psychological theory. It emerged in the early twentieth century as a reaction to depth psychologyand other traditional forms of psychology, which often had difficulty making predictions that could be tested experimentally. Its early influences were Ivan Pavlov, who investigated reflexes and classical conditioning, and Edward Thorndike, one of the first to study operant (or instrumental) behavior. Together with John B. Watson and others, these investigators rejected introspective methods and sought to understand behavior by measuring observable behaviors and events. Behaviorist philosophies shifted somewhat during the 1940s and 1950s and again since the 1980s. Radical behaviorism is a conceptual variant proposed by B. F. Skinner which acknowledges the presence of private events—including cognition and emotions—and suggests that they are subject to the same controlling variables as observable behaviors.

In the second half of the 20th century, behaviorism was largely eclipsed as a result of the cognitive revolution. During this time cognitive-behavioral therapyevolved; this procedure has demonstrable utility in treating certain pathologies, such as simple phobias, PTSD, and addiction. The application of radical behaviorism—known as applied behavior analysis—is used in a variety of settings, including, for example, organizational behavior management, fostering diet and fitness, and the treatment of such mental disorders as autism and substance abuse. In addition, while behaviorism and cognitive schools of psychological thought may not agree theoretically, they have complemented each other in practical therapeutic applications, such as in clinical behavior analysis.

Educational implications

- Behaviourism focuses on one particular view of learning: a change in external behaviour achieved through using reinforcement and repetition (Rote learning) to shape behavior. Skinner found that behaviors could be shaped when the use of rewards was implemented.
- Desired behavior is rewarded, while the undesired behavior is punished. Incorporating behaviorism into the classroom allowed educators to assist their students in excelling both academically and personally. In the field of language learning, this type of teaching was called the audio-lingual method, characterised by the whole class using choral chanting of key phrases, dialogues and immediate correction.
- Within the behaviourist view of learning, the "teacher" is the dominant person in the classroom and takes complete control, evaluation of learning comes from the teacher who decides what is right or wrong.
- The learner does not have any opportunity for evaluation or reflection within the learning process, they are simply told what is right or wrong. The conceptualization of learning using this approach could be considered "superficial" as the focus is on external changes in behaviour i.e. not interested

in the internal processes of learning leading to behaviour change and has no place for the emotions involved the process.

Whether this approach is right or wrong, it cannot be denied that an aspect of memorisation is regarded by key scholars as critical in any language learning.

Classical conditioning:

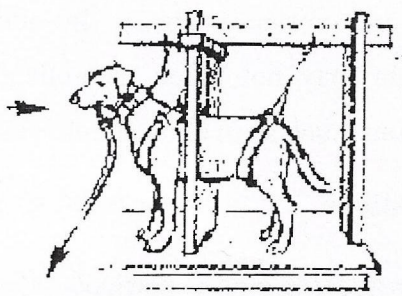
is the process of reflex learning—investigated by Pavlov—through which an *unconditioned stimulus* (*e.g.* food) which produces an *unconditioned response* (salivation) is presented together with a *conditioned stimulus* (a bell), such that the salivation is eventually produced on the presentation of the *conditioned stimulus* alone, thus becoming a *conditioned response.*

Classical Conditioning (Pavlov)

Unconditioned Stimulus *(food)* → Unconditioned Response *(salivation)*

Unconditioned Stimulus *(food)* together *with* Conditioned Stimulus *(bell)* → Unconditioned Response

Conditioned Stimulus *(bell)* → Conditioned Response *(salivation)*



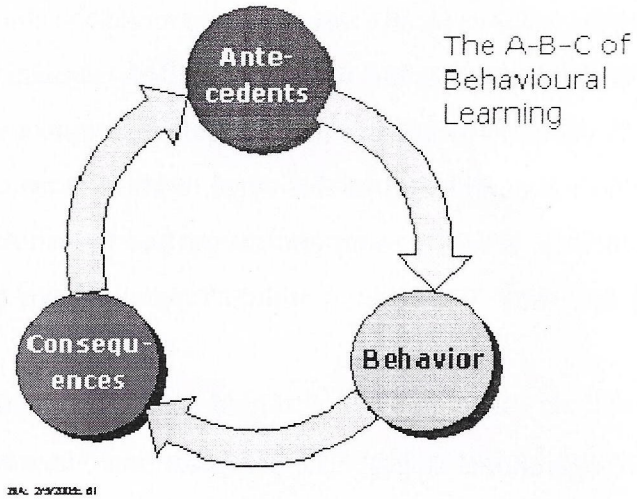
This is a disciplined account of our common-sense experience of learning by association (or "contiguity", in the jargon), although that is often much more complex than a reflex process, and is much exploited in advertising. Note that it does not depend on us *doing* anything.

Such associations can be chained and generalised (for better or for worse): thus "smell of baking" associates with "kitchen at home in childhood" associates with "love and care". (Smell creates potent conditioning because of the way it is perceived by the brain.) But "sitting at a desk" associates with "classroom at school" and hence perhaps with "humiliation and failure"...

Operant Conditioning

If, when an organism emits a behaviour (does something), the consequences of that behaviour are reinforcing, it is more likely to emit (do) it again. What counts as reinforcement, of course, is based on the evidence of the repeated behaviour, which makes the whole argument rather circular.

