

AUGMENTATIVE ALTERNATIVE COMMUNICATION (AAC) FOR SPEECH DELAY CHILDREN

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ABSTRACT

Augmentative Alternative Communication (AAC) is a method of communication that can ‘add-on’ to speech and are used to get around problems with ordinary speech. The purpose of this research is to design and develop an AAC for speech delay children. The technique that is applied is speech recognition to improve their speech developmental among them. In methodology, the model that used in the project is Waterfall model. There are two types of testing used to evaluate the application which are heuristic evaluation and usability testing. A heuristic evaluation has been conducted to three expert users where feedbacks and suggestions from them were taken into refinement. After refinement, Usability Testing was conducted with thirty speech delay children at age four to nine years old. Usability Testing was used to evaluate the application based on User Interface Satisfaction, Interaction and Navigation, Functionality, Content and General Feedback. Result from Usability Testing, reported that speech delay children agreed the functionality of the application very well where the icon and image used are suitable. Furthermore, there were also recommendation to improve the AAC application in the future such as to include verbal instructions along with the instructions of the word for the users to understand where the users can play the application themselves without being instructed by the therapist or teacher. As a conclusion, AAC application for speech delay children has been successfully designed and developed to assist the children in improving their communication skill.

Keywords: Augmentative Alternative Communication (AAC), speech recognition, speech delay.