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A Close Look at Learning Styles

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Honors Senior Capstone

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The term “learning style” refers to the idea that each student learns in his or her own way. More specifically, a learning style is the preferential way that a student is able to learn, retain, and apply the information that they are learning. In order to bring about success in anything that one does, it is important to understand learning styles, the history of them, their evolution, and how research on them can help one better understand how he or she learns. For example, as a child, hand and body motions and movements are created to go along with songs so that children can perform the action while singing. For children who learn best through actions (kinesthetic learners), they are able to learn the parts of the song while they are moving their body. As a teacher, it is important to know each student's learning style and just as importantly, it is essential for students to understand their own learning style in order for successful learning to occur.

The idea of the term “learning style” was first recognized as early as 334 BC by Aristotle, who believed that, “each child possessed specific talents and skills” (Reiff & National Education Association, W. D., 1992). The concept of learning styles has evolved ever since. After Aristotle began to recognize that children had differences, many researchers began forming their own ideas regarding learning styles. One of these researchers, Lev Vygotsky, began coming up with his own learning theories in 1978. Vygotsky believed that social learning precedes a child's development because a child's development stems from social interactions. He also believed that a child's specific environment will influence how the child thinks and what the child thinks about. Along with this theory, Vygotsky believed that a child's community plays the biggest role in a student's ability to make meaning from things (McLeod, 1970). On the other hand, theorist Jean Piaget believed that a child has to develop before learning. Piaget believed that cognitive development is universal across cultures. Contrary to Vygotsky's theories, Piaget

believed that a child's development is influenced from his or her own independent experiences, which allow the child to construct his or her own knowledge (McLeod, 1970).

Once different ideas were developed on how children learn, what children need to learn, and what it is that attracts children to learn in different ways, theories were then developed on the different types of learning styles that a child possesses. The most recent and well-known theories have been developed by Howard Gardner, Neil Fleming, and David Kolb. For the purpose of this paper, I am going to focus only on these three learning theorists.

Howard Gardner believed that students learn in ways that are identifiably distinctive. Because of this, Gardner thought it would be best to assess learning in a variety of ways, which is how he came up with the idea of multiple intelligences. Under the Gardner's multiple intelligences, he describes seven different and distinctive learning styles into which he believes that students, and society for that matter, are categorized. Each learning style use different parts of the brain. Gardner's seven distinctive learning styles are the following: visual-spatial--people who think in terms of physical space; bodily-kinesthetic--people who enjoy movement and using their bodies; musical--those who show a keen sensitivity to rhythm and sound, not just with music but in the environment around them; interpersonal--those who understand better through interaction with others; intrapersonal--those who are reflective and learn through understanding their selves; linguistic--those who think in words and enjoy working with written text; and logical-mathematical--those who learn through exploring patterns and relationships (Reiff & National Education Association, W. D., 1992). Although Gardner describes these learning styles as distinctive, a student, or person in society doesn't just have to fall under one style, but can be a composite of multiple styles of intelligences (Gardner, H., & Hatch, T., 1989).

Learning styles theorist Neil Fleming had slightly different thoughts regarding learning styles. Fleming developed the acronym, VARK, Visual, Aural, Reading/Writing, and Kinesthetic, referring to the instructional preference in which students, or people in society prefer to take in and give out information. According to Fleming, the Visual aspect of this acronym refers to those who prefer to look at graphs, charts, hierarchies, symbols, and things that other teachers use to represent words (in place of words). For a person with a visual instructional preference, the layout, design, and coloring of a page give them meaning. The Aural part of the acronym refers to those who have a speaking or hearing instructional preference. For example, these people learn best through group discussions, receiving feedback, phone calls, presentations, and through speaking with others. The Reading/Writing part of this acronym refers to those whose instructional preference is working with words that are either read or written. Lastly, the kinesthetic part of this acronym refers to those whose instructional preferences are through “learning by doing” for example, experiences, examples, and/or practice (Fleming, N. D., 2011).

Fleming, like other learning style theorists, believed in the importance for students, teachers, and people in the general society to understand, know, and be comfortable with different learning styles, especially their individualized way of learning. Fleming’s strong desire for people in society to understand their style of learning, lead him to become the first to develop a learning style preference questionnaire (Fleming & Baume, 2006).

