

ABSTRAK

Indah Mutiara Dewi, NIM 4201131028 (2024). Pengembangan E-Modul Berbasis Project Based Learning Dengan Menggunakan Kvisoft Flipbook Maker Pada Materi Asam Basa.

Penelitian ini bertujuan untuk mengetahui analisis kebutuhan, tingkat validitas, respon peserta didik dan guru, dan hasil belajar peserta didik terhadap emodul Berbasis *Project Based Learning* pada materi asam basa. Metode penelitian yang digunakan adalah *Research and Development* dengan model penelitian yang digunakan adalah model pengembangan ADDIE. Populasi dalam penelitian ini adalah siswa kelas XI MIPA SMAN 3 Medan. Sampel dalam penelitian ini diambil secara *purposive sampling* sebanyak satu kelas yakni kelas XI MIPA 5. Hasil penelitian yang diperoleh berdasarkan analisis kebutuhan yaitu kurangnya penggunaan bahan ajar yang dapat membantu peserta didik pada pembelajaran kimia. Kemampuan peserta didik dalam menghubungkan materi yang dipelajari tentang proyek dalam kehidupan sehari-hari juga menjadi salah satu tuntutan dalam pembelajaran kimia. Berdasarkan validitas menunjukkan bahwa e-modul yang dikembangkan dinyatakan valid oleh validator dengan kriteria “Sangat Layak” dengan rata-rata validasi skor 3,38, kemudian berdasarkan hasil pengolahan angket respon siswa dan guru, diperoleh bahwa e-modul yang dikembangkan secara keseluruhan mendapatkan persentase sebesar 79% dan 92,64% yang termasuk kedalam kriteria “Baik” dan “Sangat Baik”. Uji hipotesis dengan *One Sample T-Test* $\alpha = 0,05$ diperoleh $t_{hitung} = 7,605$, sedangkan $t_{tabel} 1,697$. Hal ini menunjukkan bahwa $t_{hitung} > t_{tabel}$ ($7,605 > 1,697$). Artinya H_0 ditolak, H_a diterima sehingga dapat disimpulkan *e-modul* pembelajaran kimia berbasis proyek pada materi asam basa lebih besar dari nilai KKM.

Kata kunci: E-modul, berbasis *Project Based Learning*, asam basa, model ADDIE

ABSTRACT

Indah Mutiara Dewi, NIM 4201131028 (2024). Development of E-Modules Based on Project Based Learning Using Kvisoft Flipbook Maker on AcidBase Material.

This research aims to determine the needs analysis, level of validity, student and teacher responses, and student learning outcomes regarding Project Based Learning e-modules on acid-base material. The research method used is Research and Development with the research model used is the ADDIE development model. The population in this study were class XI MIPA students at SMAN 3 Medan. The sample in this study was taken by purposive sampling from one class, namely class XI MIPA 5. The research results obtained were based on a needs analysis, namely the lack of use of teaching materials that could help students in learning chemistry. Students' ability to relate material learned about projects to everyday life is also one of the demands in chemistry learning. Based on validity, it shows that the e-module developed was declared valid by the validator with the criteria "Very Eligible" with an average validation score of 3.38, then based on the results of processing student and teacher response questionnaires, it was found that the e-module developed as a whole received a percentage of amounting to 79% and 92.64% which are included in the "Good" and "Very Good" criteria. Testing the hypothesis with One Sample T-Test $\alpha = 0.05$ obtained $t_{\text{count}} = 7.605$, while $t_{\text{table}} 1.697$. This shows that $t_{\text{count}} > t_{\text{table}}$ ($7.605 > 1.697$). This means that H_0 is rejected, H_a is accepted so it can be concluded that the project-based chemistry learning e-module on acid-base material is greater than the KKM value.

Keywords: E -module, based on Project Based Learning, acid base, ADDIE model