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DEVELOPMENT OF FLIP PDF CORPORATE EDITION FLIP BASED E-MODULE TEACHING MATERIALS ON TRANSACTION DOCUMENT MANAGEMENT MATERIALS IN CLASS X VOCATIONAL SCHOOLS

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Abstract

The implementation of the 2013 curriculum requires students to be creative, innovative, and This research aims to analyze the e-module design, analyze the feasibility of the e-module content, and determine expert validation tests for the e-module. E-module teaching materials developed using flip pdf corporate edition on transaction document management material in class X SMK. This research includes research and development (R&D) which uses 3D models, namely Define, Design and Development. There are 3 expert validators to assess the product being developed from the e-module design aspect, the suitability aspect of the e-module content, and the e-module teaching material aspect. The validity test results for the e-module design aspect were 88.33% in the very feasible category, then the feasibility aspect of the e-module content was 85.41 in the very feasible category, and the e-module teaching materials aspect was 75% in the very feasible category. very worthy category. The total results obtained from expert validation of e-module teaching materials were 82.91%, included in the very suitable category.

Keywords: *Development, Teaching Materials, E-Modules, Flip PDF Corporate Edition*

INTRODUCTION

Education is an important component that humans must have, because it is a planned effort to realize an active learning process. The use of technology and delivery of Independent Curriculum learning has been implemented as a form of improvement and 21st century skills (Asrowi et al., 2019; Ramadhani & Fitri, 2020; Wibowo & Purnamasari, 2019).

Therefore, innovation in making teaching materials is very necessary to achieve learning success. Teaching materials are a collection of materials that are systematically arranged as independent learning media (Magdalena, et al., 2020; Martatiana, et al., 2022; Poerwanti Hadi Pratiwi & Nur Hidayah, 2017). Teaching materials are tools that help teachers or educators in carrying out the teaching process (Arsanti, 2018; Hamid & Alberida, 2021; Syahda Puspita Husada, 2020).

Electronic teaching materials are learning materials created for students so that they can easily learn inside and outside the classroom which are used in digital form which makes the learning process more interactive (Anggraini et al., 2021; Utami & Lena, 2022; Yulaika, et al., 2020). These electronic teaching materials are called E-modules which are digital teaching materials. E-modules are a development of printed modules in digital form which are adapted from printed modules, and can be accessed via devices (Muhasim, 2017; Seruni

et al., 2019; Sugihartini & Jayanta, 2017). E-modules are also a form of independent learning media that is prepared in digital form (Rahmi, 2019; Ratnawati & Khaharsyah, 2022; Syamsiah et al., 2018).

Flip PDF Corporate Edition is an application for creating flip-based e-modules that have a book-like appearance with content in it that can add animation or video, both offline and online videos, and can add audio and images for explanations of the material (Sumarni & Dwitianti, 2022; Susanti & Sholihah, 2021; Zinnurain, 2021).

Empirical studies of previous research have produced e-modules which are contextually based electronic teaching materials that are effective and suitable for use (Hardini & Susanti, 2020; Prinstin & Handayati, 2020; Suherja et al., 2022). Apart from that, other research concluded that e-modules were assisted by the Flip Builder application. (Agustina & Efendi, 2021; GAN & Thohiri, 2022; Tsaniya Putra & Khofya Haqiqi, 2022). There is also research which concludes that interactive electronic modules using Flip PDF Professional are suitable for training students' learning skills, because they are valid, practical and effective in the very good category (Arini & Kustijono, 2017; Ellysia & Irfan, 2021; Rohmah & Sakti, 2022).

In this way, the research objectives can be developed, namely (1) Analyzing the design of the flip pdf corporate edition based e-module on transaction document management material, (2) Analyzing the feasibility of the content of the flip pdf corporate edition e-module based on transaction document management material, and (3) Know the expert validation test of e-module teaching materials developed using flip pdf corporate edition on transaction document management material in class X vocational schools.

METHOD

This research uses the research and development (R&D) method, which is defined as a scientific way of conducting research, carrying out designs, and being able to produce and test the validity of products (Sugiyono, 2022). A 3D development model consisting of Define, Design and Development is used.

The teaching materials developed are electronic teaching materials for transaction document management using Flip PDF Corporate Edition. The validity test was carried out using an expert assessment sheet (questionnaire) with three aspects, namely design, content, and material.

Validator assessment of flipbook-based e-module validation by calculating the feasibility percentage, then analyzing it.

RESULTS AND DISCUSSIONS

Results

The research process for developing flipbook-based e-modules consists of three stages, namely definition, design and development. For the definition stage, the researcher explained the problems found in the field, namely in the teacher's teaching and learning activities.

