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**BUSINESS REGISTRATION E-MODULE DEVELOPMENT USING “SI-APIK”
DIGITAL APPLICATIONS TO IMPROVE STUDENT SOFT SKILLS IN BUSINESS
SIMULATION COURSES**

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ABSTRACT

This study aims to develop E-Module business recording using the digital application "Si-Apik" by testing the level of user needs, expert validator assessment, comprehension of participants and user evaluation. Type of this research is Research & Development (R&D) with the ADDIE model which consists of four stages, Analys, Design, Development, Implementation and Evaluation. The research instrument method used in this study was observation, interviews, questionnaires and validation. The research subjects are 60 D3 Business Administration students who have studied Business Simulation. E-Module business recording using "Si-Apik" digital application was declared very good for use as a learning media with the results of the validation details for the material expert at 4.85 and the validation for the media expert at 4.00 out of a maximum value of 5.00. The results of student responses to the E-Module were 4.27 out of a total maximum score of 5.00 which was categorized as very good. Based on the result, it can be conclude that the development of E-Modul business recording using the "Si-Apik" digital application is feasible to be used in learning Business Simulation subjects at the D3 Business Administration Bali State Polytechnic to improve students' understanding.

KEY WORDS

E-module, business recording, instructional media, digital application, business simulation.

In the era of development in the field of information technology and communication 4.0, it has developed widely so that at this time it can indirectly affect the sectors of people's lives in their daily lives. The development of this technology is very supportive of educators in providing effective teaching quality easily, one of which is by providing a varied learning system. In the era of global demands, the world of education requires the world of education to always be able to adapt technological developments to improve the quality of education, especially adjustments in the use of Instructional Media for the world of education (Nurseto, 2011). Currently, the difference in learning that exists today is very much felt with learning in the past where in addition to the development of information technology, other changes are also accompanied by repeated behavioral changes in a learning process (Thobroni, 2013). In today's era, technology enters our lives easily, including in the field of education. So that the change from an innovation in learning causes the current world of education to experience changes in the field of teaching and learning and in learning, especially in digital learning systems.

The learning system in the current digital era has brought a new face in developments in the world of education. The development of a learning system that leads to digital can support the convenience of educators in providing quality teaching in an effective learning process using varied Instructional Media so that the learning atmosphere in the learning

process can be lively and not boring (Riyana, 2012). Varied instructional media such as creating a passionate, fun and interesting learning process can be done and can be used as teaching materials to support during the learning process and can create good motivation in the learning process in the classroom (Nazar, 2020). An educator's accuracy in determining effective learning methods and in accordance with the concept of discussion will be able to increase understanding of the existing lecture material and can also encourage learning outcomes and involve emotions, as well as intertwined thoughts (Dananjaya, 2010). One of the Instructional Media in the digital era is E-Module.

E-Module is a module in an electronic version which in its use can be accessed using electronics including laptops or devices and is designed in such a way with the required software (Arsal, 2019). The E-Module contains learning materials, methods, limitations and evaluations of the design in a systematic, interesting way and also in order to achieve the expected competencies. This is interesting because it can make the learning atmosphere more communicative. This is in line with (Chania, 2016) which states that this E-Module can improve learning outcomes. On the display, the E-Module contains information in the form of a book format that is presented electronically using a flash disk, hard disk, or the like that can be read using digital media such as laptops, computers or devices that students in accessing the E-Module electronically can increase the learning motivation of students (Daryanto, 2013). The development of this E-Module is applied to the Business Simulation course in the Department of Commerce Administration, Bali State Polytechnic.