Learning is really about the increased probability of a behaviour based on reinforcement which has taken place in the past, so that the antecedents of the new behaviour include the consequences of previous behaviour.



The A-B-C of Behavioural Learning

The schedule of reinforcement of behaviour is central to the management of effective learning on this basis, and working it out is a very skilled procedure: simply reinforcing every instance of desired behaviour is just bribery, not the promotion of learning.

Withdrawal of reinforcement eventually leads to the extinction of the behaviour, except in some special cases such as anticipatory-avoidance learning.

Cognitivist

Cognitivism

Definition

Cognitivism is "the psychology of learning which emphasizes human cognition or intelligence as a special endowment enabling man to form hypotheses and develop intellectually" (Cognitivism) and is also known as cognitive development. The underlying concepts of cognitivism involve how we think and gain knowledge. Cognitivism involves examining learning, memory, problem solving skills, and intelligence. Cognitive theorists may want to understand how problem solving changes throughout childhood, how cultural differences affect the way we view our own academic achievements, language development, and much more. (Feldman, Cognitivism)

Cognitivism is Seen from Different Viewpoints

- Willhelm Wundt started the first psychology laboratory in 1879 in Leipzig, Germany. He believed in "the development of introspection as a means for studying the mind." (Cognitivism) Though he was not specifically involved in the field of Educational Psychology, he began the study of the mind. Therefore, he is an important name in the history of psychology, educational or otherwise.
- Jean Piaget theorized that there are four stages of Cognitive Development. The first is a sensorimotor stage. This stage typically lasts until a child is about two years old. During the sensorimotor stage, a child explores the world through his senses: taste, touch, sight, sound, and smell. A child will develop an awareness that things and people exist even when the child is not there. For example, at the completion of this stage, a child is aware that his toys are still in the living room, even when he is in his room and cannot see them. A child will also develop some motor skills during this time. However, children typically have no understanding of symbolic representation.

The final three stages are operational stages. The preoperational stage occurs when a child begins and continues to develop language and thinking skills, and typically lasts from age two until age seven. The child also becomes focused on himself and how the world relates to him.

The concrete operational stage usually occurs between the ages of seven and twelve. During the concrete operational stage, a child begins to see the world in relation to others, not just himself. Children also begin to develop locigal thinking; they begin to understand that the way objects are set up has nothing to do with the amount of an object. For example, children will begin to understand that in the following pictures, even though they are set up differently, different colors, etc., there are still only four boxes in each picture.

The final stage of Piaget's theory is known as the formal operational stage. The formal operational stage begins around age twelve and lasts throughout our adult lives. During this stage we develop both logical and abstract thinking. Our thought process is ever changing. For example, if you ask a four year old girl why she eat apples, she may say, "they're yummy." Asking the same question to a twelve year old girl may get you a response such as, "they're good for me" Asking a college student in a nutrition class why a person eats apples can lead to an entire discussion on what foods you should eat and what they do for you. During each stage we gain life experiences and increase our knowledge through them. Piaget also believed that a child who hadn't completed certain developmental stages could not learn things from higher developmental stages. For example, a child who has not learned language could not think logically.

Besides his four stages of cognitive development, Piaget influenced the study of cognitivism in many other ways. He believed that the human mind is embedded with specific ways of doing things. For example, a baby knows how to suck his thumb without being taught, we breathe unconsciously, and our hearts beat without being ordered to. There are three major concepts when dealing with changing ingrained schemes. Assimilation occurs when a person perceives a new object in terms of existing knowledge. Accommodation occurs when you modify existing cognitive structures based on new information. Equilibration includes both assimilation and accommodation and is considered the master developmental process. For example, a child who has only been around sports cars will believe that a car is small, has two doors, and is fast. When he sees a minivan, he must change his belief about what a car is. Once he accepts that a minivan is a type of car and a sports car is another type of car, equilibration is achieved. (Blessing, Cherry, Classroom, Computers, Cognitivism, Feldman, Free, Sauers)

- Lev Vygotsky had another view on cognitive development. He believed that learning was passed down from generation to generation; that it was a result of guided social interactions in which children worked with their peers and a mentor to solve problems and that cognitive development could only be understood if you took cultural and social context into account. He believed that you were unable to think until you knew and understood a language. Vygotsky came up with the Zone of Proximal Development, which he defined as the difference between the developmental level of a child and the developmental level a child could reach with the right amount of guidance. He called this guidance scaffolding and believed that teachers should foster learning, independence, and growth among students. (Blessing, Cherry, Classroom, Computers, Cognitivism, Feldman, Free, Sauers)

Classroom Implications

- In a classroom environment, there are many variables that influence and contribute to learning. When creating and implementing a learning environment, it is imperative that the teachers not only create a setting that promotes learning, but also take the time to understand each child.
- Classrooms are widely diverse and complex. Students learn differently and are at various developmental levels. Teachers who properly manage their classrooms and establish expectations will be able to incorporate diverse teaching philosophies and create an excellent learning environment for each student.
- It is important that teachers create a learning environment that encourages students to do their best and makes learning interesting. This creates a motivational climate within the classroom.

