

ABSTRAK

SITI HIDAYAH. Pengembangan Media pembelajaran Matematika Materi Luas Bangun Ruang Sisi Datar Berbasis Augmented Reality Berbantuan Unity 3D untuk Meningkatkan Hasil Belajar Siswa Kelas V Sekolah Dasar. Skripsi. Medan: Fakultas Ilmu Pendidikan Universitas Negeri Medan, 2024.

Penelitian ini bertujuan untuk menghasilkan media pembelajaran berbasis *Augmented Reality* berbantuan *Unity 3D* materi bangun ruang sisi datar yaitu kubus dan balok kelas V SDN 11 Rantau Utara. Jenis penelitian ini adalah penelitian dan pengembangan dengan model pengembangan ADDIE yang terdiri dari *Analysis*, *Design*, *Development*, *Implementation*, dan *Evaluation*. Tahapan *Analysis* yaitu analisis kebutuhan, analisis peserta didik, dan analisis materi. Tahapan *Design* yaitu mendesain media pembelajaran menggunakan aplikasi *Unity 3D*. Tahapan *Development* yaitu mengembangkan media dan melakukan validasi kepada validator materi dan media. Tahapan *Implementation* yaitu melakukan uji coba media untuk mendapatkan nilai kepraktisan dan keefektifan media. Tahapan *Evaluation* yaitu melakukan refleksi terhadap uji media dalam kegiatan pembelajaran. Teknik pengumpulan data yang digunakan adalah wawancara, observasi, angket, dan tes. Hasil dari penilaian validasi ahli media, ahli materi, dan ahli praktikalitas diperoleh 89%, 92%, dan 94% dengan kualifikasi sangat layak dan sangat praktis. Berdasarkan perhitungan ketuntasan kelas diperoleh persentase keefektifan media pembelajaran yaitu sebesar 85% yang dikategorikan sangat efektif dan keefektifan media berdasarkan perhitungan N Gain diperoleh nilai 66 % dikategorikan efektif. Disimpulkan bahwa penelitian dan pengembangan ini menghasilkan sebuah produk berupa media pembelajaran Matematika berbasis *Augmented Reality* berbantuan *Unity 3D* layak, praktis, dan efektif untuk digunakan.

Kata Kunci : augmented reality, unity 3d, bangun ruang

ABSTRACT

SITI HIDAYAH. Development of Broad Material Mathematics Learning Media Build Flat Side Rooms Based on Augmented Reality Assisted By Unity 3D to Improve Student Learning Outcomes Grade V Elementary School. Skripsi. Medan: Faculty of Education Universitas Negeri Medan, 2024.

This research aims to produce Augmented Reality-based learning media assisted by Unity 3D, flat side space building materials, namely cubes and blocks in class V of SDN 11 Rantau Utara. This type of research is research and development with the ADDIE development model consisting of Analysis, Design, Development, Implementation, and Evaluation. The Analysis stages are needs analysis, student analysis, and material analysis. The Design stage is to design learning media using the Unity 3D application. The Implementation stage is to conduct media trials to obtain the value of practicality and effectiveness of the media. The Evaluation stage is to reflect on the media test in learning activities. The data collection techniques used are interviews, observations, questionnaires, and tests. The results of the validation evaluation of media experts, material experts, and practicality experts were obtained 89%, 92%, and 94% with very feasible and very practical qualifications. Based on the calculation of class completeness, the percentage of effectiveness of learning media was obtained, which was 85%, which was categorized as very effective, and the effectiveness of the media based on the calculation of N Gain was obtained a value of 66%, which was categorized as effective. It is concluded that this research and development has resulted in a product in the form of Augmented Reality-based Mathematics learning media assisted by Unity 3D that is feasible, practical, and effective to use.

Keywords: augmented reality, unity 3d, build space