The Business Simulation course is a course in the Department of Commerce which is taken by students in the fourth (fourth) semester to be precise in the Business Administration Study Program in the Even semester. In the Instructional Media Business Simulation Course (Simbis Teaching Team, 2015) compiled by the Business Simulation course compiler team, This course covers understanding business concepts, especially retail, understanding forms, Business Simulation flowcharts, job descriptions for each staff, making job applications and implementing Business Simulation. In this simulation activity there is a simulation calendar activity arranged weekly which contains a description of the duties of each position. At the beginning of the lecture, students will be given orders to form groups. Furthermore, each group will work on a series of available simulations, one of which is recording business transactions. The presence of Digital Applications in business transactions can provide users with a more personal experience in utilizing digital technology that provides value (Rumondang, 2019). Along with the times and technology, the development of efficiency and effectiveness in recording business transactions has begun to be made easier with digital-based applications, especially in the development of business transaction services (Wiwik, 2020). A digital-based application program is a program that is ready to use or a program that is formed to be able to perform functions for users or other applications (Kadir, 2008). One of the Digital Applications in Indonesia is the application for recording business transactions, namely "Si-Apik". The Si-Apik application is an application for recording business transactions from Bank Indonesia that can help provide standards for preparing business reports (Balance Sheet, Profit and Loss, etc.), provide tools and help analyze financial capabilities. So that this Digital Application can be used as a provision of knowledge in recording digital-based business transactions (Anwar, 2018).

However, currently in the era of technological development, in the Business Simulation course there has never been a teaching process that uses Digital Applications to support the teaching process. The process of recording business transactions carried out in the simulation process is still conventional at the same time in learning activities must be balanced with the development of a dynamic era, especially the soft skills of students in using digital platforms to build student excellence in the era of technological development. Especially in this technological era, an orderly presentation of business transactions is based on business transaction reports that are presented in a systematic and structured manner from time to time. This can be used as a reference to determine the performance of the development of business actors during the run (Ria, 2018). To support it all, an E-Module is needed using the "Si-Apik" application that is in accordance with the instructions in the Business Simulation course. Bali State Polytechnic as one of the best vocational campuses

in Indonesia, students need excellence in the digital field to support campus excellence. In this case, the author wants to develop an E-Module for the Business Simulation course application for the Digital Application Business Recording "Si-Apik" in order to support the success of the student learning process in the Department of Commerce Administration. Based on the description that has been explained previously, this study aims to get an overview of the development of E-Module Business Recording using the "Si - Apik" Digital Application and to find out how effective the results of developing E-Module are by knowing the results of evaluations and experts.

METHODS OF RESEARCH

The research approach used in this study uses a Research and Development (R&D) approach where this approach is used to be able to produce products produced by researchers and test the effectiveness of the products produced (Sugiyono, 2016). So that in this study, the product developed by the researcher can be accounted for. The development of this E-Module uses the ADDIE model. This ADDIE model can be developed as needed in designing a learning system (Mulyatiningsih, 2013). The development model using the ADDIE model consists of analysis, design, development, implementation and evaluation. The development process through ADDIE was chosen by researchers because it has an appropriate framework guide in developing learning products in education, one of which is in lecture education.

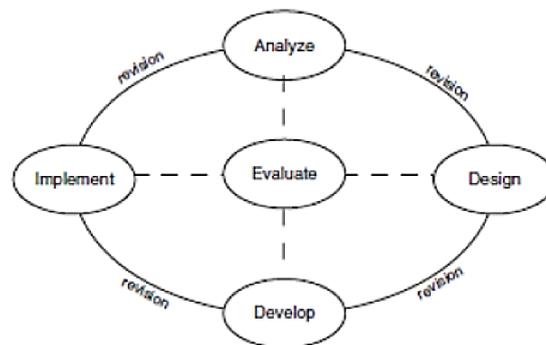


Figure 1 – Stages in the ADDIE Model (Branch in Wildan, 2016)

In the analysis (analysis) stage, researchers observed teaching and learning activities in the Business Simulation course, Department of Commerce, Bali State Polytechnic taught by the researchers, namely by students in two classes, namely in Class IV D and IV E. Interviews were also conducted by other lecturers (team teaching). The analysis carried out by the researcher at this stage is 1) needs analysis, 2) curriculum analysis and 3) student characteristics analysis.

This design stage is the next stage of the process after going through the previous analysis stage on the design of the E-Module. At this stage also, the design of the instrument was carried out by the researcher to be able to measure the feasibility of the E-Module developed by the researcher. At this design stage, the researcher did 1) compile an outline of the contents of the E-Module, 2) compile the framework of the E-Module, 3) compile the contents of the E-Module learning, and also 4) design the instrument.

