Learning Theories Paper

Tia J Baumberger

University of Mary

Learning Theories

Learning theories are frameworks that describe how students learn. They explain how students absorb, retain, and process knowledge. Learning theories are influenced by our environment, emotions, prior experiences, and cognitive processes. They all play an important role in how we acquire knowledge, and the skills we retain. The framework of the learning theories are used as guidelines to create productive classroom environments, select instructional tools, and techniques that promote student engagement and learning. Behaviorism, cognitivism, and constructivism are the three broad areas of learning theories that will be discussed.

Behaviorism originates from the principle of operant conditioning which is the work of B. F. Skinner. "Operant conditioning is a method of learning that occurs through rewards and punishment for behavior (Mcloed, 2008)." Learning occurs with new behaviors or a change in behavior. This takes place because of the association between stimuli and response. Learning begins when there is a stimulus from the environment. The learner realizes the stimulus and generates a response. The response can either be positive or negative depending on the stimulus. Consequences that reinforce the desired behavior are created to achieve the desired behavior. Say for example a student continues to talk out of turn throughout the lecture. The teacher takes points away from the student's participation grade proving to the student that bad attitudes results in poor grades. This learning theory can be repeated so that it soon becomes automatic. It works for both positive and negative behaviors.

A few classroom practices that reflect behaviorism is engaging in verbal reinforcement by saying "good job today for staying focused during lecture". Another practice that promotes behaviorism is giving bonus points or extra credit. It gives the students the incentive to participate and try harder to receive a reward. Establishing rules and having repetitive classroom procedures promotes positive behavior.

The next learning theory is constructivism which is based off individual perspectives. Our perspectives come from individual experiences and the combination of the internal knowledge we have. Therefore, learning is different for everyone because it is based off individual experiences. For example, each student generates a mental picture, visualizes the concept differently, and makes sense of new experiences. This learning theory, "is simply the process of adjusting our mental models to accommodate our new experiences" (Kelly, 2012). Examples of this learning theory includes case studies, discovery learning, group works, simulations, and research projects.

The final learning theory is cognitivism which takes place within our internal processes. "Cognitivists see learning as an internal process that involves memory, thinking, reflection, abstraction, motivation, and metacognition (Anderson, 2008)." Cognitivism emphasizes intelligence which gives students the tools to make hypotheses and form the mental processes for thinking, memory, problem solving, and knowing. Once a student receives new information this information is stored in our sensory memory. With practice and repetition the information is now stored in the short-term memory. If a student is not exposed to the information for a while the student will forget, and the information will be loss. On the other hand, if the student continues to practice, recognize, and is exposed to the new information it will fall into our long-term memory where it stays. Knowing how the brain stores and loses information allows teachers to change their instructional strategies. Classroom strategies such as playing memory with vocabulary words, using flash cards, or graphic organizers help students learn and retain the

3

information. Summarizing, note taking, and real-world field trips expose the students to new information so they can start processing.

All three learning theories come with great variety and potential to be used in my classroom. First by looking at the theory of behaviorism which emphasizes operant conditioning. I can see myself using this theory in creating my classroom management plan. I am a huge believer in establishing procedures and having an effective classroom management plan. When the students know what is expected of them a foundation is laid out on the classroom floor. I love the idea of using positive reinforcement to promote a healthy environment. By simply praising one student for completing the assignment on time, other students will want the attention, and they will make sure to complete their assignment on time. I see this learning theory taking place in my classroom as soon as students walk in the door. I like giving students bell work to complete before class, it gives them an idea for the topic for the day and it helps everyone to get on the same page. This procedure would be established through a stimulus such as the bell ringing, students then respond to the stimuli by working on their bell work.

I myself learn well from constructive learning. Being a biology education major I am constantly picturing in my head where elements are located on the periodic table, how the process of photosynthesis and cellular respiration work, and how my personal experiences relate to new topics. Within my teaching philosophy I feel strongly about making my classroom authentic and real world. In my future classroom I am going to incorporate a lot of hands-on experiences like walking out side to investigate the weather, looking for erosion, analyzing different plants, and looking to find new ways to get outside and see science first hand. Constructivism also incorporates how students interpret the data visually. In my classroom I will

4

have many projects that requires graphs, 3D models, diagrams, and visual representations so students are able to "picture" the concepts in their head.

As a teacher it is very beneficial to know how students process new information, therefore the lesson can accommodate the learning process. Cognitivism focuses on multiple exposures to new information for students to retain the information. According to Pritchard, "I am told that Ways of Learning has been found useful in pre- training, training and postexperience contexts (2014)." Within my teaching philosophy I see the importance of preparing students how to learn instead of simply throwing the information at them. Students not only need to be able to retain the information, but they also need to know how to learn it. I believe it is important to prepare students with the life skills they will use after high school. In my classroom, I will use lab manuals for students to write their vocabulary words in. They will define, draw a picture, and use it in a sentence. By exposing students to one-word multiple times it will become more familiar. I also like incorporating competitive games to help students learn new information and vocabulary terms.

All learning theories come with benefits and flaws, the learning theory that works the best will be based off the students. According to Pritchard, "we have an established system where children are taught and where they are initiated into the accepted knowledge and skills base that is considered to be essential if they are to grow into citizens of our society who are able to function and contribute effectively (2014)." I like incorporating a variety of learning theories so that I have a balance in my classroom, and I can meet the needs of all my students. There are so many learning theories if one doesn't work there is always another one to try.

References

Anderson, Terry. (2008). The Theory and Practice of Online Learning. Edmonton, AB: Published Athabasca University press.

Kelly, James. 2012. Learning Theories. The Peak Performance Center. Retrieved from http://thepeakperformancecenter.com/educational-learning/learning/theories/.

Mcloed, Saul. 2008. Skinner- Operant Conditioning. Simple Psychology. Retrieved from https://www.simplypsychology.org/operant-conditioning.html .

Pritchard, Alan. (2014). Learning theories and learning styles in the classroom. New York, NY: Routledge.