

ABSTRAK

Jumaylin Br. Marpaung. NIM. 8236121010. Pengembangan E-Modul Geografi Berbasis *Project Based Learning* Di SMA Negeri 1 Babalan. Tesis. Medan: Program Studi Teknologi Pendidikan Pascasarjana Universitas Negeri Medan, 2025.

Penelitian Pengembangan E-Modul Geografi Berbasis *Project Based Learning* Di SMA Negeri 1 Babalan merupakan penelitian yang menghasilkan produk berupa bahan ajar dalam bentuk E-Modul yang membuat ragam media pembelajaran yang dapat memfasilitasi gaya belajar peserta didik yang beragam. Penelitian ini bertujuan untuk (1) menganalisis kelayakan E-Modul Geografi berbasis *Project Based Learning* di SMA Negeri 1 Babalan. (2) menganalisis kepraktisan E-Modul Geografi berbasis *Project Based Learning* di SMA Negeri 1 Babalan. (3) menganalisis efektivitas E-Modul Geografi berbasis *Project Based Learning* dalam meningkatkan hasil belajar peserta didik di SMA Negeri 1 Babalan. E-Modul Geografi berbasis *Project Based Learning* dikembangkan dengan berbantuan aplikasi Flipbook. Flipbook adalah media digital yang menyajikan pengalaman interaktif dengan menggabungkan animasi, teks, video, gambar, audio, dan navigasi. Hal ini membuat pembelajaran menjadi lebih menarik dan interaktif bagi peserta didik. Metode penelitian yang digunakan adalah pendekatan kualitatif dan kuantitatif dengan menggunakan model ADDIE, yang terdiri dari tahapan (1) Analisis, (2) Desain, (3) Pengembangan, (4) Implementasi, dan (5) Evaluasi. Berdasarkan (1) hasil uji validasi ahli materi, E-Modul sangat layak digunakan dengan perolehan rata-rata 98%. (2) Hasil uji validitas ahli media, E-Modul berbasis PjBL sangat layak dengan rata-rata 87%. (3) Hasil uji validitas ahli desain sangat layak dengan perolehan rata-rata 86. (4) Berdasarkan hasil kepraktisan E-Modul dalam kategori sangat praktis dengan rata-rata 94,3%. (5) Hasil penelitian menunjukkan pada kelas eksperimen diperoleh nilai rata-rata 85,83 dengan standar deviasi 10,051, sedangkan kelas kontrol rata-rata nilai adalah 83,77 dengan standar deviasi 16,261. Berdasarkan nilai tersebut kelas eksperimen nilai rata-ratanya lebih tinggi dari pada kelas kontrol. (6) Hasil uji *independent sample t-test* atau Uji-T terhadap hasil belajar peserta didik kelas eksperimen menunjukkan bahwa hasil uji diperoleh nilai t_{hitung} sebesar 2,37, sedangkan nilai t_{tabel} sebesar 1,670, maka ada perbedaan hasil belajar kelas eksperimen dengan kelas kontrol dimana hasil belajar peserta didik meningkat.

Kata kunci: E-Modul, Geografi, Project Based Learning, Model ADDIE, Hasil Belajar.

ABSTRACT

Jumaylin Br. Marpaung. NIM. 8236121010. Development of a Project Based Learning-Based Geography E-Module at SMA Negeri 1 Babalan. Thesis. Medan. Postgraduate Educational Technology Program of Universitas Negeri Medan, 2025.

Development Research of Geography E-Module Based on Project-Based Learning at SMA Negeri 1 Babalan. This development research aimed to produce a Geography E-Module based on Project-Based Learning (BjBL). The module was designed to integrate various learning media to accommodate the diverse learning styles of students. The objectives of this study were to: (1) Analyze its feasibility (2) assess its practicality, and (3) evaluate its effectiveness in improving students' learning outcomes at SMA Negeri 1 Babalan. A Geography e-Module based on Project-Based Learning is developed with the help of a Flipbook application. A Flipbook is a digital medium that delivers an interactive experience by combining animation, text, video, images, audio, and navigation. This makes learning more engaging and interactive for students. The research method was both qualitative and quantitative approach, applying the ADDIE development model, which consists of five stages: (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. The validation results show that: (1) Based on material expert validation, the E-Module is highly feasible with an average score of 98%. (2) Based on media expert validation, the Project-Based Learning E-Module is highly feasible with an average score of 87%. (3) Design expert validation results also show high feasibility with an average score of 86%. (4) The practicality of the E-Module is categorized as very practical with an average score of 94.3%. The research results show that experimental class trials revealed an average score of 85.83 with a standard deviation of 10.051, while the control class had an average score of 83.77 with a standard deviation of 16.261. Based on those scores, the experimental class has a higher average than the control class. Furthermore, the results of the independent sample t-test for student learning outcomes in the experimental class showed a t-value of 2.37, while the critical t-table value was 1.670, thus there is a difference in learning outcomes between the experimental class and the control class, with the experimental group showing improved student achievement.

Keywords: E-Module, Geography, Project Based Learning, ADDIE Model, Learning Outcomes.