The first stage, design, designs a flipbook-based e-module on transaction document management material. The flipbook-based e-module contains a cover, foreword, table of contents, learning objectives, illustrations, material presentation, summary, practice questions, and bibliography. This research uses Kvisoft Flipbook Marker (Puspitasari et al., 2020; Wijaya et al., 2021).

The next stage is the development stage. After the e-module is produced, then submit the e-module to be reviewed and validated by an expert validator which includes material validation, content validation and design validation.

The feasibility of this e-module in transaction document management material is seen from the results of e-module design validation, content feasibility validation, and e-module teaching material validation carried out by expert validators. This e-module is available at <https://online.flipbuilder.com/rfgsp/swmt/>. Table 1 below is the result of calculating the validity of e-module design aspects.

Table 1. Validation Test Results for E-Module Design Aspects

Validation	Score	Maximum Score	Percentage	Category
Expert 1	38	40	95%	Very worthy
Expert 2	33	40	82.5%	Very worthy
Expert 3	35	40	87.5%	Very worthy
Average	35.33%	40	88.33%	Very worthy

From table 1 above, it is known that the feasibility of the content of electronic teaching materials using the Flip PDF Corporate Edition developed is at a very feasible or valid level with an average percentage of 88.33%. Table 2 below is the result of calculating the validity of the feasibility aspect of the module content.

Table 2. Validation Test Results for Content Feasibility Aspects

Validation	Score	Maximum Score	Percentage	Category
Expert 1	28	32	87.5%	Very Worth It
Expert 2	28	32	87.5%	Very Worth It
Expert 3	26	32	81.25%	Very Worth It
Average	27.33%	32	85.41%	Very Worth It

From table 2 above it is known that the use of learning media in electronic teaching materials using Flip PDF Professional which was developed is at a very feasible or valid level with an average percentage of 87.5%. Table 3 below is the result of calculating the validity of media aspects.

Table 3. Validity Test Results for E-module Teaching Material Aspects

Validation	Score	Maximum Score	Percentage	Category
Expert 1	15	20	75%	Worthy
Expert 2	15	20	75%	Worthy
Expert 3	15	20	75%	Worthy
Average	15	20	75%	Worthy

The results of the media aspect validity test in table 3 show that the use of the learning media developed is at a feasible or valid level with an average percentage of 75%. Table 4 below is the result of the total validity test.

Table 4. Total Validity Test Results

ASPECT	AVERAGE VALUE	CATEGORY
E-Module Design	88.33%	Very Worth It
Content Eligibility	85.41%	Very Worth It
E-Module Teaching Materials	75%	Worthy
Average	82.91%	Very Worth It

The results of expert validation interpretation show an average of 82.91%, which means that the flip PDF corporate edition based e-module on transaction document management material is in the very suitable category for use in learning. This is the same as other research

which obtained an overall validation average of 88.87% with a very feasible category (Fahrezi & Susanti, 2021). Furthermore, other research also obtained an average final feasibility validation result of 86.6%, categorized as very feasible (Wijaya et al., 2021).

Discussion

The average expert validation test results for the e-module design aspect are rated in the very feasible category. Then the average expert validation test results for the suitability aspect of the content were assessed in the very suitable category referring to the Likert scale interpretation. These results reflect that the electronic teaching materials developed have used good language, correct sentence structures, consistent use of terms, and consistency in the use of good symbols, so that the teaching materials developed are at the stage of being suitable for use.

From the total results of testing the validity of e-module design aspects, suitability of e-module content, and teaching materials assessed by 3 expert validators, it is known that the e-module developed with Flip PDF Corporate Edition is classified as very good. This means that the electronic teaching materials developed have fulfilled the aspects of e-module design, content suitability, and e-module teaching materials, so that these electronic teaching materials have been tested and can be used in the field.

In accordance with other research, the development of interactive teaching materials assisted by the Flip PDF Corporate Edition application on telephone handling material was declared suitable for use in the learning process (Anggraeni & Puspasari, 2022; Asnawati, & Sutiah, 2023; Susanti & Sholihah, 2021). Then other studies also show research results, namely results with very valid interpretations (Kusuma Dewi et al., 2023; Silmi & Rachmadyanti, 2018; Simanihuruk & Hia, 2022). Thus, the development of interactive teaching materials can make it easier for students to understand the material being studied, and can help teachers to add learning media references during the teaching and learning process.

CONCLUSION

Development of an e-module based on Flip Pdf Corporate Edition on transaction document management material using 3D models, namely Define, Design and Development. The validation results obtained from e-module design experts were 88.33%, then the results obtained from validation experts for content suitability were 85.41%, and the results obtained from expert validation of e-module teaching materials were 75%. The total results obtained from expert validation of e-module teaching materials were 82.91% in the very suitable category, therefore the Flip PDF Corporate Edition-based e-module is ready to be tested in the field.

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