- There are two factors that are critical to motivate students, value and effort. (Classroom Management) Students must understand that the work they are performing is worthwhile. *Value* measures the importance of a student's work to himself and others. *Effort* is the amount of time and energy students put into their work.
- Understanding the value of academic tasks and the effort needed to complete those tasks can motivate students to perform better in the classroom environment (Classroom Management).

Cognitive Development Implied in the Classroom ("Piaget's Theory")

- Teachers should carefully assess the current stage of a child's cognitive development and only assign tasks for which the child is prepared. The child can then be given tasks that are tailored to their developmental level and are motivating.
- Teachers must provide children with learning opportunities that enable them to advance through each developmental stage. This is achieved by creating disequilibrium. Teachers should maintain a proper balance between actively guiding the child and allowing opportunities for them to explore things on their own to learn through discovery.
- Teachers should be concerned with the process of learning rather than the end product. For example, the teacher should observe the way a child manipulates play dough instead of concentrating on a finished shape.
- Children should be encouraged to learn from each other. Hearing others' views can help breakdown egocentrism. It is important for teachers to provide multiple opportunities for small group activities.
- Piaget believed that teachers should act as guides to children's learning processes and that the curriculum should be adapted to individual needs and developmental levels.

Examples of Cognitive Games in the Classroom

Cognitive games are designed to help stimulate various regions of the brain. These games are used to improve reflexes, help people learn, promote critical thinking, and help people learn different patterns of association. Cognitive games are helpful when used to learn a foreign language and memorize new material. Various learning techniques are used in the classroom because there are various learning styles. There are many games that promote and influence cognitive learning.

Examples of cognitive games include:

Educational Websites and Computer Games

Most educational websites computer games focus on stimulating a young child's senses while engaging them in various cognitive tasks. Below are three of the many learning websites that are available to enhance cognitive development in young children.

- ABCmouse.com
- PBS Kids Educational Games
- Spelling City
- Cognitive Fun Games

Sorting Games

Sorting games require individuals to utilize recognition and reasoning. Teachers can engage children in games in which the children sort items by various criteria, such as color, size, texture, and other physical attributes of the items. A more advanced approach to sorting is discussing how the items are similar. This process promotes critical thinking.

Flash Cards

Flash cards can be used various tasks. This involves notecards or even scraps of paper in which two parts of information is written on either side of the notecard. These can be as simple as having cards with a red dot on one side and the word red on the other. Flash cards are typically used in a classroom for drills or in private study. These cards are used to aid memorization. Pre-made flash cards are available for many subjects. Teachers and students may also make homemade flash cards, depending on how and what they are studying. Flash cards may also be personalized and printed from certain websites. (Flashcards) Flash cards can be utilized into various games as well.

Board Games

Teachers may include board games in their classrooms to promote cognitive development. Unlike computer and video games, boardgames are tangible. Children can manipulate different pieces in the game. Board games can be implemented to enhance mathematical and linguistic skills and enhance a child's ability to understand and follow directions. Monopoly and Bingo are two examples of games that may be considered in the classroom.

Puzzles

Finding a solution to a puzzle develops a child's problem solving ability. Puzzles require a child to consider patterns, orders, and associations. Some children are better problem, and puzzle, solvers than others. Children who actively solve puzzles that they are able to touch and piece together are more likely to understand certain concepts and develop their own theories about those concepts.

Implications Related to Technology Use

The introduction of computers into the educational system was led by the assumption, which persisted through the 1970s, that computers would replace teachers. (Computers for Cognitive) This was an innovation that required extensive involvement of teachers to change teaching methods and define their role in the classroom setting. Children are familiar with multiple aspects of computer technology because

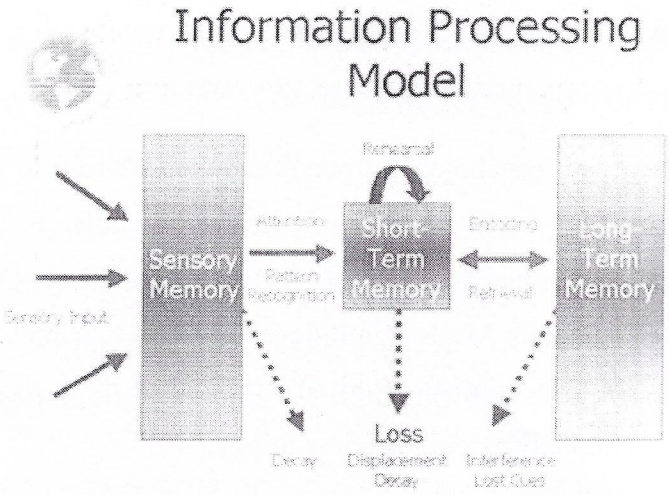
they have most likely been using it for most of their life. However, many older parents, grandparents, and teachers are unfamiliar with technology. Adults must learn to use new or unfamiliar technology for the safety and education of children. Implementing computer technology in the classroom is best when the teacher can guide the students through unfamiliar technology. The learning process is enhanced when students are guided by teachers.