In this development stage, the researcher carried out 3 development steps on the E-Module which were arranged, including 1) E-Module development, 2) instrument development, and also 3) E-Module assessment. From these three steps the development of E-Module can produce.

The implementation phase is carried out after the E-Module is assessed by the material expert validator and media expert validator. In addition, the improvement process is based on the suggestions given. Furthermore, the E-Module was then tested on students in class IV

D and also IV E in the Business Administration D3 Study Program who were taking the Business Simulation course with a total number of 60 (sixty) students for further testing of teaching materials in learning activities in the Business Simulation course. The results of this trial are used as a reference for researchers in improving the E-Module developed by researchers. This assessment is based on 1) content feasibility aspects, 2) linguistic aspects, 3) usability aspects, and 4) graphic aspects.

The evaluation stage (evaluation) is carried out by researchers after passing the previous stage process. In the development of this E-Module, the evaluation is carried out after getting some input from experts in the form of improvements that researchers must make based on the results of suggestions and responses from students to the development of the E-Module, as well as an evaluation of student learning outcomes.

Responses from online questionnaire instruments addressed to validators of media experts, material experts and also student evaluations are processed directly through the responses tab on google form in tabular form. Furthermore, the results of the spreadsheet generated from the google form are downloaded directly and then processed by further researchers towards the average process.

This quantitative data is then calculated by the following formula (Mulyardi in Refnywidiastuti, 2019):

$$R = \sum_{i=1}^n V_i / n$$

Where: R = Average score; Vi = The total score of the assessors; n = Number of assessors.

RESULTS AND DISCUSSION

Analysis Phase

In the analysis stage, the researcher uses the observation method in teaching and learning activities in the Business Simulation course taught by the researcher, namely by students in two classes, namely Class IV D and IV E, D3 Business Administration Study Program, Department of Commerce, Bali State Polytechnic. Interviews were also conducted by other supporting lecturers (team teaching) in these subjects. From the results of interviews that have been conducted with team teaching lecturers as well as seniors in the Business Simulation course, it is clear that so far learning is still relying on ordinary teaching materials that have lasted several years provided on campus and it has never been imagined that there will be a pandemic so that it must adapt to the situation, so in the future it is necessary to develop teaching materials. In this E-Module development research, it is only carried out on the development of basic teaching materials in basic discussions related to Business Recording activities which include activities in the field of managers, administration, finance and control and inventory. What has been experienced by students so far is that students in this semester have difficulty experiencing practice, especially in adjusting business transactions with existing instructions, because so far in offline learning, each group makes transactions with each other so it is still seen that some students are less active in learning. So far, there has never been any development of teaching materials that utilize technology in this Business Simulation Course, especially in Business Recording. So that students provide input so that the presentation of the material must be more interesting and include video tutorials. Therefore, the researcher developed an E-Module Using the "Si-Apik" Digital Application in the Business Simulation Course. which is made is expected to increase the role of lecturers in learning and make students more active and enthusiastic in the learning process.

Design Phase

The design process is the next stage after going through the analysis stage by designing an E-Module Business Recording Using the "Si-Apik" Digital Application in the

Business Simulation Course. At this stage, the instrument design is carried out to measure the feasibility of the E-Module developed by the researcher. In this case, the design carried out includes first compiling an outline of the contents of the E-Module by setting 5 learning activities, including materials related to 1) retail business concepts, 2) company management, 3) business documents, 4) Digital Application "Si-Apik", and 5) implementation of Business Simulation. The five designs already contain general understandings, functions, types, summaries and assignments and in some parts of the learning activities there are practice and evaluation video tutorials. Then in the second stage in the preparation of the E-Module framework, it consists of five parts contained in the E-Module.