In 1986, Fleming developed a series of general questions and help sheets that could be used for different populations such as teachers, students, employers, and employees. Fleming’s goal was for people to find their individual preferences for the way that they work with information. After filling out the questionnaire, the individuals were asked to tally up how many “a’s” they chose, how many “b’s” they chose, how many “c’s” they chose and how many “d’s”

they chose. Each multiple choice letter corresponds with a letter in Fleming's acronym, V-A-R-K. Once the individual has tallied up the responses, he or she can then follow the steps on Fleming's help sheets to determine an individual instructional practice preference (Fleming & Mills, 1992).

According to Fleming, he believed that teachers, especially, should benefit from knowing their own individual instructional practice preferences. When a teacher understands his or her own style, he or she will be able to understand the style of teaching that they prefer. In order to meet the diverse styles of instructional practice necessary within the classroom, teachers must attempt to understand their styles to provide the students with a range of learning. Fleming believed that understanding and trying to incorporate all students' instructional preferences in the classroom instead of just teaching using one's own preferences, thereby encouraging the students to adapt to the teacher, will create a more balanced and successful classroom. This adjustment will provide an equal learning opportunity for all students in the classroom, not just for those who have the same style as their teacher (Fleming & Mills, 1992).

Learning style theorist David Kolb looked at learning styles in a slightly different way from both Fleming and Gardner. Kolb's theory is that, "learning is the process whereby knowledge is created through the transformation of experiences" (Kolb, 1984). Under Kolb's theory is what is referred to as his Experiential Learning Cycle. Under the Experiential Learning Cycle, there are four stages: concrete experience, reflective observation, abstract conceptualism, and active experimentation. Kolb believed that one must first encounter a new experience, and then reflect upon that experience. These two steps lead to a new idea or a new concept arising within the person due to analyzing and drawing conclusions upon their reflection. The last part of the Experiential Learning Cycle that Kolb theorized is that a person will then apply the new

ideas, concepts, conclusions, and analyses to the world around them. Kolb believed that a person can enter this cycle at any stage, but in order for the best learning to occur, a learner must experience all stages of the cycle (Experiential Learning, Kolb, 2017).

Kolb's learning styles are based off of his Experiential Learning Cycle. Kolb's theory is founded on the premise that each person is naturally drawn to a single learning style and the factors that contribute to a person's single learning style are one's social environment, educational experiences, or individual cognitive structure. Whichever factor contributes to a person's learning style, Kolb believes that the learning preference itself is resulted from two separate choices we make. Kolb presents these choices on an axis, where the vertical axis (from north to south) is the Perception Continuum, which is how one thinks, feels, or responds to a task and the horizontal axis (from west to east) is the Processing Continuum, which is how one faces a task. Under the Perception Continuum, a person's preference is between Concrete Experience, looking at things as they are, or Abstract Conceptualization, looking at things as concepts or ideas instead of just taking them as they are (Kolb learning styles, n.d.). Under the Processing Continuum, people take the results of their perception continuum and process in one of two ways: Active Experimentation, which is taking what he or she has concluded and trying it out to prove that it works, or Reflective observation, which is taking what he or she concluded and watching to see if it works. In order for a learner to understand their Kolb style of learning, she or he is to take their preferences (the two choices that are made by a person) from both the Processing Continuum and the Perception Continuum to see which of Kolb's four learning styles he or she falls under (Kolb learning styles, n.d.).

David Kolb's four styles of learning correspond to the different stages of experiential learning. The following are the different types of learners, which are described by the conditions

that people learn under. The four types are the divergers (those who are concrete experiencers and reflective observers), the convergers (those who are abstract conceptualizers and active experimenters), the accommodators (those who are concrete experiencers and active experimenters), and the assimilators (those who are abstract conceptualizers and reflective observers) (Kolb, 1981). A diverging learner is able to achieve best through looking at things in different perspectives. They perform better by observing and listening to other opinions. An assimilating learner is one that are focused on logical ideas and theories that come from science based research as opposed to theories that are seen as more practical. A converging learner performs is one that is good at prefers to do than to just listen. Converging learners are also good at solving problems and like to find practical solutions to things. An accommodating learner is one that performs best through taking other people's theories and ideas to make a final product or bring forth a result (McLeod, 2013).

For the purposes of good educational practice, it is important to understand the theories and ideas of learning styles. Understanding the ideas and theories of learning styles will allow teachers to adjust their practice to meet the needs of all students. In order to have good educational practice, we need to understand that students, and all people in society for that matter, do not fit in a box. Students themselves need to be able to understand the various styles, theories and ideas of learning so that they can identify ways that they can learn best. Knowing how one learns best will allow students to be able to advocate for themselves to become successful, lifelong learners.

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