

**Personal Learning Theory:
Educational Technology**

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Introduction

There exist many learning theories suggested by important theorists who have taken years in studying, researching and examining their theories. Even though many learning theories address different aspects of learning, they are linked to the studies of behaviorism, constructivism, and cognitivism (Gredler, 2009). Yet many of these theories suggest that learning occurs only in the brain. I surely agree with some of these theories but I also believe learning goes beyond what the brain can attain. As a teacher I'm always looking for better ways to teach in order to provide meaningful lessons that will create memories in my student's lives. Constantly, I ask myself these kinds of questions; how do we learn? What is the best way to learn? How can I help my students to learn faster and better? Why do my students have to learn specific lessons? Do these specific lessons make connections with my students' past, present and future?

The purpose of this paper is to reflect my beliefs regarding the teaching and learning process. It will describe and interpret my personal learning theory.

Theories of Learning

The main learning theories are behaviorism, constructivism and cognitivism. In order to develop my personal learning theory, I have to identify and analyze the connections of the leading learning theories.

Behaviorism Learning Theory

Behaviorism theory focuses on the relationships among environmental conditions, events and behavior (Gredler, 2009). Behaviorism focuses on a new behavioral pattern being repeated until it becomes automatic. Also, in order to activate learning it uses rewards and consequences when teaching the concept. One of the theorists who believed in rewarding good behavior and was able to do different experiments to proof his theory was B.F. Skinner (Mergel, 1998).

After learning about the behaviorism learning theory, I understood the reason why many students have bad attitude towards learning. I disagree with this learning theory. As a teacher, I have seen that some educators offer rewards; such as toys, stickers, candies, etc. in order to convince students to do or learn something new. Yes this might motivate students to work harder at something, but this new knowledge would only be stored in their short term memory for they are focused on the reward instead of the learning. These bad habits motivate the learner to become lazy in learning unless there are rewards offered in exchange. Students are not been motivated to learn they are been motivated to win prizes instead. The good grade should be the students' reward. In other words, students have to learn to earn good grades by studying hard; they have to see that hard work pays off.

Cognitivism Learning Theory

Cognitive theorists recognize that humans generate knowledge and meaning through sequential development of an individual's cognitive abilities, such as the mental processes of recognize, recall, analyze, reflect, apply, create, understand and evaluate. (Merge, 1998) According to Piaget's view, the role of education is to support the spontaneous research of the child (Gredler, 2009). In other words, teachers should design lessons that would make connections with the student's memories so they could recognize information, recall memories in order to reflect, apply, create, understand and evaluate the new given information. Teachers should also give feedback about the correctness of responses, but as a motivator. It is important to provide the needed information but without organizing it for them (Good and Brophy, 1990). Theorist Bruner believed that learners should learn by discovery in order to construct their own learning (Mcleod, 2008).

I believe cognitivism learning theory is the one educators use the most. I have used this theory on a daily basis. Before delivering a new lesson, I have to make sure I have provided visual aids or information that will make connections to the students' stored memories. Students do learn faster when they make connections to their memories, and prepare themselves to keep and store the new given information that will be analyzed to understand it better.

Constructivism Learning Theory

Constructivism learning theory views knowledge as a human construction. Piaget's perspective of learning, views the learner's knowledge as adaptive. The teacher's role is to challenge the child's way of thinking. Constructivism is based on learner's creativity meaning and choosing to learn (Gredler, 2009). As a teacher I agree to this theory, which it will create a lifelong learning experience. It will motivate the learner to experiment, think, discuss, search and find solutions to a Problem Based Lesson.

In the classroom, the constructivist view of learning can point towards a number of different teaching practices. In the most general sense, it usually means encouraging students to use active techniques (experiments, real-world problem solving) to create more knowledge and then to reflect on and talk about what they are doing and how their understanding is changing. The teacher makes sure she understands the students' preexisting conceptions, and guides the activity to address them and then build on them. (Brooks, 2004)

Provoking curiosity can ignite learning. It gives the student the motivation to search and learn more about the subject. I have seen in my classroom the way students react when Problem Based Lessons are given as a project. Students start collaborating in groups, participate in discussions, and write down important points. Then, they start using technology and internet to learn more about the problem. After they find good sources, students start planning for new possible solutions to the given problems. Students later present in teams their problem, findings, plans and possible solutions. I have noticed that while students are working on these projects, they are eager participating and learning. At the end of the school year, they still talk about the project because for some reason, it impacted their learning. In other words, they had the opportunity to create more knowledge after trying out experiments on their own.

