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# DEVELOPMENT OF ELECTRONIC MODULE LEARNING ISLAMIC EDUCATION BASED ON ETNOCONSTRUCTIVISM IN PRIMARY SCHOOL

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#### **Abstract**

This study discusses the development of an ethnoconstructivist-based electronic module in Islamic religious learning in elementary schools. The research method is research and development using the ADDIE research model which consists of five stages, namely (1) Analysis; (2) Design; (3) Development; (4) Implementation; and (5) Research Evaluation was carried out in elementary schools in Muara Bungo, the 2020/2021 school year. The sample in this study was 81 grade III elementary school students in Muara Bungo, Indonesia for the 2020/202 academic year. The research objectives are (1) to see how to develop an electronic module based on ethnoconstructivism in Islamic religious learning in elementary schools, (2) to see how perceptions and interests are in using ethnoconstructivism-based electronic modules. Based on the distribution of perception questionnaires and interest questionnaires, the results were perceived frequency as much as 59 with a percentage of 72.8% in sufficient criteria and interest received a frequency of 63 with a percentage of 77.8% in good criteria.

**Key words:** *electronic modules, ethnoconstructivism, Islamic religious education* 

#### INTRODUCTION

Education is the main element in shaping the quality of human resources. Professional resources are an absolute requirement in an effort to improve the quality of the nation, meaning that through education a country can improve the quality of human resources. In accordance with Undang-undang Nomor 19 of 2016 concerning the Program Indonesia Pintar, it is written that the government supports the implementation of universal secondary education or pilot compulsory 12 (twelve) years of education. Thus all elements of society can take part in education in order to increase human resources and self-potential.

As written in the verse Al-Quran surah Al-Mujadillah 58:11 that "Allah will exalt those who believe among you and those who are given some degree of knowledge." This verse of the Koran has guaranteed those who are knowledgeable and will be elevated. So with so many advantages in attending education both in general and religious studies.

Today, the development of science and technology is growing rapidly and has positive and negative impacts on life, both from a social, economic, cultural and educational perspective. When viewed from an educational context, science and technology have provided various variations of learning resources and learning media.

Learning that is fun and encourages students to learn more deeply is a must for an educator in order to create effective, efficient and enjoyable learning.

Quality education cannot be separated from a teacher. The teacher has a very major role in learning, not only as a provider of learning material, but the teacher must design learning activities. Hasan & Rahman (2016) The teacher who makes great activation of his roles in classroom management and enriches learners knowlede. Learning activities must be designed by the teacher as well as possible, so that the learning process is meaningful. Meaningful learning will occur when students relate new experiences to their existing ones (Prawita et al., 2018)

Seeing the development and progress of science and technology, it is necessary to improve learning by utilizing learning resources ranging from those that do not use technology to using technology. Thus students can optimize their own potential by interacting with the learning environment through the learning process.

Use of ICT in the learning process makes it easier for teachers to convey knowledge. ICTs make acquisition of knowledge more accessible, and concepts in the field of learning also determine when involving students in the application of ICTs(Shan Fu, 2013). In addition, technology also makes it easier for teachers and students to access learning resources. Learning resources are anything that can be used to facilitate learning in order to achieve learning objectives and improve student performance in learning and learning.(Rahmadi et al., 2018). Creating convenience in learning content and interacting with others, anytime and anywhere(cahyanti et al., 2018). Along with technological advances, teachers are also required to increase their competence in the learning process so that learning objectives can be achieved properly.

Learning media is an important part of learning (Susanti, 2015). Because learning media is an inseparable part of the teaching and learning process. Technology-based learning media is an alternative that can be used by teachers in the learning process. Content that can be enjoyed more easily and whatever is available can use learning resources effectively or can activate the content themselves at home or school(Kaewkiriya, 2013). Therefore, teachers must be able to use technology appropriately so that learning activities can run smoothly. When teachers are unable to accept and use technology in an appropriate and optimal way, the advantage of technology cannot be maximized to improve the effectiveness of student learning (Yeop, et al., 2018).

Based on observations made at primary school by conducting observations, interviews and distributing questionnaires to Islamic religion subject teachers, it is known that during the learning process the teacher rarely uses technology and

is only fixated by using Islamic religious printed books that have been provided or makeshift reference materials. If there were other reference sources such as modules, it would be very helpful for the learning process.

Module is one of the learning media that can be used in the distance learning process, using modules also encourages students to learn independently. This is very appropriate to assist online learning, which at this time there are schools that are carried out face-to-face or online. Then as an effort to reduce environmental pollution and take advantage of technological advances, the module was developed in electronic form so it is called an electronic module. The advantage of the electronic module is that it can present material with a combination of media such as audio, text, images and video(Agustina, 2013). In addition, the electronic module also helps teachers in the learning process, because e-modules are teaching materials that can help students learn subject matter independently using electronic media. (Wulansari, et al., 2018).

