LEARNING THEORY

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ABSTRACT

Learning is a dynamic process in which information and experience can be transformed into knowledge, abilities, actions and attitudes. Different theories of learning help us understand how we learn. Many teaching methods have also shown that they have been effective. We must also take into account the many different teaching roles and their importance; each role server as a means of learning is created. Some teachers (expert, formal instructor, authority, facilitator and delegator of the personal model), while other teachers rely on the same techniques that are proven and checked. However, adapting teaching methods to accommodate the situation and invidual needs are part of a most effective method of teaching. It has demonstrated the significance of teaching behavior and the different teaching methods and the forecast benefits of student learning.

INTRODUCTION

The theory of learning explains the ways in which students obtain, process and preserve information. Cognitive, emotional and environmental impacts and past interactions all lead to the acquisition or transformation of the perception or view of the world and the retention of information and skills.

Behavioralist view schooling as a training element and promote a system of education incentives and goals. Educators who support cognitive science claim that learning as a behavior change is too restrictive to be described and research the learner rather than his or her environment, particularly his or her complex memory. Many who support construction claim that the capacity of a learner to learn depends largely on what he already knows and understands and that knowledge acquisition should be a personalized construction process. Transforming learning theory focuses on the often needed changes in the preconceptions and world view of a learner. Geographical theory concentrates on how contexts and environments form the process of learning.

We continue to do our whole lives, learning is something. It's a dynamic process by which awareness, abilities, habits and attitudes can be translated into information and experience. In everything, and maybe to various degrees, there is the opportunity to learn. We must research the various theories and philosophies in order to fully understand the complexity of learning.

Learning can be defined as a process that combines both cognition, emotion and the environment in order to learn or improve information, values, skills and world views Illeris (2000); (1995). The learning process focuses on what happens during the learning process. Tighe (1982) has shown that learning can be differentiated from behavioral changes induced by maturation and disease; it does also apply to engine skills, such as cycling, analytical ability, writing, some attitudes and beliefs, such as A suggested by Wolfe (1952) that neurotic symptoms and mental disorder patterns can also be learned. Illeris (2000, p-3) narrowly describes learning as "any process that in living organisms leads to permanent capacity change and which is not solely due to biological maturation or aging." A learning theory is applied to explain the dynamic mechanisms involved in learning, how adults and children learn.

Learning theories are an ordered collection of principles that describe how people learn, conserve and remember information. We can better understand how learning takes place through research and by understanding the various learning theories. The criteria for the selection of educational materials, techniques and methods to facilitate learning can be utilized in the concepts of theories.

Three Learning Theories

1. Behaviorism
2. Cognitivism
3. Constructivism

A. Behaviorism

Comportement was born in the late 19th and early 20th centuries from research performed by Ivan Pavlov. The study carried out by Pavlov on animal digestion culminated in the recognition that the animals examined were to salivate, regardless of whether food was being treated by the laboratory worker assigned to feed them. Pavlov realized that the laboratory assistant had started to be correlated with food, and that the unconditional reaction to unconditional stimuli salivating while food was in the laboratory was replaced by a conditioned response. In addition, the initial triggering stimuli (laboratory assistant) were replaced by a new stimulus (the ringing of the bell) in order to achieve the reaction. He then trained the animals to unlearn the learned reaction to stimulus so that when a bell was banged the dogs could no longer salivate. Classical conditioning is known as this method of linking neutral stimuli in order to obtain conditions.

John Watson has built on Pavlov's studies and applied the theory of conditioning to the development and teaching of men to "learn how to combine an unconditionally motivated stimulus which already leads to a certain response(reflex) with a new stimulus (conditional)." Learning is seen by action in behaviorism and must be observed and expressed in the actions. Essentially, behavioral behaviorism is focused on cause, effectiveness and the correct combination of recompense and punishments are used to motivate and mold conduct. Further research explored the role of voluntary action, for example the deliberate execution of an act. These studies have shown that increased awards have contributed to a repeat of the probability of the action.

The use of incentives and sanctions as trainers and instructors can be matched for performance. This involves the use for training purposes of beneficial or unnecessary behaviors. For example, it has been proven that social recognition and gratitude from gold stars to awards strengthen the probability of repeated desired action. Likewise, the desired behaviors, such as the allocation of time for leisure or the desired tasks, can contribute to habitual behaviours. Disincentives can, by comparison, be used to restrict the repetition of unwanted behaviors and to direct the participants towards their desired acts.

Conduct is most successful if the new experience or capacity has only one right answer or way to be done or in practices in which differences in thinking and implementations are minimised. Only one correct answer should be given. Behavior may also be successful in the area of social education and rule-making, with incentives for enforcement. To be most successful, at the beginning of the training session, participants should be aware of the rules, and the instructor should explain the anticipated performance level.

Behaviorism	
Pros	Cons
Helps the instructor set high expectation	May be immorally applied and used
Good for establishing rules and expected norms of behavior	May not address the core of behavioral issues, such as outside personal issues
Participants should be familiar with the reward system	Does not look at nonobservable learning (e.g., affective domain)
Simple to use	Does not take emotions into account
	Does not work for high cognition or complex thought

Reinforcement Table (what is the most effective reinforcement schedule)	
Reinforcement Schedule	Likelihood of Repetition
Continuous (reinforce after every occurrence)	Low to moderate
Fixed ratio (e.g., 4 to 1)	Low to moderate
Intermittent or random	Moderate to high

Behaviorism Terms	
Stimulus	Anything that affects behavior
Response	Behavior in response to the stimulus
Unconditioned stimulus	Feature that causes a natural, reflex action
Conditioned stimulus	Feature that has an affect through association with use
Extinction	Dying out of a conditioned reflex
Spontaneous recovery	Return of a conditioned response
Generalization	Similar stimuli to conditioned stimuli that gets a response
Discrimination	The ability to tell the difference between two similar stimuli (the opposite of generalization)

B. Cognitivism

Although learning with mental activity was defined by both cognitivism and constructivism, constructivism varies in different ways from cognitiveism. Again in Jonnassen's words (1991b), "Most cognitive psychologists think of the mind as a tool to reference the real world; constructivists believe that the mind filters the insights into the world to produce its own uniquely real reality."