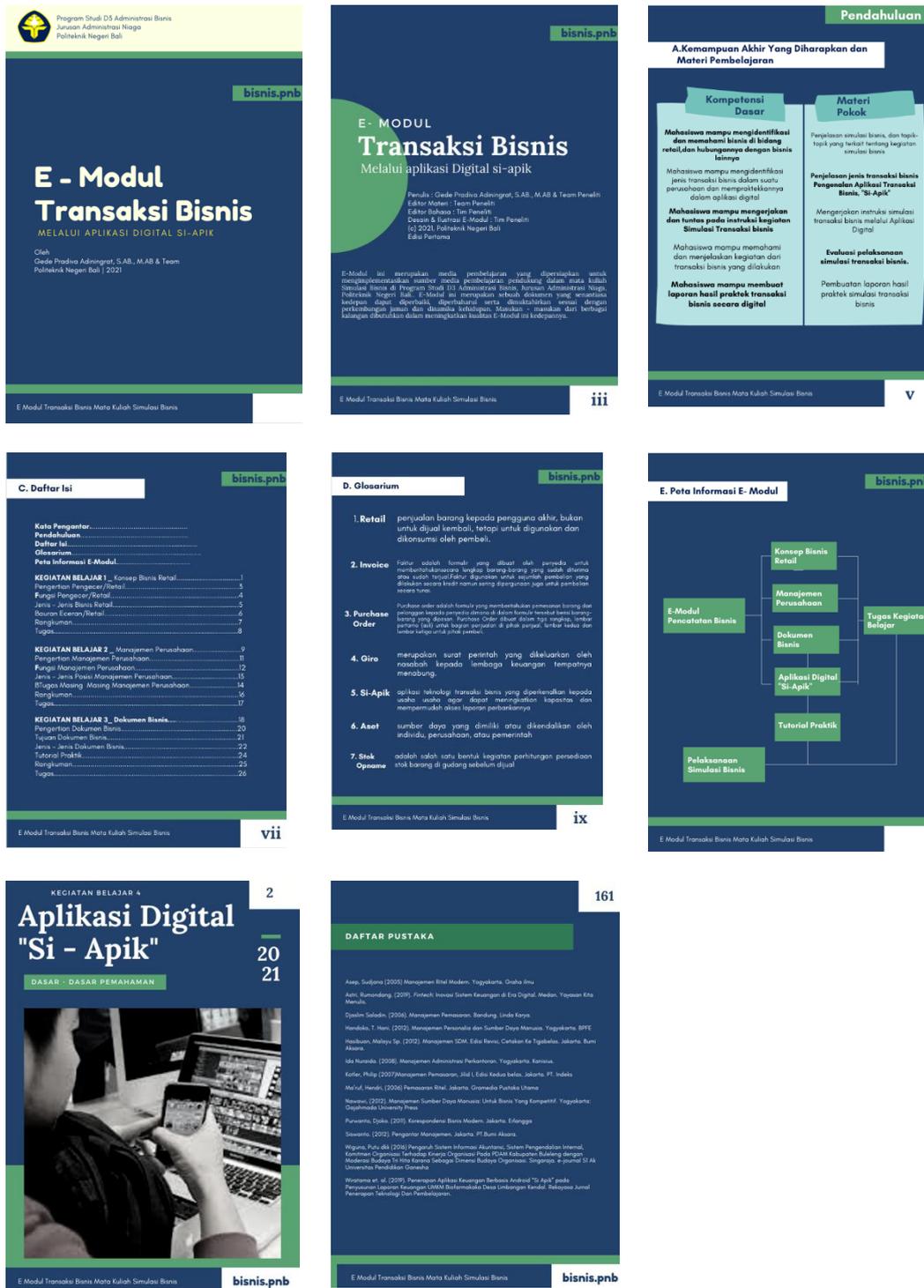


Figure 2 – E-Module pages

The part is the introduction, the second part is the glossary, the next part is the learning activities, evaluation, and the last part is the bibliography. The third stage is the process of compiling the learning content of the E-Module. This process starts with the presentation of the general material for each learning activity. In the material provided, there are several assignments and evaluations in the form of quizzes provided. In the implementation of the Business Simulation practice, there are practical video tutorials for each activity which are divided into months and weeks of activities. After students finish studying the material and instructions in practice on a learning activity, then students complete the questions on the available instructions. The instructions that were carried out contained feedback in the form of an assessment of the results of the instructions through the google drive provided and then carried out by students so that researchers and the teaching team could conclude their learning outcomes. Instruction tasks given in the E-Module can be done in groups at home and on campus which can be uploaded in the QR barcode provided in the E-Module. The last stage is the design of the instrument which is designed with a questionnaire with a Likert scale of 5 with answers Strongly Agree (SS), Agree (s), Neutral (N) and Disagree (TS) and Strongly Disagree (STS). The answer is then converted into a score consisting of 5,4,3,2 and 1 according to the order of the statements of the answer.