Computers are an essential part of education and are only becoming more frequent in the classroom. Educational technology is advancing and is becoming easier for children to use. Children are already using websites to practice almost every aspect of learning. Children who use computers should be closely monitored for safety purposes. Children who do use computers should always use computers on a desk and males should never use laptop computers on their laps. This affects physical development in later years. Finding the right balance between computer games and hands on activities is essential when children are in the developmental stages of life. Studies have indicated that computers do not necessarily enhance cognitive development. They have actually found that the use of computers in early childhood may impede the intellectual and social development of young children. (Computers for Cognitive) These studies indicated that computers may prevent children from interacting with classmates, teachers, and adults, and hinders the development of certain social skills.

Information processing model

Cognitive theory defines learning as "a semi-permanent change in mental processes or associations." Cognitivists do not require an outward exibition of learning but focus more on the internal processes and connections that take place during learning.

The main assumption of cognitive psychology is that there are cognitive processes that take place and influence the way things are learned. Explanations for how cognitive processes work are known as information processing theories or models. The three-component model of information processing is taught in Educational Psychology. It looks something like this:



Important classroom principles from cognitive psychology include meaningful learning, organization, and elaboration.

Create an environment where there are lots of manipulatables, tools where they can develop an understanding. An instructor can ask questions to help students refine their thinking and recognize where they may be wrong.

Failure may be considered a good thing as it is a tool to help learners realize that they need to learn more.

Role of the instructor: monitoring their progress, asking lots of questions

In this section, we also discuss higher-level thinking skills such as metacognition, study strategies, transfer, problem solving, and critical thinking.

Humanist

Meaning

The meaning of the term *humanism* has fluctuated according to the successive intellectual movements which have identified with it. Generally, however, humanism refers to a perspective that affirms some notion of human freedom and progress. In modern times, humanist movements are typically aligned with secularism, and today humanism typically refers to a non-theistic life stance centred on human agency and looking to science rather than revelation from a supernatural source to understand the world.

Definition

Humanism is a philosophical and ethical stance that emphasizes the value and agency of human beings, individually and collectively, and generally prefers critical thinking and evidence (rationalism, empiricism) over acceptance of dogma or superstition.

Humanistic psychology is a psychological perspective which rose to prominence in the mid-20th century in response to Sigmund Freud's psychoanalytic theory andB. F. Skinner's Behaviorism. The approach emphasizes an individual's inherent drive towards self-actualization and creativity. Psychologists Carl Rogers andAbraham Maslow introduced a positive, humanistic psychology in response to what they viewed as the overly pessimistic view of psychoanalysis in the early 1960s. Other sources include the philosophies of existentialism and phenomenology.

Principles

Choice and Control

The humanistic approach places a great deal of emphasis on students' choice and control over the course of their education. Students are encouraged to make choices that range from day-to-day activities to periodically setting future life goals. This allows for students to focus on a specific subject of interest for any amount of time they choose, within reason. Humanistic teachers believe it is important for students to be motivated and engaged in the material they are learning, and this happens when the topic is something the students need and want to know.

Felt Concern

Humanistic education tends to focus on the felt concerns and interests of the students intertwining with the intellect. It is believed that the overall mood and feeling of the students can either hinder or foster the process of learning.

The Whole Person

Humanistic educators believe that both feelings and knowledge are important to the learning process. Unlike traditional educators, humanistic teachers do not separate the cognitive and affective domains. This aspect also relates to the curriculum in the sense that lessons and activities provide focus on various aspects of the student and not just rote memorization through note taking and lecturing.

Self Evaluation

Humanistic educators believe that grades are irrelevant and that only self-evaluation is meaningful. Grading encourages students to work for a grade and not for intrinsic satisfaction. Humanistic educators disagree with routine testing because they teach students rote memorization as opposed to meaningful learning. They also believe testing doesn't provide sufficient educational feedback to the teacher.

Teacher as a Facilitator

"The tutor or lecturer tends to be more supportive than critical, more understanding than judgmental, more genuine than playing a role." [9] Their job is to foster an engaging environment for the students and ask inquiry-based questions that promote meaningful learning.

Humanistic Theory

Humanistic "theories" of learning tend to be highly value-driven and hence more like prescriptions (about what ought to happen) rather than descriptions (of what does happen).

- They emphasise the "natural desire" of everyone to learn. Whether this natural desire is to learn whatever it is you are teaching, however, is not clear.
- It follows from this, they maintain, that learners need to be empowered and to have control over the learning process.
- So the teacher relinquishes a great deal of authority and becomes a facilitator.

The school is particularly associated with

- Carl Rogers, and
- Abraham Maslow (psychologists),
- John Holt (child education) and
- Malcolm Knowles (adult education and proponent of andragogy).
- Insofar as he emphasises experiential learning, one could also include Kolb among the humanists as well as the cognitive theorists.

While the tenor of humanistic theory is generally wishy-washy liberal, its approach also underlies the more committed stance of "transformative learning" (Mezirow) and "conscientization" (Freire).