"The Constructors don't deny the existence of the real world. They claim that the world we know is derived from our own interpretations of our experience." Eritmer and Newby (2013) offers us a great description of what constructivists think. In comparison to it, humans build meaning. As there are several meanings to glean from interactions, a predefined, "correct" interpretation cannot be achieved. Learners don't transfer information from the outside world to their memories; they instead create the world's own personal understandings based on individual experiences and interactions. There is, therefore, a continually shifting inner reflection of knowledge; there's no objective truth that students aspire to learn».

This learning theory is rooted in Jean Piaget's work, which notes that learning takes place internally by information processing instead of simply through reacting to an external stimulus. Learning is the product of information collection and reorganization within a matrix of information previously collected. Cognitivism focuses on the thought processes of the person and the instructor emphasizes the meditation on metacognition experiences, thinks about their thinking. This behavioral improvement is a result of learning after the internal working of thought based on the new knowledge or information gained. The learning process involves both learning and cognitive entity reorganization.

Cognitivism applied to behavioral theories by looking at students not as blank panels but as people with specific viewpoints, perspectives and know-how and teachers to meet the participants' learning needs. The appreciation of subjective intelligence vision of students means that lessons and exercises may have different results depending on the experience of learners. In addition to the newly gained knowledge and talents, students often strive to evolve a working model of the environment and how this works.

Although the teacher is regarded as the expert who imparts expertise to unknown students in the classroom of behavior, cognitive instructors seek to guide students through an area of development, bridging the participants with what they are not familiar with. Teachers aim to help students incorporate new skills and knowledge into their academic structure and adjust their views of the world as appropriate. Teachers apply cognitive skills to help students refine their reasoning. They ask questions. Teachers may also use games, jigsaw puzzles, flash cards and other means to generate imbalance that the student needs to adapt and proceed.

C. Constructivist and Connectivism

The concept that learners actively construct their own knowledge, is based on their own significance and is guided by previous knowledge and events is based on Constructivist Learning Theory. New knowledge and knowledge modify the known, and learning occurs when it is used to solve problems, tests and/or applications. In short, information can be received without application, but there is no understanding. Furthermore, learning is a social activity involving sharing and use through the proximal development area.

Connectivism adds to constructivism to explain how the internet created information and allowed it to be shared worldwide. Info and knowledge will no longer be stored in the single or small group, but worldwide. Instructors focus on providing the context, interpretation and assessment of stored knowledge. Learning is no longer an educational activity via connectivism and the role of peer networks in the conservation, interpretation and application of information is even greater. Knowledge and authority are shared in the classroom with instructors who lead the learners to learn and apply knowledge in heterogeneous groups. The instructor's role is to create a collaborative and problematic environment and to provide insights, insights and activities that adapt to the student's needs. Building Teaching Competences (Brooks and Brooks, 1993)

1. Encourage and accept student autonomy and initiative.
2. Use raw data and primary sources, along with manipulative, interactive, and physical materials.
3. When framing tasks, use cognitive terminology, such as “classify, analyze, predict, and create.”
4. Allow student responses to drive lessons, shift instructor strategies, and alter content.
5. Inquire about students’ understanding of the concepts before sharing (your) own understanding of those concepts.
6. Encourage students to engage in dialogue, both with the teacher and with one another.
7. Encourage student inquiry by asking thoughtful, open-ended questions, and encourage students to ask questions of each other.
8. Seek elaboration of students’ initial responses.
9. Engage students in experiences that might engender contradictions to their initial hypothesis and then encourage discussion.
10. Allow wait time after posing questions.
11. Provide time for students to construct relationships and create metaphors.
12. Nurture students’ natural curiosity through frequent use of the learning cycle model.

Goals of the Constructivist Classroom

1. Students determine how they will learn.
2. Evaluation of alternative solutions.
3. Realistic tasks are embedded in the learning.

4. Student-centered.
5. Collaboration is valued.
6. Multiple modes of instruction are used.
7. Encourage awareness of the knowledge contraction process (reflection, metacognition).

Understanding basic learning theory allows the instructor to develop and present course materials in a manner that best meets the needs of the learner. Based on learner development, capabilities, experiences, and life stage, instructors may use different learning theories to share knowledge and improve learner abilities. Remembering that adult learners have different learning needs and may have had different learning models used during their development, instructors should be fluent in the theories and able to shift between models based on the needs of the learner to fully meet the learning objectives.

The Classroom	
Behaviorist	Constructivist
Fixed curricula	Based on student questions and interest
Repetition	Interactive and built on student KSAs
Teacher centered	Learner centered
Passive	Active
Monologue	Dialogue
Individual work	Group work

CONCLUSION

Learning is a complex process through which knowledge and experience can be converted into knowledge, skills, attitudes and behaviours. The broad definition of Illeris (2000) is that learning is any "any process that in living organisms leads to permanent capacity change and which is not solely due to biological maturation or aging." There are also many teaching methods which prove to be successful. It is also essential to note a teacher's many different roles and their significance; each role is a means to achieve learning results. Various teachers have various teaching styles and are constantly following the same techniques; however, changing the teaching style to suit individual needs and circumstances is the most successful method of teaching. It has been demonstrated the importance of teaching and of the different styles of teaching and the predicted benefits in student learning.

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