Emergence of My Theory of Practice

After analyzing behaviorism, cognitivism and constructivism learning theories, I have observed that all of these have something in common; a connection between the

learner, their surroundings and interactions which could lead to motivation to learn. Motivation is the key to help the students learn and as teachers we must provide the tools necessary to keep students motivated. All students can learn, even the ones that most of the time choose to be disruptive and don't pay attention in class.

Throughout my seven years of teaching 6th grade Art in middle school, I have learned that if a student has not been highly motivated in class, he or she will choose to not to learn. If a student chooses not to learn, it could cause unwanted classroom disruption. For example, last semester I had a male student who had a reputation of been a "very disruptive bad boy". Prior to my class he would spend his time in the principal's office or I.S.S. (in-school suspension). From the first day of class, I observed his behavior and his interactions with other classmates and noticed his social skills were poor. He didn't have friends and most of the time classmates would avoid him because he would be disrespectful and use faulty language. I was determined to help him become a better student, at least in my class. I started having conversations to get to know him and his family, hobbies, likes and dislikes about school. I realized that he had poor social skills due to his troubled family life. I also found out he had a fascination with computers and video games, since that was "the only thing", according to him, that he was good at.

A week later I decided to implement Game Based Learning lessons to my class, and these lessons required technology. The purpose of Game Based Learning lesson was to use critical thinking, solving problem skills, math, geometry, engineering and design to create a functional house in a video game called Minecraft. Minecraft is a game about placing blocks to build anything you can imagine. At night monsters come out, so the creator has to make sure to build a shelter before that happens (Minecraft, 2009).

After my student found out this lesson was going to be assigned to class, he showed up first period with a big smile on his face and an apple for Mrs. Cepeda, me. He didn't have Art class until 8th period, but he said he couldn't wait to see me to tell me how excited he was to learn a lesson through a video game. During that week I noticed his behavior started changing in and outside my class. He was early to all of his classes; he would apologize right away if a bad word would slip out of his mouth. I could see he was trying his best in being polite to his classmates and smiled more often. The day of

the Minecraft project was here and I decided to give this student the opportunity to be the leader. He was assigned to teach the class “how to use Minecraft” since he had prior knowledge on this video game. He was impressively great in teaching the class, step by step on how to use the tools to create a 3-D house in the video game. He was able to teach all of these by using a provided laptop, internet, a digital projector, and speakers. The rest of the class started taking him seriously and would call him for assistance with the video game tools. He earned their respect. He felt he was finally doing something good in class. Of course, this student learned about the video game lesson concept; he created an awesome 3-D house with five rooms, swimming pool, utilities, basement, hiding place, etc. After that Video Game Based Learning lesson, he has been motivated to come to school every day. He pays attention in his other classes and tries to stay out of trouble so he can make it to his last period class: Art.

After having this student in my class, I’ve challenged myself in learning about my student’s environment and used also his prior knowledge and interests in creating a lesson. I also provided tools to facilitate his learning. Educational tools that is necessary for 21st century kids to learn by making connections with their world. I’m talking about technology. Educational technology tools must be part of the learning theory because it helps the learner to facilitate learning.

Conclusion

Behaviorism, cognitivism and constructivism learning theories have something in common; they focus on the learner their environment and connections to ignite motivation in learning.

My personal learning theory is influenced by the cognitivism and constructivism theories, but I believe the learner needs to be assisted with interactive 21st century tools to make better connection with their environment. According to George Siemens, “The natural attempt of theorists is to continue to reuse and evolve theories as conditions change. At some point, however, the underlying conditions have altered so significantly, (as with technology) that further modification is no longer sensible. An

entirely new approach is needed.” (2004) Educators need to instill the love of learning. They need to motivate students to learn by providing educational technology tools to make connections, interact with others, participate in classroom discussions, search for facts and create new solutions to problems. Technology allows us to stay current and help students to learn by staying connected to others. The future of learning in schools is technology because we have 21st century learners (Siemens, 2004).

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