

Theory of Learning

Lindsay Luft-Dixon

What Is Learning?

Learning is the process beings go through to understand new sensory information and build knowledge. It begins immediately from birth and continues as long as we have the memory to build off our previous knowledge. What we learn may not always be accurate but helps build our knowledge base, and sometimes we may need to dismantle prior learnings to correctly understand new information. Learning is inclusive of getting an education without excluding informal and non-formal learning.

Learning Conditions

Learners and those working with them need to make sure the learner's physiological and safety needs are met, mitigate the effects of any trauma, regulate extreme emotions, and instill motivation to create optimal learning environments. Although Maslow stated the order of needs may be flexible, when our physiological and safety needs are met, "...our activities become habitually directed towards meeting the next set of needs that we have yet to satisfy," (McLeod, 2020). This can be the largest barrier in creating an optimal environment for learning. Especially in issues related to the learner's needs, they may learn the wrong thing causing misconceptions. For example, a student might learn that it is better for them to act out and not learn, rather than learn how to control their emotions and ask for help when they are struggling. Growing can be difficult when our needs are not met.

Part of feeling supported to learn is being in learning environments that are culturally sustaining. In this case, culturally sustaining means "requires that our [learning] be more than responsive of or relevant to the cultural experiences and practices of young people - it requires that [educators] support young people in sustaining the cultural and linguistic competence of their communities while simultaneously offering access to dominant cultural competence," (Paris, 2012, p.95). Trying to tell learners to forget their own cultures and lives in the pursuit of learning makes them reluctant and restrains their ability to learn. If learners are exposed to culturally sustaining spaces, they will be readier to receive and transfer knowledge.

The spaces where you learn can be anywhere. We are most familiar with formal learning: structured, in a classroom, led by teachers. We also have informal learning which Eshach states as different by being "...in a planned but highly adaptable manner in institutions, organizations, and situations beyond the spheres of formal or informal...it shares the characteristic of being mediated like formal education, but the motivation for learning may be wholly intrinsic to the learner" (2007). Informal learning happens spontaneously throughout life, and has no authority

figure or mentor (Eshach, 2007). For example, I have had more free time and energy at the end of the day, and I have become comfortable with cooking. At the start I was meticulously following every recipe, only making it if I had the exact ingredients and getting frustrated if I was unable to perfectly do a single technique. Over time I have watched hours of cooking videos, made a lot of meals, and now I feel comfortable making substitutions and altering dishes to fit the equipment I own. I am the master of my own cooking learning and I plan on continuing it while I have the time.

Motivation can be extrinsic or intrinsic. Some of the strongest motivators in our early school years are extrinsic: candy, making role models proud, getting to play, praise, and other tangible rewards. Over time these extrinsic motivators disappear, we need to create intrinsic motivation for ourselves and without experience this can feel impossible. Some examples would be learning about different parenting models because you want to be a good parent or learning a complex game to strengthen your ability to be strategic.

How Learning Happens

Learning occurs consciously but can become unconscious over time. Habits are invaluable and allow us to accomplish intricate tasks but come with a caveat that we no longer are consciously thinking about what we are doing. "The basal ganglia was central to recalling patterns and acting on them," Duhigg (2012) shared in *The Power of Habit*. This includes tasks like pulling out of your driveway and making a cup of coffee. However, "When a habit emerges, the brain stops fully participating in decision making. It stops working so hard, or diverts focus to other tasks," (Duhigg, 2012). If our learning becomes routine, we no longer pay attention to or are not as critical about what we learn. I believe being critical about our learning is paramount because it helps us decide accuracy and recognize connections that we may not otherwise be able to make.

If we are familiar with a subject already and consider ourselves experts it changes how we experience new material. A novice may notice the basic differences after being exposed to information, while an expert will be able to focus on smaller details that may go unnoticed by the novice. Developing expertise is something that happens over time, as the basics become habits.

That knowledge also helps us develop ways to organize our knowledge. We have schemas in place to help us understand how our new knowledge fits with what we already know. Schema can be defined as representations of our current knowledge that allow us to have plans for situations and help us process new information (Wiseman, 2008). Dr. Wiseman in *Schema Theory: Using Cognitive Structures in Organizing Knowledge* helps us understand further "As individuals encounter new information, they add this information to their schemas, which are organized into different interrelated categories." (p. 1) Having prior knowledge helps us assimilate knowledge and develop our understanding of information. A novice may have to develop a schema from scratch, while an expert can make more connections and fit things

within their existing scheme easily. An expert's depth of knowledge in a subject helps to create more advanced schemas.

The tools we use to learn are just as important as the learning itself. Humans over time have developed tools to help us with the heavy lifting to focus on higher cognitive tasks or provide new techniques and models for learning. In our current situation we are rapidly learning to develop effective and efficient methods for distance learning for all age ranges whereas before it was focused primarily on adult learners.

Idealized Learning

I believe that members of our current society are required to become great learners, but our public-school system struggles to do this while meeting all the requirements they need to meet. We are focused so much on how to help young people learn that we are not as effective helping adult learners. Although current society is more focused on younger learners, we place more emphasis on meeting standards and standardized test scores compared to learning as a lifelong skill. I hope that if adults and leaders can model what learning looks like for them, students will be more interested in learning. A society that values learning in its own right rather than learning for a purpose will help increase younger learners' intrinsic motivation and develop a flexible workforce.

In a perfect scenario, learners would be intrinsically motivated to learn about the world around them, including in our school systems. This would require a drastic shift in culture to revere learning rather than high grades, accumulation of facts, and memorization. As the jobs of the future are likely to require technical skills we do not have yet (World Economic Forum, 2016), we need to create a society that is metacognitively aware of their learning. I believe this will develop people who are flexible in their roles to develop new skills quickly and adapt to new situations, positions, and issues.

References

Duhigg, C. (2012). *The power of habit*. New York, NY: Random House.

Eshach, H. (2007). Bridging In-School and Out-of-School Learning: Formal, Non-Formal, and Informal Education. *Journal of Science Education and Technology*, 16(2), 171-190. Retrieved April 18, 2020, from www.jstor.org/stable/40188686

McLeod, S. A. (2020 March 20). Maslow's hierarchy of needs. Simply Psychology. Retrieved from <https://www.simplypsychology.org/maslow.html>

Paris, D. (2012). Culturally Sustaining Pedagogy: A Needed Change in Stance, Terminology, and Practice. *Educational Researcher*, 41(3), 93-97. Retrieved April 19, 2020, from www.jstor.org/stable/41477769

World Economic Forum. (2016). The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf

Wiseman, D. (2008). Schema Theory: Using Cognitive Structures in Organizing Knowledge. Retrieved from https://www.coastal.edu/media/academics/collegeofeducation/documents/research/Research_schematheory.pdf