Original Research Paper

An Enhancement of Dyslexic Mobile Application using Sight Word Reading Strategy: Results and Findings

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Abstract: Dyslexia is an indicating term for learning disorder due to the difficulty in identifying speech and sound of letters and words, causing reading difficulty. Most children with dyslexia utilise the greater part of their senses to connect with their environment. One of the difficulties faced by dyslexic children is their troubles expressing their emotion or thought through verbal or written communication due to limited vocabulary, which is caused by issues in perceiving letters, sound and importance of the word overall. Sight word reading is a methodology with various reading stages and fascinating diversion with the purpose to create a fun reading experience. Currently, the dyslexia centre (i.e., Learning and Resource Centre, Dyslexia Association of Sarawak) does not adopt Information and Communication Technology (ICT) in their teaching and learning processes. Hence, in this study, a mobile application that utilises sight word reading strategy has been produced with the aim to help children with dyslexia build up their reading aptitudes. Sight words reading strategy is incorporated into three different modules in the mobile application, namely short stories, rhymes and song verses, according to the suggestions given by the instructors at dyslexia centre. This paper presents the study on the effect of sight word reading strategy in mobile application. The main contributions of this study is the utilisation of sight word reading strategy to enhance the application features such as story, rhyme and song modules. An improved score board is added to monitor the progress of the child. This mobile application, Mr Read V2.0 has been tested at the Learning and Resource Centre, Dyslexia Association of Sarawak with the instructors and dyslexic children, together with their parents. The children obtained 28% improved test scores taken before and after using Mr. Read V2.0. The overall results of the testing session showed that 100% respondents, instructors, parents and children either agreed or strongly agreed that this mobile application can improve the reading skill from using the additional features added to Mr. Read V2.0. Sight word reading strategy that is incorporated into mobile application is an effective approach to help dyslexic children improve their reading skill.

Keywords: Dyslexia, Reading Skills, Sight Words, Mobile Application

Introduction

Dyslexia is a specific learning disability characterised by the inability to decode and recognise words which have been shown to originate from neurobiological (Lyon *et al.*, 2003). Children with dyslexia utilize the greater part of their faculties to speak with their environment. They are effectively pulled in to images instead of words and are exceptionally inventive. Many individuals relate the words "learning inability" and "dyslexia" to the words "idiotic" or "unintelligent". This is in actuality the most remote clarification from reality. Dyslexia is really a trouble with language, not knowledge (Bouquett and Lindsey, 2008). Dyslexia is a weakness in the capacity to read (Farrell and Osenga, 2013). Instead, dyslexic individuals have difficulties