Development Phase

The development stage consists of 3 development steps, namely the development of the E-Module, the development of the instrument, and the assessment of the E-Module. The results of the E-Module development stage are by developing in terms of 1) cover (cover), 2) inner cover, 3) introduction, 4) table of contents, 5) glossary, 6) E-Module information map, 7) learning activities, and 8) bibliography. In the initial development of this E-Module, the E-Module was developed using Microsoft Office Word to collect and compile material and also collect questions for quizzes and summary components. In making the background design and E-Module cover, researchers used the Canva application, in making and editing practical video tutorials using the Cap Cut and Soloop applications, in making quizzes using google forms and Quizizz, and in making barcodes using the QR Code Generator application. Furthermore, the E-Module data files, which are still in .doc form, are transferred to the designs that were previously created through the Canva application, adding components in the form of video tutorials, uploaded to the drive and a quiz form which is then made in the form of a QR Barcode. The whole thing is made into one file in the form of an E-Module which has been compiled in a Canva design and downloaded in .pdf format.

From the results of the development of the E-Module that has been developed, then the development of a feasibility instrument is carried out by experts. The existing instruments in the E-Module were previously consulted with the teaching team and the research team and improvements were also made, then validated by material experts and media experts using the E-Module assessment sheet that had previously been made by the researcher. In this case, the results of the E-Module validation from the material expert validator are as follows:

Table 1 – E-Module Validation Results by Material Experts

| No | Assessment Aspect | Average Score for Each Aspect | Category |
|------------------------------|-------------------|-------------------------------|-----------|
| 1 | Contents | 4,86 | Very good |
| 2 | Linguistic | 4,83 | |
| 3 | Presentation | 4,88 | |
| Average overall rating score | | 4,85 | |

In the evaluation of the E-Module by the material expert validator on the material in the E-Module, it assesses aspects related to content, linguistic aspects, and aspects of presentation resulting in an average overall assessment score of 4.85 from a maximum score of 5.00 with a very good product category. The validation stage by media experts includes, among others, aspects of the screen design display, aspects of ease of use, aspects of consistency, aspects of usability, and aspects of graphics.

Table 2 - E-Module Validation Results by Media Experts

| No | Assessment Aspect | Average Score for Each Aspect | Category |
|------------------------------|-----------------------|-------------------------------|-----------|
| 1 | Display Design Screen | 4,14 | Very good |
| 2 | Ease of Use | 4,28 | |
| 3 | Consistency | 4,00 | |
| 4 | Benefits | 4,33 | |
| 5 | Graphics | 4,42 | |
| Average overall rating score | | 4,23 | |

In the evaluation of the E-Module Business Recording using the "slick" Digital Application in the Business Simulation course conducted by the media expert validator on the material contained in the E-Module, the average overall assessment score is 4.23 from a maximum score of 5,00 with very good product category. Furthermore, based on the results of the assessment by the media expert validator, it can also be seen that this E-Module is declared good based on the media. So in general the quality of the E-Module is said to be good and feasible to use in the learning process at the implementation stage.

