Robot Technology Impact on Dyslexic Students' English Learning

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Abstract : Involving students in English language learning process and achieving an adequate English language proficiency in the target language can be a great challenge for both teachers and students. This can prove even a far greater challenge to engage students with special needs (Dyslexia) if they have physical impairment and inadequate mastery of basic communicative language competence/proficiency in the target language. From this perspective, technology like robots can probably be used to enhance learning process for the special needs students who have extensive communication needs, who face continuous struggle to interact with their peers and teachers and meet academic requirements. Robots, precisely NAO, can probably provide them with the perfect opportunity to practice social and communication skills, and meet their English academic requirements. This research paper aims to identify to what extent robots can be used to improve students’ social interaction and communication skills and to understand the potential for robotics-based education in motivating and engaging UAEU dyslexic students to meet university requirements. To reach this end, the paper will explore several factors that come into play – Motion Level-involving cognitive activities, Interaction Level-involving language processing, Behavior Level -establishing a close relationship with the robot and Appraisal Level- focusing on dyslexia students’ achievement in the target language.

Keywords : dyslexia, robot technology, motion, interaction, behavior and appraisal levels, social and communication skills

Conference Title : ICSE 2017 : International Conference on Special Education

Conference Location : Istanbul, Türkiye

Conference Dates : July 27-28, 2017