Good learning is learning that can integrate with the students' environment, thereby making it easier for students to receive learning. So that students can construct their knowledge with what they have found and experienced. Learning with this method is called ethnoconstructivism. Thus the electronic module to be developed is a module based on ethnoconstructivism and adheres to Islamic values.

Previous studies that are relevant to this research made a development of an Islamic religious learning module. This research was conducted by Nursyafitri, et al. In 2020. This research was conducted to develop an Islamic religious learning module. The results of the experiment were carried out with the one group pretest-posttest design experiment with the results of the trial showing that the pretest students' mean score was 60, and the mean increase was 86.7. Thus it can be said that the pie learning module is effectively used in learning.

The newness of this research with previous research lies in the form and content of the module. In this study, the module developed is an electronic module based on ethnocosntructivism in Islamic religious learning in elementary schools. Meanwhile, the modules in the previous research were not developed electronically and were not based on local wisdom. Therefore the purpose of this study is to (1) find out how the development of ethnoconstructivist-based electronic modules in Islamic religious learning in elementary schools, (2) to find out how perceptions and interests are in using ethnoconstructivist-based electronic modules in Islamic religious learning. The results of this study are expected to be used as teaching materials as well as learning media that can support Islamic religious learning in elementary schools.

#### **METHOD**

This study uses the research and development (RnD) method. The RnD method is a research method used to produce certain products and test the effectiveness of these products (Sugiyono, 2015). Research was carried out to obtain information about user needs, while development was carried out to produce ethnoconstructivist based learning modules with the 3D Page Flip Professional Pro application. The research and development model to produce this learning module adopts the model from Branch (2009), namely the ADDIE development model. The stages in the ADDIE model consist of five steps, namely (1) Analysis; (2) Design; (3) Development; (4) Implementation; and (5) Evaluation.

The analysis stage is the first stage before developing a product. At this stage the needs, basic competencies and objectives of learning are analyzed against what students will learn. The basic competencies used in the electronic module of Islamic religious education in class III are 3.6 Understanding caring attitudes towards others as an implementation of understanding QS al-Kausar and 4.6 Exemplifying caring behavior towards others as an implementation of understanding QS al-Kausar The electronic module design stage includes a start page containing core competencies, a basic competency page, a story material page containing the culture of Jambi province and practice questions, a page for learning materials and question exercises, and a work page with an assessment rubric. Development stage, carried out after the ethnoconstructivism-based electronic learning module of Islamic religious education is made based on the design that has been designed. After the development stage, the 3D Pageflip Professional-based ethnocontructivism electronic module was implemented in real conditions, namely in the classroom. The electronic module of Islamic religious education based on ethnoconstructivism was tested on third grade elementary school students to determine students' perceptions and interests in learning. The last stage is the evaluation stage, this stage is carried out to see the feasibility of the ethnoconstructivism-based electronic module of Islamic religious education learning and students' perceptions and interests in learning to use this electronic module. The 3D Pageflip Professional based ethnocontructivism electronic module was implemented in real conditions, namely in the classroom. The electronic module of Islamic religious education based on ethnoconstructivism was tested on third grade elementary school students to determine students' perceptions and interests in learning. The last stage is the evaluation stage, this stage is carried out to see the feasibility of the ethnoconstructivism-based electronic module of Islamic religious education learning and students' perceptions and interests in learning to use this electronic

module. The 3D Pageflip Professional based ethnocontructivism electronic module was implemented in real conditions, namely in the classroom. The electronic module of Islamic religious education based on ethnoconstructivism was tested on third grade elementary school students to determine students' perceptions and interests in learning. The last stage is the evaluation stage, this stage is carried out to see the feasibility of the ethnoconstructivism-based electronic module of Islamic religious education learning and students' perceptions and interests in learning to use this electronic module.

This research was conducted in elementary schools in Muara Bungo, the 2020/2021 school year. The sample in this study was 81 grade III elementary school students in Muara Bungo, Indonesia for the academic year 2020/2021. Sampling was done by using total sampling technique. Based on the research objectives, the researcher wanted to see students' perceptions and interests in the use of electronic modules in the learning process. Schools that are used as research sites are schools that have provided facilities in the form of computers / laptops and already have an infocus.

