

Constructing Learning Through Constructivism

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Constructivism is the theory that learners update new knowledge based on what they previously know about things. I think that the idea that our previous knowledge and experiences play a major role in what we absorb is incredibly relevant and demonstrates the reason that all learners learn differently because we all have different schema. As an elementary educator, it has become increasingly more difficult, for a variety of reasons, to execute the traditional way of learning in the classroom successfully. When I picture the traditional view of learning where a teacher is pouring knowledge into empty vessels, I subsequently view the knowledge flowing in one ear and out of the other. Through a constructivist approach, I believe that we were designed to be active participants in how we acquire new knowledge.

When active learning opportunities are presented to our students that allow them to assert learning in their own personal preferences, they are then able to connect the new knowledge to their previous knowledge and construct new ideas. Jean Piaget's mechanisms of accommodation and assimilation are very important in understanding how constructivism is effectively carried out in the classroom. Through assimilation, a learner is taking in the new and building it into the pre-existing mental capacity that is already established within their minds. This type of construction of knowledge helps the learner to make relevant connections between concepts and coherently apply the new knowledge. By using accommodation, a learner is taking brand new concepts that have little to no connection to previous background knowledge and doing their best to incorporate the new ideas with what they do have as a learner.

For example, let's say I am an elementary student and I'm reading a book where the characters are visiting the county fair. If I have ever been to a fair, I am immediately making connections to those experiences and creating mental images that piece together my experiences with those of the characters in the book and I am most likely understanding the setting and plot well. However, if I have never been to a fair, I am then using what I read and see in the text to connect to what little I do know about the entire fair

experience to build new knowledge. Either way, I am actively using my own knowledge, or lack thereof, to better understand what I am reading,

Constructivism opens the door for immense social interaction. By allowing learners to socially construct learning, we are creating environments where we can share our experiences to create new knowledge through social learning. If I am a student who has not ever been to the fair. I can use the ideas of my peers to begin creating those connections and developing my own schema through constructivism. Social learning through constructivism also gives learners the chance to formulate, ask, and answer questions about the topic. By using these interactions to help drive instruction, learning then becomes a dynamic experience where it can continue to grow and change.

How does technology aid in supporting constructivism? Let's go back to my example from the county fair. When a student has little to no background knowledge on the topic, technology resources help to establish that schema. They can research what a Ferris wheel looks like, use virtual reality experiences to walk through a simulation of a county fair, access drone YouTube videos that fly over famous county fairs like the Texas State Fair in Dallas. Technology offers so many ways for students to create and construct their own experiences, when they don't already have a foundational background knowledge on the topic and these examples are just the very basic ways technology can be helpful in supporting this theory.

Constructivist learners are encouraged by constructivist teachers who create well-planned learning opportunities that offer exploratory methods to acquire new knowledge. As teachers, we have to be willing to make the shift from asking questions to our students to asking questions with our students. Constructivism must be modeled as an autonomous learning scenario by educators in order for students to properly begin constructing their own learning. If we want our students to take control of their learning and develop metacognition, there has to be ample opportunity to ask, attempt, fail, try again, and grow within the environment. This type of learning cannot take place if educators are just pouring knowledge into a bottomless cup.

In essence, learning happens through active participation in the process. Through background connections, social situations, experimental opportunities, and self-directed learning moments students are able to construct learning that has meaning and proves to be relevant to their lives. When a shift is made from receiving information to actively thinking and understanding what is coming in, learning happens.