

Understanding learning and acquisition of knowledge essay sample

[Psychology](#), [Behaviorism](#)



Educators have realized that for the students to be successful in life they need to be lifelong learners. Many educators have attempted to define learning. Some of these definitions are too complicated to have meaning. Others are not broad enough in their scope. Perhaps the best definition, especially where educators are concerned, is the definition which puts emphasis on the student's ability to perform as the result of learning.

Nature of Learning

- Ornstein (1990) - learning is a reflective process whereby the learner either develops new insights or changes or restructures his mental process.
- Lardizabal (1991)- learning is an integrated, on-going process occurring within the individual.
- Slavin (1995)- learning is a change of individual cause by experience.
- Calderon (1998)- learning is the acquisition through maturation and experience of new and more knowledge, skills, and attitudes that will enable the learner to make better.

Theories of Learning

Introduction

Theories are statements that explain a certain event or phenomena. This report discusses different theories that explain how learning occurs in learners, thus, the learning theories. These learning theories are classified among the Behavioral Theories, Cognitive Theories, and Constructivist

Theories. However, even though there are a lot of theories which explain how learning occurs, there is no single perfect theory that can explain all as learning depends also on the learners, the teacher and the environment that they have.

Behavioral Theories

Among the Behavioral Theories are the well-known theories like Ivan Pavlov's Classical Conditioning Theory, Thorndike's Stimulus-Response Theory, B. F. Skinner's Operant Conditioning and Albert Bandura's Social Learning Theories.

1. Ivan Pavlov's Classical Conditioning

Ivan Pavlov based his theory from his experiment on the digestive process of dogs where he found that the dogs respond to neutral stimulus when it is associated with a conditioned stimulus. From this experiment he also concluded the ways of learning in humans. He formulated concepts like stimulus generalization, discrimination, and extinction which all talks about how learners respond to various stimuli.

2. Thorndike's Stimulus-Response Theory

Thorndike's theory has a little resemblance to Pavlov's theory such that his theory also uses stimuli and responses. Thorndike did a cat experiment and from it, he concluded that stimuli can prompt responses. Moreover, a behavior which gives a pleasant consequence is more likely to be repeated, and a behavior which results to bad consequence is tending not to be

repeated. This led him to formulate the Law of Effect. He also formulated the Law of Readiness which exemplifies the importance of the readiness of learners in learning for them to not be forced to learn or do some activities. He also formulated the Law of Exercise which emphasizes the significance of exercise or continuous practice or doing of a certain activity can the learner really appreciate and perfect it.

3. B. F. Skinner's Operant Conditioning

Skinner's Operant Conditioning highlights the use of pleasant and unpleasant consequences to change behavior. These pleasant or unpleasant consequences are called reinforcements.

Reinforcements are any behavioral consequence that strengthens (that is, increases the frequency of) a behavior. It increases the likelihood of the recurrence of a particular type of response. It can be classified into positive and negative reinforcements and primary or secondary reinforcements.

4. Albert Bandura's Social Learning Theory

Different from the first three, Albert Bandura argued that much of human learning is not shaped by its consequences but is more efficiently learned directly from a model. For him, modeling is so important for learners. They can easily learn if they look to someone or something to imitate.

Cognitive Theories

Cognitive theories, on the other hand, take the perspective that students actively process information and learning takes place through the efforts of the student as they organize, store and then find relationships between information, linking new to old knowledge, schema and scripts. It emphasizes how information is processed. Among the cognitive theories of learning are Bruner's Cognitive Learning Theory, Ausubel's Meaningful Learning Theory and Gagne's Cognitive Learning Theory.

1. Bruner's Cognitive Learning

Jerome Bruner emphasized on discovery and "hands on" learning. He argued that we should teach the 'structure' of the subjects. He advocated the introduction of the real process to students.

He also formulated the concept of Discovery Learning which is an instructional approach that provides students with data and then requires them to process this information into meaningful abstractions. Through this, Bruner hoped to make students active inquirers in the subject they are studying.

