

## ABSTRAK

### **Galih Ramadhan. 2023. PENGEMBANGAN E-MODUL BERBASIS MODEL PEMBELAJARAN DISCOVERY LEARNING MENGGUNAKAN POWERPOINT DAN FLIP PDF COORPORATE PADA MATERI ALAT OPTIK**

E-Modul dikemas sedemikian rupa untuk membantu dalam proses pembelajaran fisika. Tujuan penelitian ini adalah untuk mengetahui tingkat kevalidan dan kepraktisan E-Modul berbasis model pembelajaran *Discovery Learning* menggunakan *Powerpoint* dan *Flip Pdf Corporate* pada materi Alat Optik. Jenis penelitian adalah penelitian *Research and Development* (R & D) dengan menggunakan model pengembangan *Analysis, Design, Development, Implementation, Evaluation* (ADDIE). Teknik pengumpulan data menggunakan wawancara kepada satu guru fisika SMA Negeri 1 taraju, angket uji validitas kepada tiga ahli, angket kepraktisan kepada 64 siswa SMA Negeri 1 Taraju dan satu guru fisika SMA Negeri 1 Taraju. Data dianalisis dengan cara kualitatif dan kuantitatif. Data kualitatif berupa hasil wawancara serta saran dan komentar dari validator, sedangkan data kuantitatif berupa penilaian validator, guru, dan siswa menggunakan *skala likert* pada angket kevalidan dan kepraktisan e-modul. Hasil penelitian menunjukkan bahwa rata-rata persentase validasi ahli materi sebesar 81% dengan kriteria sangat valid. Persentase validasi ahli media sebesar 82% dengan kriteria sangat valid. Persentase validasi ahli bahasa sebesar 88% dengan kategori sangat praktis. Hasil uji kepraktisan siswa mendapatkan hasil persentase 85% sedangkan hasil uji kepraktisan guru mendapatkan persentase 89% dengan kategori sangat praktis. E-Modul berbasis model pembelajaran *Discovery Learning* menggunakan *Powerpoint* dan *Flip Pdf Corporate* pada materi Alat Optik yang dikembangkan memenuhi kriteria sangat valid dan praktis untuk digunakan dalam proses pembelajaran.

Kata kunci: Alat Optik, E-modul, *Flip Pdf Corporate*, *Powerpoint*.

## **ABSTRACT**

**Galih Ramadhan. 2023. DEVELOPMENT OF E-MODULES BASED ON DISCOVERY LEARNING MODELS USING POWERPOINT AND FLIP PDF COORPORATE ON OPTICAL DEVICE MATERIALS**

*The e-module is packed in such a way as to assist the physics learning process. The purpose of this study was to determine the level of validity and practicality of the E-Module based on the Discovery Learning model using Powerpoint and Flip Pdf Corporate on Optical Instrument material. This type of research is Research and Development (R&D) which used the Analysis Development Model, Design, Development, Implementation, and Evaluation (ADDIE). The data collected used the interview technique with one physics teacher in 1 Taraju Senior High School, validity test questionnaires with three experts, and practicality questionnaires with 64 students of 1 Taraju State Senior High School as well as one physics teacher. The data were analyzed utilizing qualitative and quantitative methods. Qualitative data is in the form of interview results as well as suggestions and comments from validators, while quantitative data is in the form of validator, teacher, and student assessments using the Likert scale in the validity and practicality questionnaire of e-modules. The research results show that the average percentage of material expert validation is 81% with the criteria of strongly valid, the percentage of media expert validation was 82% with strongly valid criteria, and the percentage of linguists validation was 88% with the strongly practical category. The results of the practicality test for students get a percentage of 83% while the results of the practicality test for teachers get a percentage of 89% in the strongly practical category. E-Module based on the Discovery Learning learning model using Powerpoint and Flip Pdf Corporate on the Optical Device material developed meets strongly valid and practical criteria for use in the learning process.*

*Keyword: Optical Device, E-module, Flip Pdf Corporate, Powerpoint.*