The data collection instrument in this study used two types of questionnaires consisting of a perception questionnaire and an interest questionnaire. This questionnaire instrument was used to measure students' perceptions and interest levels in learning using electronic modules. The total number of statements in the questionnaire consists of 40 statements, with each questionnaire having 20 perceptions questionnaire statements and 20 interest questionnaire statements. Before being used to retrieve data, the questionnaire instrument had passed validation by an expert validator, namely an education lecturer at Jambi University. The data obtained from the questionnaire was measured using a Likert scale technique with five answer choices, namely Very Good (SB) = 5, Good (B) = 4, Enough (C) = 3, Not Good (TB) = 2,

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Score		Criteria	
	interval		
	20.0-36.0	Not very good	
	36.1-52.0	Not good	
	52.1-68.0	Enough	
	68.1-84.0	Good	
	84.1-100	Very good	

Table 1. Categories of Students' Perceptions and Interests

The data obtained from the questionnaire were analyzed using qualitative descriptive statistics. Qualitative descriptive analysis is used to describe and explain the data that has been collected about students' perceptions and interests in the

application of the ethnoconstructivist-based electronic learning module of Islamic religious education in elementary schools by describing the results of product development in the form of Mean, Median, Mode, Range, maximum value and minimum value at every variable. To get these results, the data is processed using the SPSS version 22 statistical program to see the trend in the percentage of product usage assessments of the appearance and content of the products that have been developed.

#### **RESULT AND DISCUSSION**

The resulting product is an electronic module based on local wisdom in Islamic Religious Education learning. The contents of local wisdom values in the form of customary forests are integrated into Islamic religious education learning materials, which are related to praiseworthy behavior: caring for others and the environment. Then it is packaged in an electronic module using an application, namely 3D Pageflips Professional. This development is carried out so that students can form a caring character for both their fellow humans and the surrounding environment and build their own knowledge (concepts) about caring behavior by learning from the environment or culture that is around them, but integrated in Islamic Education learning. The display of the parts of the developed electronic module is as follows:

#### 1. Cover or Cover Module

Cover or module cover contains information on the title, class identity, image, and author's name.



Figure 1. Cover

#### 2. Core Competencies and Basic Competencies page

The core competency page contains competencies that students must master. Core competencies consist of four competencies, namely, spiritual competence (KI

1), social competence (KI 2), knowledge competence (KI 3) and skills competency (KI 4). Meanwhile, basic competencies are the development of core competencies. Basic competencies contain competencies that students must master per subject. Each subject contains different basic competencies.



Figure 2. Core Competencies and Basic Competencies

## 3. Learning Indicators and Objectives

This page contains indicators that are the development of basic competencies, in which one basic competency can be developed into one or several indicators. Furthermore, the learning objectives are the objectives of learning indicators that will be achieved or mastered by students.

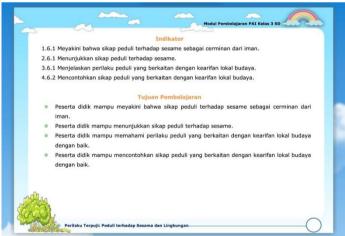


Figure 3. Indicators and Learning Objectives

### 4. Local Wisdom Stories page

Local wisdom pages contain local wisdom values found in the regions. This page is shown to deliver students to build their knowledge of the environment or culture of students.



Figure 4. Local Wisdom Stories page

### 5. Learning Materials page

The learning material page contains material per subject related to the story that has been described and is in accordance with the basic competencies that must be mastered by students.



Figure 5. Learning Materials Page

#### 6. Activity page

The activity page is given to train the skills of students. Sheets are carried out when the learning materials and practice questions have been completed or as activities to make students more active and creative.



Figure 6. Activity page

The electronic module was then tried out to see the students' perceptions and interests. The test subjects were 81 elementary school students in Bungo Regency. Then the students filled out a questionnaire, namely the perception questionnaire and the interest questionnaire, here are the results of the data obtained:

Score interval	Criteria	F	%
20.0-36.0	Not very good	0	0
36.1-52.0	Not good	1	1.2
52.1-68.0	enough	59	72.8
68.1-84.0	good	18	22.3
84.1-100	Very good	3	3.7
amount		81	100

Table 2. Results of students' perceptions questionnaire

Based on table 2, the results of the questionnaire on students' perceptions of the electronic module can be seen that the Very Bad criteria get a frequency of 0 with a percentage of 0%. The bad criteria got a frequency of 1 with a percentage of 1.2% For the criteria Sufficiently got a frequency of 59 and a percentage of 72.8%, the criteria were Goodgot frequency of 18 with a percentage of 22.3%, and very good criteria gotthe frequency was 3 and the percentage was 3.7%. The results of the questionnaire on students' interest in the electronic learning module are shown in Table 3 below:

