

ABSTRAK

SAKINATUN NAJMI SIBARANI. Pengembangan *E-Modul* dengan *Platform Flipbook* untuk Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran Sistem Informasi Geografis di SMK Negeri 1 Percut Sei Tuan. Tesis. Medan : Program Pascasarjana Universitas Negeri Medan. 2024.

Penelitian ini bertujuan untuk mengetahui kelayakan dan efektivitas *E-Modul* dengan *platform Flipbook* pada mata pelajaran Sistem Informasi Geografis (SIG) kelas XI Teknik Geospasial SMK Negeri 1 Percut Sei Tuan. Penelitian ini menerapkan metode *Research and Development* (R&D) dengan model ADDIE (*Analysis, Design, Develop, Implement, dan Evaluate*). Subjek penelitian adalah siswa kelas XI Teknik Geospasial SMK Negeri 1 Percut Sei Tuan berjumlah 30 orang. Penelitian ini melibatkan uji validasi oleh ahli materi, ahli media, dan ahli desain pembelajaran, serta tahapan uji coba, yaitu uji coba perorangan pada 3 siswa, uji coba kelompok kecil pada 6 siswa, dan uji coba lapangan terbatas pada 30 siswa. Hasil penelitian menunjukkan *E-Modul* dengan *platform Flipbook* layak digunakan berdasarkan validasi ahli media sebesar 89,17% (sangat layak), validasi ahli materi sebesar 92,13% (sangat layak), dan validasi ahli desain pembelajaran sebesar 88,71% (sangat layak). Pada uji coba perorangan memperoleh skor 91,47% (sangat layak), uji coba kelompok kecil memperoleh skor 92,33% (sangat layak), dan uji coba lapangan memperoleh skor 96,14% (sangat layak). Penggunaan *E-Modul* dengan *platform Flipbook* pada mata pelajaran SIG lebih efektif dibandingkan media papan tulis konvensional, terlihat dari hasil $t_{hitung} = 1,91$ dan $t_{Tabel} = 1,672$, dimana $1,91 > 1,672$ pada taraf signifikan $\alpha = 0,05$. Hal ini menunjukkan bahwa H_0 ditolak dan H_a diterima, atau dengan kata lain, terdapat perbedaan yang signifikan antara hasil belajar siswa pada kelas eksperimen dan kontrol pada taraf signifikansi 5%. Nilai keefektifan *E-Modul* dengan *platform Flipbook* lebih tinggi, yaitu sebesar 84,7%, dibandingkan hasil belajar siswa dengan media papan tulis sebesar 80,8%.

Kata Kunci : *E-Modul, Flipbook, Hasil Belajar Sistem Informasi Geografis, ADDIE.*



ABSTRACT

SAKINATUN NAJMI SIBARANI. Development of E-Modules with Flipbook Platform to Improve Student Learning Outcomes in Geographic Information Systems Subjects at SMK Negeri 1 Percut Sei Tuan. Thesis. Medan: Postgraduate Program, State University of Medan. 2024.

This study aims to determine the feasibility and effectiveness of E-Modules with the Flipbook platform in the Geographic Information Systems (GIS) subject for 11th-grade Geospatial Engineering students at SMK Negeri 1 Percut Sei Tuan. This study uses the Research and Development (R&D) method with the ADDIE model (Analysis, Design, Develop, Implement, and Evaluate). The subjects of this study were 30 students of 11th-grade Geospatial Engineering at SMK Negeri 1 Percut Sei Tuan. The study involves validation tests by subject matter experts, media experts, and instructional design experts, as well as trial phases, including individual trials with 3 students, small group trials with 6 students, and limited field trials with 30 students. The results show that the E-Module with the Flipbook platform is feasible for use, based on media expert validation of 89.17% (very feasible), subject matter expert validation of 92.13% (very feasible), and instructional design expert validation of 88.71% (very feasible). In the field trials, individual trials scored 91.47% (very feasible), small group trials scored 92.33% (very feasible), and limited field trials scored 96.14% (very feasible). The use of E-Modules with the Flipbook platform in GIS subjects is more effective compared to conventional blackboard media, as indicated by t-test results ($t_{count} = 1.91$ and $t_{Table} = 1.672$, where $1.91 > 1.672$) at a significance level of $\alpha = 0.05$. This indicates that H_0 is rejected and H_a is accepted, showing a significant difference in student learning outcomes between the experimental and control classes at a 5% significance level. The effectiveness of the E-Module with the Flipbook platform is higher, at 84.7%, compared to student learning outcomes using blackboard media, which was 80.8%.

Keywords: E-Module, Flipbook, Learning Outcomes, Geographic Information Systems, ADDIE.

