

ABSTRAK

Rizky Al Baqiy, 5193151026 : Pengembangan Media Pembelajaran Berbasis *Augmented Reality* Pada Mata Pelajaran Informatika di SMK Swasta Rahmat Islamiyah Medan. Skripsi. Fakultas Teknik, Universitas Negeri Medan. 2026.

Penelitian ini dilatarbelakangi oleh proses pembelajaran Informatika yang masih monoton dan kurang interaktif di SMK Swasta Rahmat Islamiyah Medan, sehingga mengakibatkan kurangnya tingkat pemahaman siswa dan rendahnya hasil belajar siswa pada materi Sistem Komputer. Penelitian ini bertujuan untuk mengembangkan media pembelajaran berbasis *Augmented Reality* (AR), serta menguji tingkat kelayakan, akseptabilitas, dan efektivitasnya. Metode penelitian yang digunakan adalah *Research and Development* (R&D) dengan model ADDIE (*Analysis, Design, Development, Implementation, Evaluation*). Subjek penelitian ini adalah siswa kelas X TKJ di SMK Swasta Rahmat Islamiyah Medan. Pengumpulan data dilakukan melalui observasi, wawancara, kuesioner validasi ahli, angket akseptabilitas pengguna, serta tes hasil belajar (pretest dan posttest). Hasil penelitian menunjukkan bahwa media pembelajaran AR yang dikembangkan dinyatakan "Layak" dengan skor rata-rata validasi ahli materi sebesar 4,13 dan ahli media sebesar 4,00. Uji akseptabilitas oleh pengguna (siswa) memperoleh skor rata-rata 4,15 dengan kategori "Layak". Selanjutnya, uji efektivitas menggunakan N-Gain menunjukkan bahwa penggunaan media AR mampu meningkatkan hasil belajar secara signifikan. Kelas eksperimen memperoleh skor N-Gain sebesar 70,68% (kategori Cukup Efektif), menunjukkan bahwa setelah penggunaan media ini terdapat peningkatan pemahaman siswa. Kesimpulannya, media pembelajaran berbasis *Augmented Reality* pada mata pelajaran Informatika ini terbukti layak, praktis, dan cukup efektif digunakan untuk meningkatkan pemahaman dan hasil belajar siswa.

Kata Kunci: *Augmented Reality*, ADDIE, Informatika, Media Pembelajaran, Sistem Komputer



ABSTRACT

Rizky Al Baqiy, 5193151026 : Development of Augmented Reality-Based Learning Media for Informatics Subject at SMK Swasta Rahmat Islamiyah Medan. Thesis. Faculty of Engineering, State University of Medan. 2026.

This research is motivated by the Informatics learning process at SMK Swasta Rahmat Islamiyah Medan, which is still monotonous and lacks interactivity, resulting in poor student comprehension and low learning outcomes in the Computer Systems material. This study aims to develop Augmented Reality (AR)-based learning media and to evaluate its feasibility, acceptability, and effectiveness. The research method employed is Research and Development (R&D) using the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. The subjects of this study were 10th-grade TKJ (Computer and Network Engineering) students at SMK Swasta Rahmat Islamiyah Medan. Data were collected through observations, interviews, expert validation questionnaires, user acceptability questionnaires, and learning outcome tests (pretest and posttest). The results showed that the developed AR learning media was deemed "Feasible," with material experts giving an average validation score of 4.13 and media experts an average score of 4.00. The user (student) acceptability test obtained an average score of 4.15, also falling into the "Feasible" category. Furthermore, the effectiveness test using the N-Gain score demonstrated that the use of AR media significantly improved learning outcomes. The experimental class achieved an N-Gain score of 70.68% ("Fairly Effective" category), indicating a notable enhancement in student comprehension following the use of the media. In conclusion, the Augmented Reality-based learning media for the Informatics subject has proven to be feasible, practical, and fairly effective in improving student comprehension and learning outcomes.

Keywords: Augmented Reality, ADDIE, Informatics, Learning Media, Computer System