Figures in Humanistic models of Learning

Carl Rogers

(1902-1987) Principally known as the founder of person-centred psychotherapy and almost the inventor of counselling, also a leading figure in the development of humanistic approaches to education. See Rogers (1980)

Paulo Freire

(1921-1997) Brazilian educationalist: pioneer of adult literacy programmes as a means of raising the consciousness (*conscientization*) of South American peasants and urban underclass. Critic of the "banking" model of education (below), in which the elite own and construct the knowledge, and the poor are excluded. Very influential in politicised adult education. Not easy to read. See Freire (1972) [Back]

The Banking concept of Education:

- the teacher teaches and the students are taught;
- the teacher knows everything and the students know nothing;
- the teacher thinks and the students are thought about;
- the teacher talks and the students listen—meekly;
- e.the teacher disciplines and the students are disciplined;
- the teacher chooses and enforces his choice, and the students comply;
- the teacher acts and the students have the illusion of acting through the action of the teacher;
- the teacher chooses the program content, and the students (who were not consulted) adapt to it;
- the teacher confuses the authority of knowledge with his own professional authority, which he sets in opposition to the freedom of the students;
- the teacher is the Subject of the learning process, while the pupils are mere objects.

Humanistic perspectives to Teaching

Humanism would concentrate upon the development of the child's self-concept. If the child feels good about him or herself then that is a positive start. Feeling good about oneself would involve an understanding of ones' strengths and weaknesses, and a belief in one's ability to improve. Learning is not an end in itself; It is the means to progress towards the pinnacle of self-development, which Maslow terms 'Self-actualisation'.

A child learns because he or she is inwardly driven, and derives his or her reward from the sense of achievement that having learned something affords. This would differ from the behaviourist view that would expect extrinsic rewards to be more effective. Extrinsic rewards are rewards from the outside world, e.g. praise, money, gold stars, etc. Intrinsic rewards are rewards from within oneself, rather like a satisfaction of a need.

This accords with the humanistic approach, where education is really about creating a need within the child, or instilling within the child self-motivation. Behaviourism is about rewards from others. Humanism is about rewarding yourself!

Much of a humanist teacher's effort would be put into developing a child's self-esteem. It would be important for children to feel good about themselves (high self-esteem), and to feel that they can set and achieve appropriate goals (high self-efficacy). This form of education is known as child-centred, and is typified by the child taking responsibility for their education and owning their learning.

The behaviourists might advocate positive reinforcement such as praise, and punishment in the form of negative criticism. Both praise and blame are rejected by the humanists. Children can become addicted to praise, and put much effort into receiving praise from their teachers. Such children will often work for the praise, and not work if their efforts go unnoticed.

This is so unlike an interested adult surfing through the internet, who derives satisfaction from learning something new, even though nobody is around to witness this acquisition of knowledge. If education is preparing the child for adult life, it would seem the humanist approach is the correct one.

The humanist teacher is a facilitator, not a disseminator, of knowledge. Participatory and discovery methods would be favoured instead of traditional didacticism (i.e. learn parrot-fashion every thing the teacher says). As well as the child's academic needs the humanistic teacher is concerned with the child's affective (or emotional) needs. Feeling and thinking are very much interlinked. Feeling positive about oneself facilitates learning.

Social constructivism

Social constructivism maintains that human development is socially situated and knowledge is constructed through interaction with others. It is a sociological theory of knowledge that applies the general philosophical constructivism into the social. The concept has a long history in sociological and philosophical thought, but the term has been coined by Peter L. Berger and Thomas Luckmann with their book *The Social Construction of Reality*. Based on a combination of Alfred Schutz' Sociology of Knowledge and Durkheim's concept of institution, they develop a theory that aims at answering the question of how subjective meaning becomes a social fact. The concept uses George Herbert Mead's Ideas of Socialisation and Interaction and in this respect some aspects resemble ideas in Russian cultural psychology, wherein groups construct knowledge for one another, collaboratively creating a "small" culture of shared artifacts with shared meanings. When one is immersed within a culture of this sort, one is learning all the time about how to be a part of that culture on many levels. It is emphasised that culture plays a large role in the cognitive development of a person. Its origins are largely attributed to Lev Vygotsky.

Strong' social constructivism as a philosophical approach tends towards the suggestion that "the natural world has a small or non-existent role in the construction of scientific knowledge". According

to Maarten Boudry & Filip Buekens, Freudian psychoanalysis is a good example of this in action. As Freudian psychoanalysis is also regarded as epistemically fundamentally flawed—using its own inventions to support its arguments—this suggests that 'bona fide' science, which (by and large) is not flawed in the same way, is also not validly subject to social constructivism.

Interestingly, however, Boudry & Buekens do not claim that 'bona fide' science is completely immune from all socialisation and the (Kuhnian) claims of paradigmatic shifts, merely that the 'strong' social constructivist claim that *all* scientific knowledge is constructed ignores the reality of scientific success, and falls prey to the ancient Cretan, Epimenides' famous dictum, "All Cretans are liars"—including, of course, Epimenides.

