

My Personal Theory of Learning

Jessica Wells

College of Education, Michigan State University

CEP 800: Psychology of Learning in School and Other Settings

6/30/2022

What is the process of performing open heart surgery? What happens when my dog scratches at the back door? The first example might be answered by someone who has been in years of medical school to be a very specific type of doctor - an adult in their twenties or thirties. The latter might be answered by someone who knows my dog, someone who has a dog with a similar habit, or by someone who understands Thorndike's theory of connectionism. These contrasting examples happen in very different contexts, with different types of learners, yet the same process is happening in both: learning. Learning is the process of acquiring knowledge or skills.

Throughout history, many psychologists have studied how learning takes place and have developed their own theories. Ivon Pavlov argued the theory of classical conditioning, or learning through association (McLeod, 2018), which led to Edward Thorndike's theory of connectionism, where learning is the result of bonds formed between stimuli and responses (Resnick & Ford, 1981). These theories paved the way for behaviorists, J.B Watson and B.F Skinner, to argue "knowledge is action; or at least rules for action" (Skinner, 1976 via Berkeley Graduate Division, n.d). Through behaviorism came operant conditioning, introducing the ideas of rewards and punishments, motivation, and reinforcement into those theories of learning. After performing an action, we are more likely to repeat that action if it has a desirable outcome, such as a dog receiving a treat after fetching a ball (Cherry, 2020). If an action has an outcome that is negative or causes us pain in some way, we are less likely to repeat that behavior. In a typical classroom, these outcomes, or motivators, can come in the form of grades, stars on a chart, more recess time, detention, etc.

Learning is impacted by a variety of components including, but not limited to, prior knowledge and experience as well as the current learning environment. According to constructivist theories, learners' prior experiences will dramatically shape their ability to learn. Bransford, J. L., Brown, A. L., & Cocking, R. R. (2000) stated the following:

They 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. This, in turn, affects their abilities to remember, reason, solve problems, and acquire new knowledge (p. 10)

The environment a learner exists in also dramatically affects their ability to learn. Learning cannot always happen when the learner has outside stressors because a different part of the brain is activated during stressful situations. It is the instructor's job to provide a safe learning environment and also provide the learner with scaffolds, allowing them to be successful on a given task on their own. When learners are able to exist in a space that provides them with tools and skills to help them persevere, grow, and ask for help, the mental capacity available to help them want to keep learning is there.

Learning is not always about building brand new building blocks in a brain - sometimes it is changing the arrangement of them because of new information. Imagine we have a schema, or a concept, already built around some topic. New information can come in and change what we think about that topic, also known as "accommodation" and brought forth by Swiss psychologist, Jean Piaget (Cherry, 2019). For example, a teacher might have learned in school there are different types of learners, so they would need to make sure they have a variety of activities for their students who learn differently. When actually the idea that learning styles should drive the type of instruction "is a belief for which very little, if any, scientific evidence exists," (Kirschner & van Merriënboer (2013). After learning that new piece of information, the schema about instruction would change.

In the traditional school setting, to see what has been learned, we typically use tests to measure what was learned. Assessments, when created authentically and equitably, can be a great tool for students to show what they learned over a period of time. However, outside of the classroom, assessments can look much simpler than that. For instance, imagine someone trying to learn how to knit. They can see almost instantly what they learned based on their current

project. Can they do the specified stitch? Can they do the stitch so many times in a row, forming a scarf? How about someone learning how to take care of plants? The health of their plants demonstrate the learner's acquired knowledge on the topic. If the plant stays alive and healthy, this shows the mastery of content from the learner.

Learning is not something that only happens in a classroom. Whether we are aware of it or not, everything we do teaches us something new about our world. We learn about the people around us, what happens to x when y happens, how to perform certain processes or skills, etc. We even learn more about ourselves and what drives our behaviors each and every day. Whether someone is learning the process of open heart surgery, or how to train their dog to tell them they need to go outside, the same process is happening: acquiring new knowledge or skills.

References

- Berkeley Graduate Division. (n.d.). *Behaviorism*. Graduate Student Instructor Teaching Resource Center.
<https://gsi.berkeley.edu/gsi-guide-contents/learning-theory-research/behaviorism/>
- Bransford, J. L., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school* (Expanded Edition). National Academy Press.
<https://nap.nationalacademies.org/read/9853/chapter/1>
- Cherry, K. (2019, October 8). *Understanding accommodation in psychology*. Verywell Mind.
<https://www.verywellmind.com/what-is-accommodation-2795218>
- Cherry, K. (2020, June 3). *What is operant conditioning and how does it work?*. Verywell Mind.
<https://www.verywellmind.com/operant-conditioning-a2-2794863>.
- Kirschner, P. A., & van Merriënboer, J. (2013). Do learners really know best? Urban legends in education. *Educational Psychologist*, 48(3), 169-183.
<https://doi-org.proxy2.cl.msu.edu/10.1080/00461520.2013.804395>
- McLeod, S. (2018). *Classical conditioning*. Simple Psychology.
<https://www.simplypsychology.org/classical-conditioning.html>
- Resnick, L. B., & Ford, W. W. (1981). *The psychology of mathematics for instruction*. Routledge.
- Skinner, B. F. (1976). *About Behaviorism*. New York: Vintage Books.