SPEECH RECOGNITION BASED ORAL READING PLATFORM TO AID IN ORAL ENGLISH PROFICIENCY

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Abstract

Mastering oral proficiency in English language could be the greatest accomplishment of a language learner as English has marked its place as the global language. Lack of oral proficiency could lead to unemployment or being unsuccessful in the modern world. But attaining oral proficiency could be a challenge for a second language learner.

This study aims to investigate the oral proficiency level of government school students in Sri Lanka. Factors like poor vocabulary and pronunciation, less exposure to language spoken environments, lack of practice and less teacher-student interaction were some of the major contributory factors towards oral English incompetency. Although tools exist to solve this dilemma, they fail to cater to the requirement of individuals within the school/classroom context because school education sets the basic foundation for students to subsequently enhance future developments.

This project identified a relationship between oral reading and oral proficiency. An in-depth research on oral proficiency and current English learning methods in schools were carried out.   To overcome this problem, with the findings from the research, **"Read2speak"** was developed. Read2speak is an IT solution in the form of a web platform that allows students to reinforce learning in a different way to improve their oral proficiency through oral reading and practice using Automated Speech Recognition (ASR) including progress monitoring and regular feedback. It also allows teachers to support students individually in the process through regular monitoring and providing feedback. The system is capable of providing quantitative evidence on mispronunciation rate and reading pace thereby providing students and teachers with analyzed scores for further improvements.

The proposed solution has been evaluated and tested by experts and non-experts when evaluating the success of the project in terms of providing schools students with an effective learning technique for oral English proficiency development.