

ABSTRAK

Aisyah Putri Siregar. *Pengembangan E-Modul Praktikum Pemrograman Terstruktur Untuk Meningkatkan Motivasi Belajar Peserta Didik di SMK Negeri 1 Barumun*. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2026.

Penelitian ini bertujuan untuk mengembangkan e-modul praktikum materi pemrograman terstruktur untuk meningkatkan motivasi belajar peserta didik kelas X SMK. Penelitian ini menggunakan model pengembangan ADDIE (*Analysis, Design, Development, Implementation dan Evaluation*). Subjek penelitian ini siswa kelas X RPL-3 SMK Negeri Barumun sebanyak 28 siswa (1 kelas). Teknik dan instrumen yang digunakan meliputi lembar validasi ahli, angket motivasi belajar, angket respon guru dan angket respon siswa. Data penelitian dianalisis dengan teknik analisis kelayakan e-modul, analisis angket respon guru dan siswa, serta analisis keefektifan e-modul dengan pendekatan *Paired Sampel T-Test*. Hasil temuan penelitian menunjukkan bahwa e-modul praktikum pemrograman terstruktur yang dikembangkan telah memenuhi kriteria layak berdasarkan hasil penilaian validator ahli materi (84,0%) dan validator ahli media (80,4%). Respon guru (92,0%) dan siswa (84,2%) terhadap e-modul praktikum pemrograman terstruktur tergolong kriteria sangat baik (sangat praktis). Penggunaan e-modul praktikum pemrograman terstruktur secara signifikan juga terbukti cukup efektif dalam meningkatkan motivasi belajar siswa dengan rata-rata N-gain sebesar 63,2% serta hasil pengujian statistik dengan nilai $t_{hitung} > t_{tabel}$ yaitu $23,078 > 1,70$ dan nilai Sig. $0,000 < 0,05$. Dengan demikian disimpulkan bahwa e-modul praktikum pemrograman terstruktur yang dikembangkan dinyatakan layak, sangat praktis dan cukup efektif dalam meningkatkan motivasi belajar siswa.

Kata Kunci: E-Modul Praktikum, Motivasi Belajar, Pemrograman Terstruktur



ABSTRACT

Aisyah Putri Siregar. *Development of Structured Programming Practicum E-Modules to Improve Student Learning Motivation at SMK Negeri 1 Barumon*. Essay. Faculty of Engineering, State University of Medan. 2026.

This research aims to develop an e-module for practical work on structured programming material to increase the learning motivation of class X SMK students. This study uses the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) development model. The subjects of this study were 28 students (1 class) of class X RPL-3 at SMK Negeri Barumon. The techniques and instruments used included expert validation sheets, learning motivation questionnaires, teacher response questionnaires, and student response questionnaires. The research data were analyzed using e-module feasibility analysis techniques, teacher and student response questionnaire analysis, and e-module effectiveness analysis using the Paired Sample T-Test approach. The research findings show that the developed structured programming practicum e-module has met the criteria for feasibility based on the assessment results of the material expert validator (84.0%) and the media expert validator (80.4%). The responses of teachers (92.0%) and students (84.2%) to the structured programming practicum e-module are classified as very good criteria (very practical). The use of the structured programming practicum e-module has also been significantly proven to be quite effective in increasing student learning motivation with an average N-gain of 63.2% and statistical test results with a calculated $t_{\text{value}} > t_{\text{table}}$, namely $23.078 > 1.70$ and a Sig. value of $0.000 < 0.05$. Thus, it is concluded that the developed structured programming practicum e-module is declared feasible, very practical and quite effective in increasing student learning motivation.

Keywords: Practical E-Modules, Learning Motivation, Structured Programming