One characteristic of social constructivism is that it rejects the role of superhuman necessity in either the invention/discovery of knowledge or its justification. In the field of invention it looks to contingency as playing an important part in the origin of knowledge, with historical interests and resourcing swaying the direction of mathematical and scientific knowledge growth. In the area of justification while acknowledging the role of logic and reason in testing, it also accepts that the criteria for acceptance vary and change over time. Thus mathematical proofs follow different standards in the present and throughout different periods in the past, as Ernest argues.

social constructivism has been studied by many educational psychologists, who are concerned with its implications for teaching and learning. Social constructivism extends constructivism by incorporating the role of other actors and culture in development. In this sense it can also be contrasted with social learning theory by stressing interaction over observation. For more on the psychological dimensions of social constructivism, see the work of A. Sullivan Palincsar.

An instructional strategy grounded in social constructivism that is an area of active research is computer-supported collaborative learning (CSCL). This strategy gives students opportunities to practice 21st-century skills in communication, knowledge sharing, critical thinking and use of relevant technologies found in the workplace.

Academic writing

In a constructivist approach, the focus is on the sociocultural conventions of academic discourse such as citing evidence, hedging and boosting claims, interpreting the literature to back one's own claims, and addressing counter claims. These conventions are inherent to a constructivist approach as they place value on the communicative, interpersonal nature of academic writing with a strong focus on how the reader receives the message. The act of citing others' work is more than accurate attribution; it is an important exercise in critical thinking in the construction of an authorial self.

The level of potential development is the level at which learning takes place. It comprises cognitive structures that are still in the process of maturing, but which can only mature under the guidance of or in collaboration with others.

Background

Social constructivism is a variety of cognitive constructivism that emphasizes the collaborative nature of much learning. Social constructivism was developed by post-revolutionary Soviet psychologist Lev Vygotsky. Vygotsky was a cognitivist, but rejected the assumption made by cognitivists such as Piaget and Perry that it was possible to separate learning from its social context. He argued that all cognitive functions originate in, and must therefore be explained as products of social interactions and that learning was not simply the assimilation and accommodation of new knowledge by learners; it was the process by which learners were integrated into a knowledge community. According to Vygotsky (1978, 57),

Every function in the child's cultural development appears twice: first, on the social level and, later on, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals.Vygotsky's theory of social learning has been expanded upon by numerous later theorists and researchers.

View of Knowledge

Cognitivists such as Piaget and Perry see knowledge as actively constructed by learners in response to interactions with environmental stimuli. Vygotsky emphasized the role of language and culture in cognitive development. According to Vygotsky, language and culture play essential roles both in human intellectual development and in how humans perceive the world. Humans' linguistic abilities enable them to overcome the natural limitations of their perceptual field by imposing culturally defined sense and meaning on the world. Language and culture are the frameworks through which humans experience, communicate, and understand reality. Vygotsky states (1968, 39),

A special feature of human perception … is the perception of real objects … I do not see the world simply in color and shape but also as a world with sense and meaning. I do not merely see something round and black with two hands; I see a clock …

Language and the conceptual schemes that are transmitted by means of language are essentially social phenomena. As a result, human cognitive structures are, Vygotsky believed, essentially socially constructed. Knowledge is not simply constructed, it is co-constructed.

View of Learning

Vygotsky accepted Piaget's claim that learners respond not to external stimuli but to their interpretation of those stimuli. However, he argued that cognitivists such as Piaget had overlooked the essentially social nature of language. As a result, he claimed they had failed to understand that learning is a collaborative process. Vygotsky distinguished between two developmental levels (85):

The level of actual development is the level of development that the learner has already reached, and is the level at which the learner is capable of solving problems independently. The level of potential development (the "zone of proximal development") is the level of development that the learner is capable of reaching under the guidance of teachers or in collaboration with peers. The learner is capable of solving problems and understanding material at this level that they are not capable of solving or understanding at their level of actual development; the level of potential development is the level at which learning takes place. It comprises cognitive structures that are still in the process of maturing, but which can only mature under the guidance of or in collaboration with others.

View of Motivation

Behavioral motivation is essentially extrinsic — a reaction to positive and negative reinforcements. Cognitive motivation is essentially intrinsic — based on the learner's internal drive. Social constructivists see motivation as both extrinsic and intrinsic. Because learning is essentially a social phenomenon, learners are partially motivated by rewards provided by the knowledge community. However, because knowledge is actively constructed by the learner, learning also depends to a significant extent on the learner's internal drive to understand and promote the learning process.

Implications for Teaching

Collaborative learning methods require learners to develop teamwork skills and to see individual learning as essentially related to the success of group learning. The optimal size for group learning is four or five people. Since the average section size is ten to fifteen people, collaborative learning methods often require GSIs to break students into smaller groups, although discussion sections are essentially collaborative learning environments. For instance, in group investigations, students may be split into groups that are then required to choose and research a topic from a limited area. They are then held responsible for researching the topic and presenting their findings to the class. More generally, collaborative learning should be seen as a process of peer interaction that is mediated and structured by the

teacher. Discussion can be promoted by the presentation of specific concepts, problems, or scenarios; it is guided by means of effectively directed questions, the introduction and clarification of concepts and information, and references to previously learned material. Some more specific techniques are suggested in the Teaching Guide pages on Discussion Sections.

General Implications of Social Constructivism

If Vygotsky is correct and children develop in social or group settings, the use of technology to connect rather than separate students from one another would be very appropriate use.