Score interval	Criteria	F	%
20.0-36.0	Not very good	0	0
36.1-52.0	Not good	0	0
52.1-68.0	Enough	9	11.1
68.1-84.0	Good	63	77.8
84.1-100	Very good	9	11.1
amount		18	100

Table 3. The results of the students' interest questionnaire

Based on table 3, the results of the questionnaire on students' interest in the electronic module can be seen that the very bad and bad criteria get a frequency of 0 and a percentage of 0%. For criteria, it is enough to get a frequency of 9 with a percentage of 11.1%, the criteria for Good get a frequency of 63 with a percentage of 77.8%, and the criteria for Very Good get a frequency of 9 with a percentage of 11.1%

The purpose of this research is not only to develop teaching materials but also to determine students' perceptions and interests of the teaching materials being developed. Based on the data that has been obtained, it can be seen that the developed local wisdom based PAI learning electronic module received positive responses. The following data are obtained, namely: perception as much72.8% are in the Enough category and 77.8% interest is in the Good category.

Based on the results of the data obtained in table 2, it can be seen that the highest frequency is 59 with a percentage of 72.8% which is included in the Enough category. Perceptual dataThis shows that the developed electronic module gets positive perceptions from students, which means that from the students' point of view, the electronic module can help in receiving learning material. The learning process carried out by the teacher is the formation of students' initial perceptions in learning (Agustami, 2017). Every student has different perceptions or points of view because of their characteristics. So that the teacher must be able to create a good stimulus for the perceptions of students so that they are interested in participating in the learning process. One of the factors that can affect student learning outcomes is the students' perceptions of the teacher, If students have good perceptions, students will prefer learning and produce good learning outcomes (Najhicun & Winarso, 2016). The teacher who acts as a facilitator can shape the perceptions of students by selecting the teaching materials used. The electronic module developed can be used and helps form good learners' perceptions of learning. The formation of a good perception in students will also have an impact on the formation of the character of the students themselves.

The existence of an electronic module that has been developed makes it possible to attract students' interest in learning. This interest can affect the willingness and enthusiasm of students in learning, so that with this spirit the character values contained in the electronic module of PAI based on local wisdom can be conveyed properly. Interest in learning is defined when someone who has an interest in learning will have a feeling of interest in the lesson (Nurhasanah & Sobandi, 2016). Based on the results of the data obtained in table 3, it can be seen that of the 81 students, the highest frequency was 63 with a percentage of 77.8%. These results indicate that the students' interest in the electronic module of PAI learning based on local wisdom (ethnoconstructivism) in learning is in the Good category. Interest itself is a feeling of preference and attachment to something or an activity, without being asked (Slameto, 2013). Students who are interested in a lesson will enjoy meaningful, fun learning and optimal learning outcomes. The electronic module developed not only contains writings, but also pictures, stories about local wisdom, activities and audio and video can be included so that it will attract more interest from students to learn. The learning process needs to be formed in a condition, so that students feel interested, motivated, and want to continue learning (Firmansyah, 2015; Riwahyudi, 2015). In addition, interest also has an influence on a person's behavior and attitudes (Kompi, 2016). So that with this developed electronic module, it is hoped that students will form personal character and culture.

Character and culture development can be done in three ways, namely: through all subjects, self-development, and school culture (Kemdiknas, 2010). One way to build character development is through subjects, so that each subject must be oriented towards building the character of students, especially in Islamic religious education (PAI). Principally, Islamic Religious Education is to provide learning that instills spiritual values in students so that they become human beings with good character, character, ethics and culture as the goal of national education (Ainiyah, 2013). Education related to personality or morals cannot be taught only in the form of knowledge, but it needs habituation in daily behavior. Therefore,

## **CONCLUSION**

The development of the ethnoconstructivism-based electronic learning module for Islamic religious education uses the ADDIE development model. The steps taken are Analyze, Design, Development, Implementation, and Evaluation. After all the stages are carried out, so that an electronic module of Islamic religious education based on ethnoconstructivism can be produced for grade 3 of a proper

elementary school. Based on the distribution of perception questionnaires and interest questionnaires, the results are that for perception, the frequency is 59 with a percentage of 72.8% in sufficient criteria and interest gets a frequency of 63 with a percentage of 77.8% in the Good criteria. With the development of the ethnoconstructivism-based electronic learning module for Islamic Education, it is hoped that it can be used in the learning process, attracting students' interest in learning and helping teachers in shaping character and cultured students. Furthermore, the researcher hopes for further research to see the effectiveness of this ethnoconstructivism-based electronic learning module for PAI.

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