Study on the Frontiers of Assistive Technologies for Smart Learning in Learning Impairment of Dyslexic Children

Abstract

Learners with dyslexia are intuitive and perceive multidimensionality. But they face severe difficulty in reading, writing, mathematics and working memory. It is a different brain organization that needs different teaching methods. This article presents a methodical review of assistive technologies used for smart learning process with dyslexia. Type of technologies used in the assistive process is analyzed and listed. These include text-to-speech, Multimedia software, Touch sensation based learning, Multisensory, Games and Virtual learning Environment. The Text-to-Speech technology is the most common type of technology used by dyslexic learners. Most of the studies focus on dyslexic children. This review also finds that a majority of these studies focus on the use of multimedia and multisensory technologies for improving the reading ability of dyslexic learners.

References


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**Index Terms**

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**Keywords**

Dyslexia; Learning Impairment; Multisensory; Text-to-Speech, Speech-to-Text; Virtual Learning Environment