A constructivist teacher creates a context for learning in which students can become engaged in interesting activities that encourages and facilitates learning. The teacher does not simply stand by, however, and watch children explore and discover. Instead, the teacher may often guide students as they approach problems, may encourage them to work in groups to think about issues and questions, and support them with encouragement and advice as they tackle problems, adventures, and challenges that are rooted in real life situations that are both interesting to the students and satisfying in terms of the result of their work. Teachers thus facilitate cognitive growth and learning as do peers and other members of the child's community.

All classrooms in which instructional strategies compatible with Vygotsky's social constructivist approach are used don't necessarily look alike. The activities and the format can vary considerably. However,four principles are applied in any Vygotskian classroom.

- Learning and development is a social, collaborative activity.
- The Zone of Proximal Development can serve as a guide for curricular and lesson planning.
- School learning should occur in a meaningful context and not be separated from learning and knowledge children develop in the "real world."
- Out-of-school experiences should be related to the child's school experience.

Types of Instruction of Social Constructivism

Technology provides essential tools with which to accomplish the goals of a social constructivist classroom. Below are a few examples of the way information technology can support social constructivist teaching and learning:

- Telecommunications tools such as e-mail and the Internet provide a means for dialogue, discussion, and debate -- interactivity that leads to the social construction of meaning. Students can talk with other students, teachers, and professionals in communities far from their classroom.

Telecommunications tools can also provide students access to many different types of information resources that help them understand both their culture and the culture of others.

- Networked writing programs provides a unique platform for collaborative writing. Students can write for real audiences who respond instantly and who participate in a collective writing activity.
- Simulations can make learning meaningful by situating something to be learned in the context of a "real world" activity such as running a nuclear power plant, writing up "breaking" stories for a newspaper, or dealing with the pollution problems of local waterways

Social Context for Learning

Some social constructivists discuss two aspects of social context that largely affect the nature and extent of the learning (Gredler, 1997; Wertch, 1991):

Historical developments inherited by the learner as a member of a particular culture. Symbol systems, such as language, logic, and mathematical systems, are learned throughout the learner's life. These symbol systems dictate how and what is learned.

General Perspectives of Social Constructivism on Learning

Social constructivists see as crucial both the context in which learning occurs and the social contexts that learners bring to their learning environment. There are four general perspectives that inform how we could facilitate the learning within a framework of social constructivism (Gredler, 1997):

Cognitive tools perspective: Cognitive tools perspective focuses on the learning of cognitive skills and strategies. Students engage in those social learning activities that involve hands-on project-based methods and utilization of discipline-based cognitive tools (Gredler, 1997; Prawat & Folden, 1994). Together they produce a product and, as a group, impose meaning on it through the social learning process.

Social Constructivism and Instructional Models

Instructional models based on the social constructivist perspective stress the need for collaboration among learners and with practitioners in the society (Lave & Wenger, 1991; McMahon, 1997). Lave and Wenger (1991) assert that a society's practical knowledge is situated in relations among practitioners, their practice, and the social organization and political economy of communities of practice. For this reason, learning should involve such knowledge and practice (Lave & Wenger, 1991; Gredler, 1997). Social constructivist approaches can include reciprocal teaching, peer collaboration, cognitive apprenticeships, problem-based instruction, webquests, anchored instruction and other methods that involve learning with others (Shunk, 2000).

ROLE OF TEACHER IN HUMANISTIC THEORIES

Teacher as a Facilitator

- "The tutor or lecturer tends to be more supportive than critical, more understanding than judgmental, more genuine than playing a role."
- Their job is to foster an engaging environment for the students.
- Ask inquiry-based questions that promote meaningful learning.
- Teacher should be an emotional communicator.
- Teacher should maintain special interpersonal relationship. Which means the relationship is made through cognition and emotional communication.
- teacher must take harmonious relationship between students.
- Teacher should have sincere emotion and express brief, understanding and unconditional care for the students' psychosomatic health, they also should respect the students' emotion

ROLE OF TEACHER IN BEHAVIOURIST THEORIES

- Teacher as a facilitator and Director.
- Teacher should give guided practice; and regular reviews of material. Behaviorist methods also typically rely
- Teacher have to heavily on the use of positive reinforcements such as verbal praise, good grades, and prizes. Behaviorists assess the degree of learning using methods that measure observable behavior such as exam performance.
- Teacher has to initiate "correct" response or easily memorized material. For example, while behaviorist methods have proven to be successful in teaching structured material such as facts and formulae, scientific concepts, and foreign language vocabulary, their efficacy in teaching comprehension, composition, and analytical abilities is questionable.
- He should insist and achieve through using reinforcement and repetition to shape behavior. Skinner found that behaviors could be shaped when the use of rewards was implemented.
- He/She encourage the students for desired behavior and is to be rewarded, while the undesired behavior is punished.
- Educators to assist their students in excelling both academically and personally.He should initiate in the field of language learning, this type of teaching was called the audio-lingual method, characterised by the whole class using choral chanting of key phrases, dialogues and immediate correction.

- Teachers evaluate the content they cover.
- Teachers determine the necessary approaches to learning for student success
- Teachers teach with routines and instructional supports that assist students as they apply appropriate techniques and strategies.

