

## ABSTRAK

**Rizky Ruanda.** PENGEMBANGAN E-MODUL BERBANTUAN *E-FLIPBOOK* PADA MATERI VEKTOR KELAS X SMK NEGERI 1 PACITAN. Skripsi. Pacitan: STKIP PGRI Pacitan, 2024.

Salah satu peran krusial guru yakni mengembangkan dan memanfaatkan teknologi untuk meningkatkan kualitas Sumber Daya Manusia (SDM) di bidang pendidikan. Wujud integrasi teknologi dapat dilakukan melalui bahan ajar. Adapun tujuan dari penelitian ini yakni: (1) mengembangkan e-modul berbantuan *e-flipbook*, (2) mengetahui kelayakan produk, (3) mengetahui kualitas e-modul berbantuan *e-flipbook* yang telah dikembangkan.

Penelitian ini merupakan penelitian pengembangan (R&D) dengan model ADDIE (*Analysis, Design, Development, Implementation, Evaluation*). Instrumen yang digunakan dalam penelitian ini adalah e-modul dan angket respon siswa. Validasi ahli terdiri dari validasi ahli materi, validasi ahli media, dan validasi ahli bahasa dengan 6 validator yang terdiri dari guru matematika dan dosen Pendidikan Matematika. Validasi tersebut dilakukan untuk mengetahui kelayakan dan kualitas e-modul berbantuan *e-flipbook* yang sedang dikembangkan. Adapun penelitian ini dilakukan di SMK Negeri 1 Pacitan dengan subjek penelitian siswa kelas X RPL sebanyak 23 siswa untuk kelas uji coba terbatas dan kelas X TKJ 1 sebanyak 30 siswa untuk kelas uji coba lapangan. Teknik analisis data yang digunakan adalah analisis deskriptif data kualitatif dan kuantitatif.

Hasil validasi ahli materi pada aspek kesesuaian materi memiliki persentase skor 100%, aspek keruntutan materi 97%, aspek kelengkapan dan kedalaman materi 100%, dan aspek gambar/grafik 100%. Hasil validasi ahli media pada aspek kemudahan akses media memiliki persentase skor 98%, aspek relevansi gambar dengan materi 98%, aspek jenis *font* (huruf) mudah dibaca 92%, dan aspek ukuran *font* (huruf) mudah dibaca 97%. Hasil validasi ahli bahasa pada aspek lugas dan mudah dimengerti memiliki persentase skor 90%, aspek kaidah kebahasaan 90%, dan aspek penggunaan kalimat dapat mewakili pesan atau informasi yang hendak disampaikan 87%. Hasil uji coba terbatas pada aspek kualitas sistem memiliki persentase skor 79%, aspek kepuasan pengguna 79%, dan aspek pengetahuan atau kualitas informasi 81%. Hasil uji coba lapangan pada aspek kualitas sistem memiliki persentase skor 83%, aspek kepuasan pengguna 87%, dan aspek pengetahuan atau kualitas informasi 85%.

Berdasarkan hasil validasi ahli dan uji coba pengembangan, hasil penelitian ini menunjukkan bahwa: (1) e-modul dikembangkan berbantuan *e-flipbook* dengan materi vektor, (2) produk yang dikembangkan mempunyai kualitas sangat baik atau sangat layak digunakan, (3) e-modul yang dikembangkan berbantuan *e-flipbook* mempunyai kualitas sangat baik atau sangat layak digunakan dalam proses pembelajaran.

**Kata kunci:** E-module, *E-flipbook*, Pengembangan.

## ABSTRACT

Rizky Ruanda. *DEVELOPMENT OF E-MODULES ASSISTED BY E-FLIPBOOK ON VECTOR MATERIAL CLASS X SMK NEGERI 1 PACITAN*. Thesis. Pacitan: STKIP PGRI Pacitan, 2024.

One of the crucial roles of teachers is to develop and utilize technology to improve the quality of Human Resources (HR) in education. The form of technology integration can be done through teaching materials. The objectives of this research are: (1) developing e-modules assisted by e-flipbook, (2) knowing the feasibility of the product, and (3) knowing the quality of e-modules assisted by e-flipbook that has been developed.

This is a research and development (R&D) with the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). The instruments used in this research are e-modules and student response questionnaires. Expert validation consists of material expert validation, media expert validation, and linguist validation with 6 validators consisting of mathematics teachers and Mathematics Education lecturers. The validation was carried out to determine the feasibility and quality of the e-module assisted by the e-flipbook that was being developed. The research was conducted at SMK Negeri 1 Pacitan with research subjects of X RPL class of 23 students for the limited trial class and X TKJ 1 class of 30 students for the field trial class. The data analysis technique used is a descriptive analysis of qualitative and quantitative data.

The results of material expert validation in the material suitability aspect have a percentage score of 100%, the aspect of material conciseness 97%, the aspect of completeness and depth of material 100%, and the aspect of images/graphics 100%. The results of media expert validation on the aspect of easy media access have a percentage score of 98%, the aspect of the relevance of images to the material 98%, the aspect of font type (letter) is easy to read 92%, and the aspect of font size (letter) is easy to read 97%. The results of linguist validation on the aspect of straightforward and easy to understand have a percentage score of 90%, the aspect of linguistic rules is 90%, and the aspect of using sentences can represent the message or information to be conveyed at 87%. The results of the limited trial on the system quality aspect have a percentage score of 79%, the aspect of user satisfaction 79%, and the aspect of knowledge or information quality 81%. The results of the field trial on the system quality aspect have a percentage score of 83%, the aspect of user satisfaction 87%, and the aspect of knowledge or information quality 85%. Based on the results of expert validation and development trials, the study results indicate that (1) e-modules were developed with the help of e-flipbook with vector material, (2) the products developed have Very Good quality or very feasible to use, (3) e-modules developed with the help of e-flipbook have Very Good quality or very feasible to use in the learning process.

**Keywords:** E-module, E-flipbook, Development.