

Determining Learning Techniques by Using Artificial Intelligence and Observing the Impacts of Differentiated Education Model

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Abstract

It is fundamental for students to be aware of how they acquire knowledge from resources in the constantly evolving and changing world. Learning styles have been defined as the composite cognitive, affective, and physiological characteristics that are relatively stable indicators of how a learner perceives, interacts with and responds to the learning environment.[1] Knowing yourself as a learner is important if you want to achieve to the best of your ability. When it comes to processing information, your brain is the most important part of your body. It's where all thinking, learning, and decision-making takes place. If you know your learning style, then you can study smarter, not harder. If you know how you learn best, you can also communicate more effectively with your instructors.[2] The three most practical senses in learning environments are sight, hearing and touch. The VAK model categorizes these sensory methods of learning as Visual (V), Auditory (A) and Kinesthetic (K) learning styles.

In the 21st century it is inevitable to avoid the use of technology in education. Using ways and technical methods of technology in the classroom enables teachers and students to find the new conclusion of daily life problems. It helps in education to create a better educational syllabus, learning material, and future products and services.

As a conclusion, we have focused on learning techniques by a specific software that we have written in collaboration with a computer programmer. By this software, the learning technique of each student will be analysed by means of online tests to be performed. At the end of the day, the learning style of each student will be particularly understood.

After the development of the software which will last around 3 months, we will introduce the new system to the students. Having finalized the test period, we will measure the success rate of each student in their lessons compared to traditional learning.

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Carol Ann Tomlinson is a leader in the area of differentiated learning and professor of educational leadership, foundations, and policy at the University of Virginia. Tomlinson describes differentiated instruction as factoring students' individual learning styles and levels of readiness first before designing a lesson plan. Research on the effectiveness of differentiation shows this method benefits a wide range of students, from those with learning disabilities to those who are considered high ability.[3] In this article, the relation between the effect of differentiated education on academic achievement with the learning skills of students classified by artificial intelligence will be studied.

Keywords: VAK, AI, Effective Learning

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