E-LA

AN E-LEARNING SOLUTION PREDICTING LEARNING STYLES OF STUDENTS WITH AUTISM SPECTRUM DISORDER

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Abstract

Autism Spectrum Disorder, also known as ASD is a neurodevelopment disorder that usually manifests in the first three years of a person's life. Autism tends to affect the main areas of development, i.e., social skills, communication abilities and behaviours of interest. They tend to not comprehend individuals around them, they do not express emotions or happiness towards things like children usually do in their age, even if their name is called, they might have a delay in reaction. These children fail to develop relationships with their parents and other individuals as they have trouble communicating and therefore, it is very crucial to provide the child with early interventions and teachings to lead a better life in the future. However, due to certain factors such as the lack of awareness of ASD, Lack of parental support, lack of resources and teachers for these special needs students they don't get what they need.

The aim of the project is to identify and analyse these problems that prevents students with ASD from getting an appropriate education and the resources they need and in doing so, to design, develop and evaluate a prototype which will help the students get the needed attention and care in schools and from their parents. Thorough research was conducted through analysis of numerous researches to gain knowledge about the domain and to identify the requirements which would suit the solution. To get more accurate information, teachers from special needs schools were interviewed to get their professional opinion as well as parents of special needs children. Public surveys by sharing a questionnaire was also conducted during this time to support the findings.

In Sri Lanka, where children with disorders are looked down on, often don't get a proper education for them to live a normal life as they grow old and these children are often left alone after their parents can no longer care for their child. Hence, in order to exploit this gap, the prototype 'e-La' was designed and developed. e-La is a web application that is designed for students of age 6-12, which can be used in schools for teachers to actively interact with the students.