

ABSTRAK

Irma Aprilda Sinaga : Pengembangan Media Interaktif berbasis *Project Based Learning* pada mata pelajaran IPAS Kelas X SMKN 3 Medan. Tesis. Program Pascasarjana, Program Studi Teknologi Pendidikan, Universitas Negeri Medan, 2025

Penelitian ini bertujuan untuk mengetahui kelayakan, kepraktisan dan keefektifan media interaktif berbasis *Project Based Learning* menggunakan aplikasi canva pada materi Energi dan Perubahannya di kelas X SMKN 3 Medan. Jenis penelitian ini adalah penelitian pengembangan yang menggunakan model ADDIE. Adapun tahapan – tahapannya adalah sebagai berikut: (1) Tahapan *Analysis* untuk melakukan studi pendahuluan, (2) Tahapan *Design* untuk merancang media interaktif, (3) Tahap Develop untuk pembuatan produk dan uji kelayakan oleh ahli, (4) Tahapan *implementation* untuk uji produk, dan (5) Tahap Evaluasi untuk uji kepraktisan dan uji keefektifan produk. Hasil persentasi uji kelayakan materi diperoleh 91% dengan kategori Sangat Layak, Uji kelayakan desain diperoleh sebesar 88,9% dengan kategori Sangat Layak dan Uji Kelayakan media diperoleh sebesar 86,3 % dengan kategori Sangat Layak. Sedangkan hasil uji kepraktisan dilakukan kepada guru dan siswa dengan perolehan rata – rata 89,7 % untuk guru dengan kategori Sangat Praktis dan 89% Uji Kepraktisan pada peserta didik dengan kategori sangat praktis. Hasil percobaan penggunaan media interaktif canva berbasis *Project Based Learning* pada kelas eksperimen mendapatkan rata–rata nilai post test 82, sedangkan siswa yang diajarkan tanpa menggunakan media interaktif canva berbasis *Project Based Learning* mendapatkan rata – rata nilai post test 60. Pengujian hipotesis menggunakan *Indenpendent t* -test, mendapatkan hasil sig (2 tailed) sebesar 0,000 yang mana hasil tersebut $< 0,005$ sehingga dapat disimpulkan bahwa terdapat perbedaan hasil belajar yang signifikan antara kelas eksperimen yang dibelajarkan menggunakan media interaktif canva berbasis *Project Based Learning* dengan kelas kontrol yang tanpa menggunakan media interaktif canva berbasis *Project Based Learning*. Berdasarkan uraian diatas maka dapat disimpulkan bahwa media pembelajaran interaktif canva berbasis *Project Based Learning* sangat layak, sangat praktis dan efektif digunakan oleh siswa SMKN 3 Medan.

Kata kunci : Media Pembelajaran Interaktif, *Project Based Learning*, IPAS, Hasil Belajar, Canva, Energi dan Perubahannya, SMKN 3 Medan.

ABSTRACT

Irma Aprilda Sinaga: Development of Interactive Media based on *Project Based Learning* in the subject of Science Class X SMKN 3 Medan. Thesis. Postgraduate Program, Educational Technology Study Program, State University of Medan, 2025

This study aims to determine the feasibility, practicality and effectiveness of interactive media based on *Project Based Learning* using the Canva application on Energy and Its Changes material in class X of SMKN 3 Medan. This type of research is development research using the ADDIE model. The stages are as follows: (1) Analysis stage to conduct a preliminary study, (2) Design stage to design interactive media, (3) Develop stage for product creation and feasibility testing by experts, (4) Implementation stage for product testing, and (5) Evaluation stage for practicality testing and product effectiveness testing. The results of the material feasibility test percentage were obtained 91% with the Very Feasible category, the design feasibility test was obtained 88.9% with the Very Feasible category and the media feasibility test was obtained 86.3% with the Very Feasible category. While the results of the practicality test were carried out on teachers and students with an average of 89.7% for teachers with the Very Practical category and 89% Practicality Test on students with the very practical category. The results of the experiment using interactive media canva based on Project Based Learning in the experimental class got an average post-test score of 82, while students who were taught without using interactive media canva based on Project Based Learning got an average post-test score of 60. Hypothesis testing using Independent t-test, got a sig result (2 tailed) of 0.000 which is <0.005 so it can be concluded that there is a significant difference in learning outcomes between the experimental class taught using interactive media canva based on *Project Based Learning* and the control class without using interactive media canva based on *Project Based Learning*. Based on the description above, it can be concluded that interactive learning media canva based on *Project Based Learning* is very feasible, very practical and effective for use by students of SMKN 3 Medan.

Keyword : Interactive Learning Media, *Project Based Learning*, Canva, Learning Outcomes, IPAS, Vocational Education.