

ABSTRAK

Sarah Annisa Siregar: Pengembangan Media Pembelajaran Interaktif Berbasis Artificial Intelligence pada Mata Pelajaran Dasar-Dasar Desain Komunikasi Visual di SMK Swasta Imelda Medan. Fakultas Teknik Universitas Negeri Medan, 2026.

Penelitian ini bertujuan untuk mengetahui kelayakan media pembelajaran interaktif berbasis *Artificial Intelligence* (AI) pada mata pelajaran Dasar-Dasar Desain Komunikasi Visual materi Komputer Grafis, dan mengetahui efektivitas media tersebut dalam meningkatkan hasil belajar siswa kelas X DKV SMK Swasta Imelda Medan. Penelitian ini merupakan penelitian pengembangan (R&D) menggunakan model ADDIE (*Analysis, Design, Development, Implementation, Evaluation*). Media dikembangkan dalam bentuk *website* menggunakan Visual Studio Code dengan fitur materi, video, kuis, dan *chatbot* AI. Subjek penelitian adalah 26 siswa kelas X DKV. Instrumen yang digunakan meliputi lembar validasi ahli materi, lembar validasi ahli media, angket akseptabilitas pengguna, serta soal pretest dan posttest. Teknik analisis data menggunakan statistik deskriptif untuk kelayakan dan akseptabilitas, serta N-Gain untuk efektivitas. Hasil penelitian menunjukkan bahwa media pembelajaran interaktif berbasis AI dinyatakan sangat layak dari aspek materi dengan rata-rata skor 4,18 dan layak dari aspek media dengan rata-rata skor 3,94., akseptabilitas pengguna berada pada kategori tinggi dengan rata-rata skor 3,92., media pembelajaran efektif meningkatkan hasil belajar siswa dengan nilai N-Gain rata-rata 0,77 (kategori tinggi/efektif). Berdasarkan hasil tersebut, disimpulkan bahwa media pembelajaran interaktif berbasis *Artificial Intelligence* pada mata pelajaran Dasar-Dasar Desain Komunikasi Visual materi Komputer Grafis layak dan efektif digunakan dalam proses pembelajaran.

Kata Kunci: Media Pembelajaran Interaktif, *Artificial Intelligence*, Komputer Grafis, ADDIE, Kelayakan, Efektivitas.

ABSTRACT

Sarah Annisa Siregar: *Development of Artificial Intelligence-Based Interactive Learning Media in the Subject of Fundamentals of Visual Communication Design at Imelda Private Vocational School Medan. Faculty of Engineering, Universitas Negeri Medan, 2026.*

This study aims to determine the feasibility of Artificial Intelligence (AI)-based interactive learning media in the subject of Fundamentals of Visual Communication Design, specifically on Computer Graphics material, and to determine the effectiveness of the media in improving learning outcomes of 10th-grade DKV students at Imelda Private Vocational School Medan. This research is a development study (R&D) using the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The media was developed as a website using Visual Studio Code, featuring learning materials, videos, quizzes, and an AI chatbot. The research subjects were 26 students of class X DKV. The instruments used included material expert validation sheets, media expert validation sheets, user acceptability questionnaires, as well as pretest and posttest questions. Data analysis techniques used descriptive statistics for feasibility and acceptability, and N-Gain for effectiveness. The results showed that the AI-based interactive learning media was declared very feasible in terms of material with an average score of 4.18, and feasible in terms of media with an average score of 3.94. User acceptability was in the high category with an average score of 3.92. The learning media effectively improved student learning outcomes with an average N-Gain score of 0.77 (high/effective category). Based on these results, it is concluded that the Artificial Intelligence-based interactive learning media in the subject of Fundamentals of Visual Communication Design, Computer Graphics material, is feasible and effective for use in the learning process.

Keywords: Interactive Learning Media, Artificial Intelligence, Computer Graphics, ADDIE, Feasibility, Effectiveness.