

ABSTRAK

Ririn Anggraini, NIM 4202421028 (2024), Pengembangan Bahan Ajar Berupa E-Modul Fisika Berbasis Saintifik Berbantuan *Flip PDF Corporate Edition* pada Materi Gelombang Bunyi di kelas XI SMA

Penelitian ini di latar belakang oleh rendahnya hasil belajar peserta didik pada mata pelajaran fisika dan keterbatasan bahan ajar berupa e-modul yang dimiliki guru. Tujuan penelitian ini yaitu untuk menghasilkan E-Modul berbasis saintifik pada materi gelombang bunyi yang layak, praktis, dan efektif. Subjek dalam penelitian ini adalah peserta didik kelas XI IPA SMA Swasta Nurul Islam Indonesia. Penelitian ini dilakukan dengan metode *Research and Development (R&D)* dan model ADDIE (*Analysis, Design, Development, Implementation dan Evaluation*). Instrumen yang digunakan dalam penelitian ini terdiri dari lembar uji kelayakan ahli materi dan ahli media, angket kepraktisan guru dan peserta didik, instrumen tes hasil belajar, serta wawancara. Hasil dari penelitian ini adalah telah dihasilkannya E-Modul berbasis saintifik yang layak ditinjau dari kelayakan ahli materi dengan presentase 93,75% dan ahli media dengan presentase 92,30% yang termasuk kategori sangat layak digunakan dalam proses pembelajaran fisika. Hasil uji kepraktisan guru fisika terhadap e-modul yang dikembangkan dengan persentase 93% dengan kategori sangat praktis, dan hasil uji kepraktisan oleh peserta didik mendapatkan rata-rata persentase 90,25% dengan kategori sangat praktis. Hasil penilaian tes hasil belajar pada peserta didik memperoleh skor N-gain sebesar 0,71 dengan kategori tinggi, maka E-Modul dikatakan efektif. Dengan demikian disimpulkan bahwa E-Modul yang dikembangkan sangat layak, sangat praktis dan sangat efektif digunakan dalam pembelajaran fisika.

Kata kunci : E-Modul, Pendekatan Saintifik, Gelombang Bunyi



ABSTRACT

Ririn Anggraini, NIM 4202421028 (2024), Development of Teaching Materials in the Form of Scientific-Based Physics E-Modules Assisted by Flip PDF Corporate Edition on Sound Wave Material in class XI SMA

This research is motivated by the low learning outcomes of students in physics subjects and the limited teaching materials in the form of e-modules owned by teachers. The purpose of this study is to produce a scientific-based E-Module on sound wave material that is feasible, practical, and effective. The subjects in this study were students of class XI IPA at SMA Swasta Nurul Islam Indonesia. This research was conducted using the Research and Development (R&D) method and the ADDIE (Analysis, Design, Development, Implementation and Evaluation) model. The instruments used in this study consisted of material expert and media expert feasibility test sheets, teacher and student practicality questionnaires, learning outcome test instruments, and interviews. The results of this study are that a scientific-based E-Module has been produced that is feasible in terms of the feasibility of material experts with a percentage of 93.75% and media experts with a percentage of 92.30% which is included in the category of very feasible for use in the physics learning process. The results of the physics teacher's practicality test on the developed e-module with a percentage of 93% with a very practical category, and the results of the practicality test by students obtained an average percentage of 90.25% with a very practical category. The results of the learning outcome test assessment on students obtained an N-gain score of 0.71 with a moderate category, so the E-Module is said to be effective. Thus it is concluded that the developed E-Module is very feasible, practical and effective to use in physics learning.

Keywords: E-Module, Scientific Approach, Sound Waves

