ABSTRAK

Lumban Tobing, Lestina M, NIM 4203121041 (2020). Pengembangan Multimedia Pembelajaran Berbasis Pendekatan Kontekstual Menggunakan Adobe Flash CS6 Materi Termodinamika Pada Siswa SMA.

Penelitian ini bertujuan untuk mengembangkan multimedia pembelajaran berbasis pendekatan kontekstual pada materi termodinamika dan menganalisis kelayakan multimedia pembelajaran ditinjau dari tingkat kelayakan, kepraktisan dan keefektifan multimedia. Jenis penelitian yang digunakan yaitu *Research and Development* (R&D) yang menggunakan model ADDIE. Teknik pengumpulan data berupa angket kelayakan, respon siswa, serta tes hasil belajar berupa pre-test dan post-test. Penelitian ini dilakukan melalui tahapan analisis, desain, pengembangan, implementasi, dan evaluasi. Subjek penelitian ini meliputi dua dosen fisika dan guru fisika sebagai validator, serta siswa kelas XI MIA 2 SMA Negeri 1 Sumbul. Hasil penelitian berupa tingkat kelayakan diperoleh persentasi rata-rata 94,54 % dengan kategori sangat layak, tingkat kepraktisan multimedia memperoleh persentasi rata-rata 93,3 % pada uji coba kelompok kecil dan 94,7 % pada uji coba kelompok besar dengan kategori sangat praktis. Sedangkan, tingkat keefektifan multimedia diperoleh N-gain sebesar 0,80 yang menunjukkan terdapat peningkatan pada hasil belajar siswa yang dilihat dari hasil pre-test dan post-test. Tingkat keefektifan multimedia pembelajaran fisika berbasis kontekstual pada materi termodinamika ini dinyatakan layak, praktis dan efektif.

Kata Kunci: Multimedia, Pembelajaran Kontekstual, Termodinamika

ABSTRACT

Lumban Tobing, Lestina M, NIM 4203121041 (2020). Development of Learning Multimedia Based on Contextual Approach Using Adobe Flash CS6 Thermodynamics Material for High School Students.

This study aims to develop learning multimedia based on a contextual approach to thermodynamic material and analyze the feasibility of learning multimedia in terms of the level of feasibility, practicality and effectiveness of multimedia. The type of research used is Research and Development (R&D) which uses the ADDIE model. Data collection techniques are in the form of feasibility questionnaires, student responses, and learning outcomes tests in the form of pre-test and post-test. This research was conducted through the stages of analysis, design, development, implementation, and evaluation. The subjects of this study included two physics lecturers and physics teachers as validators, as well as students of class XI MIA 2 SMA Negeri 1 Sumbul. The results of the study in the form of feasibility level obtained an average percentage of 94.54% with a very feasible category, the level of practicality of multimedia obtained an average percentage of 93.3% in the small group trial and 94.7% in the large group trial with a very practical category. Meanwhile, the effectiveness level of multimedia obtained N-gain of 0.80 which shows that there is an increase in student learning outcomes seen from the pre-test and post-test results. The level of effectiveness of contextual-based physics learning multimedia on thermodynamic material is declared feasible, practical and effective.

***Keywords**: Multimedia, Contextual Learning, Thermodynamics*