Development of Economic Learning E-Modules Based on Inquiry to Improve Economic Learning Outcomes at First Public Senior High School in Kutalimbaru T.A 2019/2020

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Abstrak: This study aims to: (1) Produce inquiry-based economic learning e-Modules that are feasible to be developed to improve economic learning outcomes, and (2) to determine the effectiveness of inquiry-based economic learning e-Modules that are developed can improve economic learning outcomes. This type of research is development research that uses the R&D model of Borg and Gall combined with Dick and Carey's instructional design model. The research method consists of two stages: the first stage is developing e-Module learning media and conducting a feasibility test, then the second stage is testing the effectiveness of the product.

1. Introduction

In the current technological era, learning resources can be utilized by using digital literacy models or it can be said that e-learning learning, so that teachers are challenged to be able to utilize these digital-based learning resources. Technology suggests many new characteristics that can be applied to make instructions more interesting to learners (Keller & Suzuki, 2004), explained that technology can provide interesting instructions for students in learning. One learning resource that can support technology-based learning media that can be used and as a support for students in learning is a module that is packaged in e-learning or can be said to be an Electronic Module (e-Module). E-Module is the development of conventional conventional modules. Utilization of the use of e-Modules can be said to be cheaper in terms of cost than print learning media, in addition to the forms of digital learning media that are practical, interactive, interesting and fun.

(Chen & Liu, 2011: 140) suggested that the ultimate goal of learning is to convey knowledge, enhance students' ability to plan and monitor, and even reorganize their own learning strategies. Therefore, the teacher must be able to design learning activities to be more interesting and effective so that the lesson material delivered will make students in the class easy to accept what the teacher has to say and there is a sense of learning the material and improve their learning outcomes in economic subjects.

In this study will develop learning media that will be integrated with inquiry learning strategies. Because according to research conducted by Isfi and friends (2017) who develop guided inquiry-based economic learning modules shows that the results-based economic learning module develops more economic student learning outcomes than without using guided inquiry-based learning modules. In
line with the research conducted by Bimerdin, and friends (2015) in his research journal said that the module model titled Mari Editing Essays was effective because the percentage of students’ activities while studying the module was 81.48% with a very active category.

2. Research Methods

This research uses the Research and Development (R&D) method. It is said that because the research product offered is in the form of learning media based on learning media e-Module. Gall, Gall and Borg (2003: 569) say that development research is characterized by the existence of products and research procedures that can be systematically tested, validated / evaluated, and improved until the resulting product meets criteria including effectiveness, quality and quality standards. For this reason, the feasibility and effectiveness of this study was tested.

The validation process consists of 3 instruments for each validator consisting of experts consisting of learning design experts, media experts, and material experts, then provides more instruments or individual tests consisting of 3 students then small group tests consisting of 6 students Final field tests are limited to all students in the class. Then the results obtained were tested again on 72 students consisting of 2 classes, the experimental class and the control class. The experimental class consisted of 36 students who used the learning media e-module of economic learning and the control class consisted of 36 students who used economics textbooks.

3. Results And Discussion

![Figure 1. Summary diagram of product feasibility results that have been validated by experts](image)

The results of the validation from the material experts, instructional design experts and media experts to the e-Module learning in economic learning that has been developed shows that; (1) The results of learning material experts are considered very good with an average percentage of 92%. (2) The results of instructional design experts are considered very good with an average percentage of 97%. (3) The results of the media experts were considered very good with an average percentage of 87.30%. Thus the learning e-Module developed as a whole is included in the "Very Good" category.
Figure 2. Summary Diagram of product effectiveness results that have been validated by students trials

The results of the validation of effectiveness trials conducted by individual trials, small group trials and limited field trials of the learning e-Module on economic learning that have been developed show that; (1) The results of individual student trials are considered very good with an average percentage of 91%, (2) The results from small group trials are considered very good with an average percentage of 89%. (3) The results of limited field trials are considered very good with an average percentage of 91%. Thus the learning e-Module developed as a whole is included in the "Very Good" category.

The use of e-Module economic learning on student learning outcomes tests shows that student learning outcomes that are taught using e-Module economic learning (experimental class) are higher than student learning outcomes that are learned using economic textbooks (control class). Thus it was concluded that there was a significant difference between student learning outcomes that were learned using the e-Module economy with student learning outcomes that were taught with economic textbooks, which obtained $t_{\text{count}} = (2.65) > t_{\text{table}} (1.99)$.

4. Conclusion

Based on the results of the research described above, it can be concluded that the inquiry-based economic learning e-Module that is developed is feasible to be used to improve the learning outcomes of the X level of senior high school 1 Katalimbaru and the inquiry-based economic learning e-Module developed is effectively used to improve X-level economic learning outcomes in senior high school 1 Katalimbaru.

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