2. Ausubel's Meaningful Learning Theory

Ausubel concluded here that learners have the capability to turn potentially meaningful material into actual meaningfulness, thus, meaningful learning.

3. Gagne's Cognitive Learning Theory

This theory built upon behaviorist and cognitive theories to recommend approaches to instruction.

Dealt particularly with problems in determining just what skills and knowledge are required for someone to be an effective performer at a given job. He proposed that learning is like building process which utilizes a hierarchy of skills that increase in complexity.

4. Constructivist Learning Theories

Constructivism, particularly in its social forms, suggests that the learner is much more actively involved in a joint enterprise with the teacher in creating (constructing) new meanings.

Constructivist Teaching and Learning Principles

1. Learners have their ideas

← Educational research advises that students begin their study of topics with preconceived notions about concepts teachers want them to learn.

2. Learners need first-hand experiences.

← Sharing ideas, skills, etc. with learners by telling or showing often is insufficient for them to learn.

3. Learners like their ideas

← Interestingly, students are very reluctant to give up their favoured ideas.

4. Learners see what they want to see

← It has been said that observing something tells us more about the observer than what is being observed.

5. Learners often are not aware of what they know

← Students are frequently not consciously aware of reasons for their action; they just innately know why they do things a certain way.

IDENTIFYING AND ARTICULATING LEARNING OBJECTIVES

Objectives are statements of what will be achieved as a result of the instruction the teacher is designing. Lesson or instructional objectives are also called performance objectives.

Performance Objectives

- > Are objectives that specify what the learner will be able to do when the instructional event concludes?
- > It also refers to student mastery of the content of the lesson such as facts, concepts, skills, and generalizations.
- > It also includes a stem plus three components: targeted student performance, a description of the method for assessing the intended performance, and a criterion for measuring success.

> Another role of performance objectives is to ensure that the teaching and learning experience includes a full range of cognitive levels, from simple recall of facts to higher-end critical thinking.

BLOOM'S TAXONOMY

Bloom's Taxonomy includes six levels of cognition ranging from recall of knowledge to evaluation of knowledge. Each of these level is described along with verbs that might be used in objectives that are aimed at that level of thinking (Elliot et. al., 1996)

Six Levels of Cognition

Knowledge: This level of cognition includes of memorizing, or recognizing or recalling factual information. Objectives at the knowledge level would include verbs such as list, identify, name, recite, state and define.

Comprehension: At this level of cognition, the emphasis is on organizing, describing, and interpreting concepts. Verbs used in objectives at the comprehension level might include describe, interpret, explain, illustrate, summarize, restate, and defend concepts or information.

Application: The application level of cognition requires that the student apply the information presented, solve problems with it, and find new ways of using it. Objective verbs that would represent outcomes at this level of thinking would include apply, classify demonstrate, discover, predict, show, solve and compare.

Analysis: This level of taxonomy requires higher-level thinking skills such as finding underlying structures, separating the whole into its components, identifying motives, and recognizing hidden meanings. Verbs used in objectives at this level might include analyze, ascertain, diagram, differentiate, discriminate, examine, determine, classify, investigate, construct, and contrast.

Synthesis: At this level, the student is expected to create an original product based on the knowledge acquired, combine the ideas presented into a new whole, or relate knowledge from several area into a consistent concept. Action verbs in objectives at the synthesis level would include combine, compile, create, design, develop, expand, integrate, extend, originate, synthesize, and formulate.

Evaluation: At this level, the learner is expected to make thoughtful value decisions with reference to the knowledge; resolve differences and controversy; and develop personal opinions, judgments, and decisions. Objective verbs at this level would include assess, critique, judge, appraise, contrast, evaluate, weigh, and recommend.

Reference:

- Vega and Prieto (2006). Facilitating Learning. Mandaluyong City: Books atbp. Publishing Corp.