

Personal Theory of Learning

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Introduction

In each stage of life we are universally learning in different ways. As humans we evolve and reflect on what we learn from childhood to adulthood, in-school to out of school. The definition of learning is complex because the definition itself has evolved throughout time. My understanding and personal theory has stemmed from a combination of theories introduced, and scientists who have laid the groundwork to analyze the foundations of learning.

Early science in understanding learning

In early theories, scientists sought to define learning as a series of observable behaviors to demonstrate true understanding, thus the founding of Behaviorism. E.L. Thorndike (1921), presented the idea that learning is a connection of stimuli and response that is strengthened through practice. For example if a learner is gaining skills on multiplication facts they may have learned to associate the memorization of the answer (stimuli) with being the correct answer (reward). This stimuli-response connection is strengthened because it results in the satisfaction of getting the answer correct and as quick as possible. In his model of arithmetic learning he uses language that involves an individual to repeat the action of solving a problem, “in the case of the median or average pupil, twenty practices in the week of first learning, supported by thirty during the two months following, and maintained by fifty practices well spread over the later periods” (p. 187). Observable learning stemmed when analyzing how children learn based on solely imitating behaviors. Albert Bandura (1961) conducted the infamous “Bobo Doll Study” that demonstrated children viewing adult behaviors, and then mimicking that same behavior. Although Bandura used similar language to other behaviorists, his work brought up the notion that learning through just a stimulus-response cycle was too simplistic (Cherry, 2020). The importance of these models proved that learning should be defined and studied. Behaviorists

started the notion for other scientists to look at learning not just through observable actions, but as a cognitive process that is more complex.

Learning is active, even if we can't see it.

Although there is truth to how humans learn through observable behaviors and conditioning, there is an active part of learning that stems from cognitive and social contexts. Other theorists started to push the idea of cognitive learning past what was introduced by behaviorists. This science and research led to the phenomenon of cognitivism and social learning theories. Specifically in the classroom, scientists looked at what settings, models, and teaching took place for students to demonstrate learning. Learning is always happening whether students are explicitly taught or not. According to Bransford et al. (2000), “They [learners] come to formal education with a range of prior knowledge, skills, beliefs, and concepts that significantly influence what they notice about the environment and how they organize and interpret it” (p. 10). Learners are constantly igniting their schema as they navigate new learning. In the 1970s Jean Piaget introduced this term by explaining that the building of schema is obtaining and modifying knowledge, “as experiences happen, this new information is used to modify, add to, or change previously existing schemas (Cherry, 2020).

Understanding is an extension beyond just simply learning. Bransford et al. (2000) state that “‘usable knowledge’ is not the same as a mere list of disconnected facts” (p. 9). When I learned my multiplication facts, the adults in my life told me that it was a skill I needed to be good and fast at. However, I was not able to connect how these skills were applicable to other concepts or even the real world. It can be difficult to lay a foundation of facts, such as multiplication, and then make connections with other subjects, such as calculating the area of a

nature preserve for science. When learning is accompanied by understanding, there is an opportunity for the learner to engage in the world around them.

Learners also engage in concepts more when they are able to have “authentic learning experiences”. Research by Putnam and Borko (2000) suggest, “authentic activities foster the kinds of thinking and problem-solving skills that are important in out-of-school settings, whether or not the activities themselves mirror what practitioners do” (p. 4-5). For example, a question such as, “How do we get seasons?” can shape an authentic opportunity for a learner to connect to real-life experiences. The learner explores this concept within different mediums (data collection, technology, simulation, etc.). By exploring through a variety of mediums the learner takes an inquiry-based approach, which is active learning led by student thinking and questioning. This approach allows the learner to collaborate with their peers to “inquire” and formulate their own understanding. The learner is understanding how they can apply their knowledge beyond the classroom by analyzing seasons based on where they live, and how that influences different regions around the world. Authentic learning experiences are crucial for learners as they become familiar with the relationships between concepts throughout their school years and into adulthood. These experiences allow learners to make connections and reflect on their own learning without immediate direct instruction. Each individual learns in a different way, which is why active learning is so essential to the development of skills. When a learner is able to demonstrate their knowledge through a variety of outlets, it gives them the opportunity to strengthen their understanding beyond the classroom.

Conclusion

Theories of learning are not isolated, but a progression and overlapping of one another. Learning can be introduced through observing adult behavior and also through situated contexts.

Learning can be measured by habits and routines, and also building schema. As an adult I acknowledge that my learning has been a combination of operant and intentional experiences. The purpose of understanding the science of learning over time is to gain perspective on how we learn as individuals, and also how we can support the learning of others.

References

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