Implementation Phase

After the E-Module has been assessed by material experts and media experts and has been repaired based on the suggestions given, the E-Module was tested on class IV D and IV E D3 Business Administration students who were taking the Business Simulation course with a total of 60 students to be used by students as teaching materials in learning activities in the Business Simulation course. The results of this trial will be used by researchers as a reference in improving the E-Module developed by researchers. Students as respondents gave an assessment response to the E-Module Business Recording using the "Si-Apik" Digital Application in the Business Simulation course based on aspects of content feasibility, linguistic aspects, usefulness aspects, and graphic aspects. After students take the quiz, the following week starts at the stage of applying the "Si-Apik" Digital Application in the implementation of Business Simulation practices. Furthermore, after students have finished testing the application of the Digital Application in practicum as well as introducing task forms and working on quizzes, the students were asked to fill out the student evaluation instrument form for the E-Module that had been used. The results of the assessment of the response to the E-Module can be seen in table 3 below.

Table 3 – Results of Assessment of SMEs Responses to E-Modules

| No | Assessment Aspect | Average Score for Each Aspect | Category |
|------------------------------|-------------------|-------------------------------|-----------|
| 1 | Appropriateness | 4,30 | Very good |
| 2 | Linguistic | 4,25 | |
| 3 | Benefit | 4,21 | |
| 4 | Graphics | 4,33 | |
| Average overall rating score | | 4,27 | |

The results of the assessment of student responses to the development of E-Module Business Recording using the "Si-Apik" Digital Application in the Business Simulation course, on the instruments that have been distributed, the overall average value of the assessment is 4.27 from a maximum value of 5.00 with a very good product category. The results of filling out the instrument as well as the complete calculation are presented in the Appendix - Appendix. Based on the results of the assessment, it can be seen that the E-Module Business Recording using the "Si-Apik" Digital Application in the Business Simulation course is included in the very good category so that it can be used as one of the teaching materials in learning the Implementation of Business Simulation Practices.

Evaluation Phase

After going through the process of the previous stages, the development of the E-Module received several inputs in the form of improvements that must be made based on the results of suggestions from material experts, media experts, as well as student responses to

the development of the E-Module, and evaluation of student learning outcomes. The evaluation of the suggestions and follow-up obtained by the researcher is that there are several spelling errors in the E-Module, there are naming errors in the existing quotations, the writing in the E-Module should be justified, need to be enriched with materials in the video tutorial format, input in the title in one section of the E-Module, adding additional colors to the E-Module so that it is not monotonous and access to quizzes that are easily accessible.

CONCLUSION

This E-Module development research produces a product in the form of Instructional Media or teaching materials in the form of E-Module Business Recording Using the "Si-Apik" Digital Application in the Business Simulation Course for fourth semester students of the D3 Business Administration Study Program, Politeknik Negeri Bali. The reference in this study is the ADDIE development model with details of the stages, namely 1) Analysis, 2) Design, 3) Development, 4) Implementation, and 5) Evaluation. And still pay attention to the method of preparing learning modules. The E-Module developed by the researcher contains material for learning activities including retail business concepts, company management, business documents, and the "Si-Apik" Digital Application before applying it to the implementation of Business Simulation practices that have been adapted to the Basic Competencies and Main Materials from the Business Simulation learning syllabus that was previously applied in D3 Business Administration. This E-Module is in .pdf format which contains in addition to learning, there is also video tutorial content in the form of practices that show practical activities related to business document material and the application of the "Si-Apik" Digital Application as well as an evaluation in the form of a quiz that provides feedback in the form of grades and correct and incorrect questions obtained through the supporting application, Quizizz. After students finish taking quizzes on the final page of practical learning activities, this E-Module is also very interactive for users, especially students who use it. In the results of the research obtained by the researchers, it can be seen that the E-Module Business Recording Using the "Si-Apik" Digital Application in the Business Simulation Course developed is feasible to be used as Instructional Media or teaching materials for teachers and students in the process of learning activities. Based on the results of the acquisition of the average overall score, it can be seen that the total score on aspects by material experts is 4.85 in the very good category, and the average overall score for aspects by media experts is 4.23 in the very good category. And the total value of the overall score aspect of the student response to this E-Module is 4.27 with a very good category. In the future, it is hoped that the E-Module in this study can be used in Business Simulation activities obtained by fourth semester students in the D3 Business Administration Study Program by providing more complete material. And the research that has been done has not yet reached the effectiveness test of the E-Module in everyday learning. Therefore, further researchers can examine further testing in the effectiveness of the E-Module in learning.

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