ROLE OF TEACHER IN SOCIAL CONSTRUCTIVISTIC THEORIES

1. Teacher concentrates on collaborative learning methods often require GSIs to break students into smaller groups, although discussion sections are essentially collaborative learning environments. For instance, in group investigations, students may be split into groups that are then required to choose and research a topic from a limited area. They are then held responsible for researching the topic and presenting their findings to the class.
2. More generally, collaborative learning should be seen as a process of peer interaction that is mediated and structured by the teacher.
3. Discussion can be promoted by the presentation of specific concepts, problems, or scenarios; it is guided by means of effectively directed questions, the introduction and clarification of concepts and information, and references to previously learned material.
4. Teachers rarely choose classroom discussion as an instructional format.

Even within those three minutes of discussion, most talk is not true discussion because it depends upon teacher-directed questions with predetermined answers.

5. Social constructivist teachers do not take the role of the "sage on the stage." Instead, teachers act as a "guide on the side" providing students with opportunities to test the adequacy of their current understandings.
6. The educator should consider the knowledge and experiences students bring to class.
7. Learners construct their knowledge through a process of active enquiry.
8. Discovery' is facilitated by providing the necessary resources.
9. Knowledge is actively constructed & learning is presented as a process of active discovery.
10. Provide assistance with assimilation of new and old knowledge.
11. Learning programme should be sufficiently flexible to permit development along lines of student enquiry.
12. Due to its interpretivist nature, each student will interpret information in different ways.
11. Create situations where the students feel safe questioning and reflecting on their own processes.
12. Present authentic tasks to contextualize learning through real-world, case-based learning environments.
13. Support collaboration in constructing knowledge, not competition.
14. Encourage development through Intersubjectivity.
15. Providing Scaffolding at the right time and the right level.

16. Provide opportunities for more expert and less expert participants to learn from each other.

ROLE OF LEARNER IN VARIOUS LEARNING SITUATIONS

BEHAVIOURIST THEORIES

a. Behavioral change occurs for a reason; students work for things that bring them positive feelings. and for approval from people they admire.

b. They change behaviors to satisfy the desires they have learned to value.

c. They generally avoid behaviors they associate with unpleasantness and develop habitual behaviors from those that are repeated often (Parkay & Hass, 2000).

d. The entire rationale of behavior modification is that most behavior is learned. If behaviors can be learned, then they can also be unlearned or relearned.

e. Behavior that goes unrewarded will be extinguished.

f. Consistently ignoring an undesirable behavior will go far toward eliminating it.

g. When the teacher does not respond angrily, the problem is forced back to its source--the student. Other classroom strategies I have found successful are contracts, consequences, punishment and others that have been described in detail earlier in this chapter.

h. Behaviorist learning theory is not only important in achieving desired behavior in mainstream education; special education teachers have classroom behavior modification plans to implement for their students.

i. These plans assure success for these students in and out of school.

SOCIAL CONSTRUCTIVIST THEORIES

1.The role of the student to actively participate in their own education.

Students have to accommodate & assimilate new information with their current understanding.

2. One important aspect of controlling their own learning process is reflecting on their experiences.

3. Students begin their study with pre-conceived notions.

4. Students are very reluctant to give up their established schema/idea & may reject new information that challenges prior knowledge.

5. Students may not be aware of the reasons they hold such strong ideas/schemata.

6. Learners need to use and test ideas, skills, and information through relevant activities.

7. Students need to know how to learn or change their thinking/learning style.

8. Because knowledge is so communally-based, learners deserve access to knowledge of different communities.

9. For students to learn they need to receive different 'lenses' to see things in new ways.

10.Learners need guidance through the ZDP.

11. In social constructivism tutors and peers play a vital role in learning

COGNITIVIST THEORIES

Cognitivist teaching methods aim to assist students in assimilating new information to existing knowledge, and enabling them to make the appropriate modifications to their existing intellectual framework to accommodate that information.

Students to be self-motivated.

- engage actively in learning.
- are assessed as part of daily learning through a range of activities including dialogue and interactions with peers and teachers, practical investigations, performances, oral presentations and discussions.
- are assessed on written work and on products such as artwork, reports or projects.
- demonstrate their knowledge and understanding, skills, attributes and capabilities through a wide range of evidence including specific assessment tasks, activities, test and examinations.
- shape and review their learning by reflection, setting learning goals and next steps including through personal learning planning.
- review their own learning through self assessment.
- collaborate in peer assessment.
- contribute to moderation activities.

HUMANISTIC THEORIES

- Students are often in competition with each other or have to work individually towards achieving their personal goals.
- Co-operative Learning not only combines cognitive and affective aspects of learning, as well as emphasising participation and active engagement, But also stresses academic achievement and clearly defined curricular goals.
- Students have to make self assessment.

STUDY QUESTIONS

PART – A : 1O MARK QUESTIONS

1. Discuss Behaviourist theories of learning bringing out its educational implications.
2. What are the humanist theories of learning? Explain any one among these.
3. What are the cognitivist theories of learning? Give examples and explain any one among these.
4. Explain Skinner's theory of learning in social – constructivist perspective.