

## ABSTRAK

Alfi : *Pengembangan E-Modul Praktikum Pada Mata Pelajaran Administrasi Infrastruktur Jaringan Di Smkn 1 Percut Sei Tuan*. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2024

Berdasarkan observasi yang dilakukan bahwa mekanisme pembelajaran di SMK Negeri 1 Percut Sei Tuan jurusan TKJ mata pelajaran administrasi infrastruktur dan jaringan masih bersifat konvensional atau berpusat pada guru. Guru menjadi acuan utama dan referensi satu-satunya untuk melakukan pembelajaran tanpa adanya buku atau panduan yang bisa di baca atau dilakukan siswa saat guru tidak ada, sehingga menyebabkan pembelajaran menjadi kurang aktif dan kurangnya referensi siswa dalam belajar. Tujuan penelitian ini yaitu mengetahui kelayakan dan efektivitas penggunaan E-modul praktikum pada mata pelajaran administrasi infrastruktur dan jaringan. Jenis penelitian yang digunakan adalah penelitian pengembangan model ADDIE dengan lima tahap prosedur pengembangan: (Analisis, Desain, Pengembangan, Implementasi, Dan Evaluasi). ). Hasil yang diperoleh dari uji kelayakan konten e-modul praktikum berdasarkan validasi uji kelayakan materi memperoleh persentase total 96% “sangat layak”, validasi uji kelayakan bahasa memperoleh persentase total 88% “sangat layak” , validasi uji kelayakan modul memperoleh persentase total 94% “sangat layak” dan validasi uji akseptabilitas pengguna memperoleh persentase total 91% “sangat layak”. Hasil perhitungan pre-test dan post-test di kelas XI TKJ 2, di peroleh nilai rata-rata pre-tets sebesar 51,1 dan post-test sebesar 90,6. Berdasarkan hasil nilai rata-rata pre-test dan post-test diperoleh n-gain nilai rata-rata secara keseluruhan 0.79 termasuk dalam kriteria Tinggi dan dapat dikatakan Efektif digunakan sebagai media pembelajaran interaktif.

**Kata kunci:** E-modul praktikum, Administrasi Infrastruktur dan Jaringan, SMK

## ABSTRACT

Alfi: *Development of E-Module for Practical Training in Network Infrastructure Administration Subject at SMKN 1 Percut Sei Tuan. Thesis. Medan State University Faculty of Engineering. 2024*

Based on observations, the learning mechanism at SMKN 1 Percut Sei Tuan in the Information Technology and Network Administration department for the subject of network infrastructure administration is still conventional or teacher-centered. Teachers serve as the main point of reference and the only source for learning, without any books or guides accessible to students when the teacher is not present. This results in passive learning and a lack of reference materials for students. The aim of this research is to determine the feasibility and effectiveness of using an E-module for practical training in network infrastructure administration. The research method used is the ADDIE development model with five stages: Analysis, Design, Development, Implementation, and Evaluation. The results obtained from the feasibility test of the E-module content, based on material feasibility validation, achieved a total percentage of 96%, deemed "very feasible." Language feasibility validation reached a total percentage of 88%, considered "very feasible." Module feasibility validation obtained a total percentage of 94%, also considered "very feasible." User acceptability validation resulted in a total percentage of 91%, categorized as "very feasible." Pre-test and post-test calculations in class XI TKJ 2 yielded an average pre-test score of 51,1 and a post-test score of 90,6. Based on the average pre-test and post-test scores, the overall n-gain value was 0.79, falling within the "High" criteria, indicating effective use as an interactive learning medium.

**Keywords:** *E-module for practical training, Network Infrastructure and Administration, Vocational School (SMK).*