

ABSTRAK

Karakteristik siswa tunarungu dalam segi bahasa dan bicara yaitu sangat terbatas dalam pemilihan kosa kata dan sulit mengartikan kata-kata yang bersifat abstrak. Hal tersebut mengakibatkan siswa tunarungu sulit dalam berkomunikasi dan mengolah informasi, sehingga pembelajaran harus menggunakan bahan ajar berupa informasi visual. Oleh karena itu, teknologi *Augmented Reality* dapat menjadi salah satu media pembelajaran berupa informasi visual. Penelitian ini bertujuan untuk: (1) mendeskripsikan proses perancangan bahan ajar hingga diperoleh modul matematika berbantuan *Android-Augmented Reality* untuk pencapaian kompetensi dasar siswa kelas VII SMPLB dan (2) mendeskripsikan hasil implementasi pembelajaran dengan modul matematika berbantuan *Android-Augmented Reality* untuk pencapaian kompetensi dasar siswa kelas VII SMPLB. Penelitian ini menggunakan metode *Research and Development (R&D)* dengan menggunakan model ADDIE. Responden dalam penelitian ini adalah siswa tunarungu kelas VII pada semester ganjil 2018/2019 di SMPLB Kota Bandung dan Cimahi. Berdasarkan hasil penelitian disimpulkan bahwa: (1) Tahap perancangan terdiri atas: tahap analisis, tahap desain, dan tahap pengembangan; dan (2) Hasil implementasi produk bahan ajar berbantuan *Android-Augmented Reality* pada materi jaring-jaring balok dan kubus mengakomodasi ketercapaian kompetensi dasar matematis siswa tunarungu termasuk pada kategori baik.

Kata kunci: Bahan Ajar Matematika, *Augmented Reality*, Siswa Tunarungu

ABSTRACT

The characteristics of deaf students in terms of language and speech are very limited in vocabulary selection and difficult to interpret abstract words. This causes deaf students difficulties in communicating and processing information, so learning with the help of teaching materials in the form of visual information is needed. Augmented Reality technology can be one of the learning media in the form of visual information. This research aims to: (1) describe the design process of teaching materials to obtain Android-Augmented Reality assisted mathematics module for achieving students basic mathematical competencies of 7th grade students in Junior High School for Students with Special Needs (Deaf Students) and (2) describe the results of learning implementation with Android-Augmented Reality assisted mathematics module to achieve the basic competencies of 7th grade students in Junior High School for Students with Special Needs (Deaf Students). This research uses Research and Development (R & D) method using the ADDIE model. Respondents in this research are seventh grade deaf students from the first semester of 2018/2019 in Junior High School for Students with Special Needs (Deaf Students). The results of this study are: (1) The design phase consists of: analysis phase, design stage, and development stage; and (2) The results of implementation of Android-Augmented Reality assisted teaching material products for blocks and cubes net to achieve basic mathematical competencies for deaf students is in good category.

Keywords: Mathematics Teaching Materials, Augmented Reality, Deaf Students