

Abstract

Communication limitations of children with hearing impairment caused by their unfamiliarity with the vocabulary used to communicate. Due to communication difficulties faced by children with hearing impairment in expressing their desire, sometimes make them angry causing people around them get confused. Therefore, visual images and interactive media are expected to facilitate children with hearing impairment to learn and add words to their vocabulary, so it will be easier for them in communication.

A-TooLips is a word learning application that developed from TooLips. The A-TooLips add artificial intelligence elements located in the functional "pre-test". The results of the "pre-test" will determine the types of material that will be given to the user. A-TooLips made using teaching methods for children with hearing impairment such as, learning with a combination of images, articulation video and sign-language video, and learning through listening to the voice or audio. A-TooLips accompanied by exercises that help children with hearing impairment to evaluate what they have learned. The children with hearing impairment guide can also monitor their learning activity through the report in the form of logs.

By running A-TooLips on mobile devices, it is easier to learn and pronounce the words anywhere for children with hearing impairment, thus increasing their vocabulary in daily communicating with others, and facilitate their guide or teachers to monitor learning outcomes of children with hearing impairment.

Keyword: *A-TooLips, impairment, children, word, sign language, android, artificial intelligence*