ABSTRACT

The advance of educational technology is significantly change and very effective in supporting education nowadays. However, the use of technology to support education in Indonesia is currently not maximal, one of the cases that occurred was in the PGRI Sumedang Kindergarten. Teachers at PGRI Sumedang Kindergarten have difficulty in providing material that can build students interest, especially general knowledge about animal. This study aims to design Augmented Reality (AR) technology features with Speech Recognition for an Android-based interactive multimedia application of animal knowledge to assist learning activities in PGRI Sumedang Kindergarten. AR is a computer technology that combines virtual objects with the real world. This AR feature uses a card-shaped marker with an image, and speech recognition as a medium for interaction with animals in the AR. Speech recognition is a computer technology to process human speech into digital letters or words. The resulting interaction is if the user mentions the name of the animal displayed in AR, the animal animation will move. This AR feature can help learning activities at Kindergarten PGRI Sumedang. The method used in designing this feature is the multimedia development life cycle (MDLC) method.

Keyword: Augmented reality, speech recognition, learning activity, PGRI Sumedang Kindergarten.