

ABSTRAK

Juan Feri Vincensius Simamora, 5193151025 : Pengembangan Media Pembelajaran Pengenalan Alat Ukur Berbasis *Augmented Reality* Pada Mata Pelajaran Dasar-dasar Teknik Jaringan Komputer dan Telekomunikasi di SMK Swasta Jambi. Skripsi. Fakultas Teknik, Universitas Negeri Medan. 2026.

Penelitian ini bertujuan untuk mengembangkan media pembelajaran berbasis *Augmented Reality* (AR) pada materi Pengenalan Alat Ukur Jaringan, mengetahui kelayakan media, serta mengetahui efektivitasnya dalam meningkatkan hasil belajar peserta didik. Penelitian ini menggunakan metode *Research and Development (R&D)* dengan model pengembangan ADDIE yang meliputi tahap *Analysis, Design, Development, Implementation, dan Evaluation*. Subjek penelitian terdiri atas ahli media, ahli materi, dan peserta didik kelas X TKJ SMK Swasta Jambi Medan. Pengumpulan data dilakukan melalui observasi, wawancara, angket, dan tes hasil belajar. Hasil penelitian menunjukkan bahwa media memperoleh nilai validasi ahli media sebesar 3,98 (Layak), validasi ahli materi sebesar 4,23 (Sangat Layak), dan akseptansi peserta didik sebesar 4,65 (Sangat Layak). Hasil uji efektivitas menunjukkan rata-rata nilai N-Gain kelas eksperimen sebesar 59,43%, sehingga media pembelajaran berbasis *Augmented Reality* dinyatakan cukup efektif dalam meningkatkan hasil belajar peserta didik. Dengan demikian, media pembelajaran yang dikembangkan layak digunakan sebagai media pembelajaran pada materi Pengenalan Alat Ukur Jaringan.

Kata kunci: *Augmented Reality*, media pembelajaran, ADDIE.

ABSTRACT

Juan Feri Vincensius Simamora, 5193151025. Development of an Augmented Reality-Based Learning Media for Introducing Network Measurement Instruments in the Basic Computer and Telecommunication Network Engineering Subject at SMK Swasta Jambi. Thesis. Faculty of Engineering, State University of Medan, 2026.

This study aims to develop an Augmented Reality (AR)-based learning media for the topic of Network Measurement Instruments, determine its feasibility, and evaluate its effectiveness in improving students' learning outcomes. This study employed the Research and Development (R&D) method using the ADDIE development model, consisting of the Analysis, Design, Development, Implementation, and Evaluation stages. The research subjects included media experts, material experts, and tenth-grade students of the Computer and Network Engineering program at SMK Swasta Jambi Medan. Data were collected through observation, interviews, questionnaires, and learning achievement tests. The results showed that the developed media obtained an average score of 3.98 from media experts (Feasible), 4.23 from material experts (Highly Feasible), and 4.65 from students' acceptance questionnaires (Highly Feasible). The effectiveness test showed that the experimental class achieved an average N-Gain score of 59.43%, therefore, the Augmented Reality-based learning media is considered moderately effective and feasible for learning the topic of Network Measurement Instruments.

Keywords: *Augmented Reality, learning media, ADDIE.*