Aldin Alagić

Mentor: Full Prof. Danijel Radošević, Ph.D.

Positive effects of learning computer programming on students with disabilities

In today's rapidly changing technology-based world all students benefit from learning computer programing, but students with disabilities may stand to gain the most. In education, the term "students with disabilities" refers to students with various difficulties such as physical, emotional, behavioral or learning disabilities that cause problems in realization of their everyday academic activities.

This research will be focusing mainly on students with disabilities such as Autism Spectrum Disorder (ASD), Attention Deficit Disorder (ADHD) and learning disabilities. Those students are in a constant struggle with certain skills that may come natural to other students. Skills that they have hard time coping with are: social skills, creative and critical thinking. Moreover, upon completing their education these students are left with unrealistic chances of finding employment in today's highly competitive job market.

A possible solution for these problems is teaching computer programming, also known as "coding", to students with aforementioned difficulties. Studies have shown that there are multiple benefits of teaching programming to all students, regardless which school or faculty they are currently attending. Programming helps develop important life skills such as creativity, self-esteem, socialization, different types of thinking among many others.

Despite the various advantages that this approach offers to students with disabilities, little to no work has been done. As the importance of this issue is constantly on the rise, there is a great need for more thorough research and work. A questionnaire will be conducted between students in higher education in Republic of Croatia. In purpose of gaining additional information from students that come from a different setting, another questionnaire will be carried out between students of other European countries. Collected information will be used to draw out a conclusion on the effects of computer programing on development of students with disabilities.