Learning styles

In every class, there is that hardworking kid who sits in class everyday frantically taking notes and lingering on the teacher's every word, but in the end still doesn't do well on the test. We've all seen that kid before, and we all wonder how that's possible. It is undeniable that students will thrive in classes where teachers appeal to all learning styles, considering not every student learns the same way. Likewise, a student will not do comparatively well or even show interest in a class where he or she feels lost or disoriented.

There are many factors between students and educators that need to be considering in order to achieve success in a classroom, such as the different learning styles, capabilities, and limitations for each individual. According to researchers and experts, there are definitely multiple learning styles, however, the number of accepted learning styles is not agreed upon. In the past, it was argued that there are three learning styles, which include, aural (auditory-musical), visual (spatial), and physical (kinesthetic). More recent studies have shown that there are seven different learning styles, which includes, verbal (linguistic), logical (mathematical), social (interpersonal), and solitary (intrapersonal) in addition to aural, visual, and physical learning. This disagreement has taken place for several years now.

While some of the most respected colleges today, for example, Dartmouth and Indiana University, argue that only the three original learning styles exist, other experts like psychologist, Howard Gardner, are criticized for publicizing the existence of more than three learning styles. Gardner published his book, Frames of Mind: The Theory of Multiple Intelligences, arguing that seven different learning styles existed. Only a year later, Valerie Strauss from the Washington Post censured Gardner's idea and book. In her

article, Strauss insults every belief mentioned in Gardner's theory. It is clear in her article that Strauss views Gardner's theories as being " simpleminded.

" Strauss argued that although it is important to consider the different learning styles, it has not been proven that the outcomes of teaching according to all the learning styles has been more effective than what she considers the " one size fits all" approach (Strauss). The " one size fits all" idea is most commonly used to describe an item that fits all instances. Although this idea is most associated with clothing, it can also be used to describe a classroom setting. For example, hand a classroom full of kids a simple addition problem. In a classroom based upon the " one size fits all" ideology, all of the kids would solve the addition problem by drawing out the number line.

On the other hand, kids in a classroom where the teachers and educators do not endorse the " one size fits all" approach, would vary in their techniques of acquiring the answer. While one kid may draw a number line, another kid may add using physical items such as blocks or coins. Though disagreeing with Gardner's idea of " multiple intelligences," Strauss agreed that people possess " intelligences," not necessarily styles of learning. In addition to this, Strauss's argument includes that instead of classifying each person based on their strongest intelligence, researchers should understand that everyone has all the existing intelligences and that they are ranked on a scale of strongest to weakest. Strauss includes, " In contrast, there is strong evidence that human beings have a range of intelligences and that strength (or weakness) in one intelligence does not predict strength (or weakness) in any other intelligences" (Strauss). In other words, Strauss believes that while

a person may lack strength in one intelligence, it does not affect another intelligence that the person has.

While researchers like Strauss and Gardner argue their theories on how many intelligences exist and what exactly the purpose of the intelligences are, few researchers share how these intelligences should be applied in the classroom. Most non-experts on this study don't appreciate about what the research states, but more like what the outcome of such research would be in a classroom setting. It's the parents of students who want to know why their child is not performing well in a class when the teacher recites notes straight from the textbook for 45 minutes. It's the teacher who wants to know why his or her students are falling asleep when the students are handed worksheet after worksheet after worksheet. Success in a classroom is the result of teamwork between the student and the teacher.

While the student is responsible for their work and behavior, the teacher has to be willing to adapt to the different learning methods. Many people oppose the " one size fits all" approach because " parents, children, school leaders, and teachers are irreducibly diverse… and children differ quite significantly in temperament, aptitude, habits, and interest" (Teles). This can be proven to be true in any classroom. There are kids who scramble to take note on every little detail the teacher says, while others may not write down a single word. Some kids may raise their hand to ask a question every two minutes, while others never raise their hand for the entire school year.

In the California Journal of Science Education, people are grouped based on their left and right brain functions. The authors of the Journal, the California

Science Teachers Association, claim " High school students who were less motivated than their classmates and who preferred working with distractors (music, low illumination, informal or casual seating, peers rather than alone or with the teacher, tactile rather than auditory or visual instructional resources) scored right-hemisphere significantly more often than left-hemisphere. Also, students who scored high on persistence invariably scored high as left processors" (California). Left hemispheric learners learn in small steps leading up to a complete understand, while right hemispheric learners learn a general concept before focusing on the details (California). Left and right hemispheric learners can be distinguished by their test performance. This is one of the many conclusions made by the Teachers Association regarding the hemispheric style of an individual and its impact on the difficulty of learning for the individual.

One can easily identify him or herself as a left or right hemispheric learner by his or her ability to concentrate in classroom. In most, if not all, classrooms today, there are students who rather be taught the steps to how a general concept is derived, rather than be given the general concept from the beginning. Prominently, students learning preferences and interests affect the way they will learn. These differences account for the failure of the " one size fits all" approach. Boston Globe author and " one size fits all" expert, Alfie Kohn summarized three points to the success of learning for both teachers and students. Firstly, Kohn suggests that teachers need to be " as vague as possible" (Kohn).

By covering only the absolute important information during each lesson, students are more likely to remain interested. The " bunch o' facts" model of

teaching that Kohn suggests discourages depth of understanding by covering the minimal amount of material. Secondly, the most success in a classroom full of students cannot be measured. More likely than not, even the most capable student in the class has done poorly on an exam, but according to research, exam scores are not the proper means of justifying a student's lack of learning. In theory, " It's easier to quantify how many semicolons are used correctly in an essay than how many wonderful ideas it contains" (Kohn).

Lastly, students feel discouraged by the mandated uniform standards. For example, in New York State alone, all students are required to pass the New York State regents exams with a 65 or higher. Failure to reach this standard results in not only failing the class, no matter what the student earned in the class throughout the school year leading up to the regents exam, but also having to retake the exam and/or the course. This would be a huge blow to the self esteem of the student who sat in class for the entire year not understanding the curriculum but tried his or her absolute hardest. Clearly, this relates to Kohn's second argument that an exam score should not measure success because any student could do well during the school year but do poorly on the final exam.