

## ABSTRAK

Penelitian ini dilatarbelakangi oleh kesulitan siswa dalam pembelajaran matematika pada materi geometri, sehingga perlu adanya suatu media untuk membantu dan menjembatani kesulitan siswa dalam memahami materi geometri. Oleh karena itu, media *augmented reality* dapat menjadi salah satu media pembelajaran. Tujuan dari penelitian ini sebagai berikut: (1) mendeskripsikan pengembangan bahan ajar berbantuan media *augmented reality*, (2) mengetahui pengaruh bahan ajar matematika berbantuan media *augmented reality*, (3) mendeskripsikan kendala atau hambatan terkait bahan ajar matematika berbantuan media *augmented reality*; (4) mendeskripsikan respon siswa terhadap pembelajaran matematika berbantuan media *augmented reality*. Penelitian ini merupakan penelitian dan pengembangan dengan memodifikasi model Borg dan Gall yang terdiri dari 4 tahap yaitu: (1) *Preliminary study*; (2) *construction and development*; (3) *judgement and implementation*; (4) *evaluation*. Hasil akhir dari penelitian ini menunjukan: (1) terdapat beberapa revisi bahan ajar mulai dari tahap desain sampai tahap produk hasil revisi, (2) terdapat pengaruh positif dari bahan ajar matematika berbantuan media *augmented reality*; (3) kendala pada pengembangan bahan ajar terdiri dari: desain awal *augmented reality* terhadap kesesuaian materi, alokasi waktu implementasi; perbaikan *bug* pada media *augmented reality*; (4) pada umumnya respon siswa terhadap pembelajaran matematika berbantuan media *augmented reality* positif.

**Kata kunci:** Bahan Ajar, *Augmented Reality*, Bangun Ruang Sisi Datar

## ABSTRACT

This study is motivated by students' difficulties in learning mathematics on geometry concept. So that it need to assist student difficulties for understanding the concept. Therefore augmented reality can be one of media learning. Based on that, the purpose of research is: (1) to describe the develop of augmented reality assisted learning material; (2) to find out the influence of augmented reality assisted learning material toward the mastery of basic competence; (3) to describe the obstacle relating to used augmented reality assisted learning material; (4) to describe students respon toward augmented reality assisted learning material. The study is research and development (R&D) modified Borg and Gall model with consist of four stages namely: (1) *Preliminary study*; (2) *construction and development*; (3) *judgement and implementation*; (4) *evaluation*. The result of study show that: (1) there are several revisions of teaching materials from the design phase to the revised product stage; (2) there is a positive influence of mathematics teaching material augmented reality media; (3) obstacles to the development of teaching materials consist of: initial design of augmented reality to material conformity, time allocation of implementation; Bug fixes on augmented reality media; (4) in general, the students' response to the augmented reality augmented reality mathematics learning.

**Keywords:** Learning Material, Augmented Reality, Build a flat side space.