

The Use of Interactive E-Modules to Increase Students' Interest in Learning Entrepreneurship at SMK Telkom Pekanbaru

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ABSTRACT

The problem in this study is the low interest in student learning in entrepreneurship subjects. The problem that appears is the lack of student involvement and student interest in the learning process. This study aims to analyze students' entrepreneurial learning interests using interactive e-module teaching materials. This research was carried out at SMK Telkom Pekanbaru in class XII TKJ 1. This study used a type of experimental research with the One Group Pretest Posttest Design model. Data collection techniques using questionnaires and observations. The instruments in this study used questionnaire sheets and observation sheets. Data analysis techniques use descriptive analysis, t-test and Normality Gain (N-gain). The results showed that the use of interactive e-module teaching materials can increase students' interest in learning entrepreneurship. This can be seen from the difference in the level of interactive e-modules is effective in increasing students' interest in learning. Thus the conclusion of this study, there is an interest in learning student entrepreneurship with the use of interactive e-modules.

Keywords: learning interests, interactive e-modules, entrepreneurship

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INTRODUCTION

Education is the process of preparing students through learning knowledge, skills and attitudes by conducting teaching, training and research. Education is basically an effort to provide certain knowledge, skills, insights and expertise to individuals in order to develop their talents and personalities.Syafitri et al., (2023). One of the problems often encountered in the world of education is the factor of students, namely low interest in learning. According to Prianti & Rezania (2022) Interest is a tendency that persists in individuals so that they are interested in a particular field and feel happy in that field. In line with research Pujiastuti et al., (2018) Saying that interest is the tendency of one's soul to someone (usually accompanied by feelings of pleasure) because they feel there is an interest in something. Interest arises not suddenly or spontaneously, but arises due to participation, experience, habits at the time of study. Therefore, teachers need to create pleasant learning conditions so that learners will feel the need and want to continue learning. So there needs to be teacher efforts in learning, for example by using interesting teaching materials during the teaching process.

Based on the observations of researchers when carrying out teaching assistance at SMK Telkom Pekanbaru, many students do not pay attention to teachers when explaining entrepreneurship material in class. Students are more likely to be engrossed in using their smartphones and to be indifferent to the teacher's explanation. This happens because of the lack of creativity of teachers in delivering learning, thus showing a lack of interest in student learning. This is reinforced by the phrase syahza dalam Malistuti et al., (2022) Several factors cause the mastery and skills of students have not been achieved in accordance with the desired target, including the way teachers carry out learning is still monotonous or using lecture methods, this is due to the lack of tools which will essentially cause boredom in students. This of course will cause an atmosphere



that is less conducive to the learning process. A less conducive learning atmosphere is an example of the absence of student interest in learning in the learning process. According to Mesra et al., (2021) There are 2 factors that affect interest in learning, namely internal factors and external factors. Internal factors are something that makes students interested, comes from within, such as attention, curiosity, motivation and student needs. These internal factors include psychological aspects consisting of interest in learning, comfort in learning and willingness to learn, then physiological aspects consisting of student participation, and student health. External factors are things that make students interested from the outside such as the encouragement of parents/guardians, teachers and the surrounding environment. The indicators of interest in learning that are the focus of researchers from the problems that occur are the lack of student interest in entrepreneurship lessons and the lack of student involvement in learning. From educational problems that arise due to internal student factors, namely the low interest in student learning, it is necessary to have learning resources that attract students' attention. Learning resources are one of the things that support learning activities. By using learning resources, it will help the teacher in explaining the subject matter and will help students understand the subject matter studied. If there are no learning resources in learning activities, students will have difficulty in understanding the subject matter. One of the learning resources used in learning activities is teaching materials (Wulansari, Kantun, and Suharso 2018).

Good teaching materials are teaching materials that are adapted to the abilities and environment of students. Students can learn a material systematically using good teaching materials so that the subject matter can be understood as a whole. One type of teaching material is a module. Modules are teaching materials that are arranged systematically and interestingly which include learning objectives, material content and evaluations that can be used independently. Modules can be interpreted as subject matter that is arranged and presented in writing in such a way that readers are expected to absorb the material themselves (Daryanto 2013). Backed by opinions Permatasari et al., (2023) Education in the digital age provides opportunities for students to get a lot of information quickly and easily. Students today are very enthusiastic about everything that smells of modern technology, this can be used to make teaching materials such as electronic modules (e-modules).

E-modules are independent and group teaching materials that are arranged systematically which in their use use electronic media. Learning can take place effectively because e-modules can help learners who have difficulty in learning (Wulansari et al. 2018). However, the use of e-modules in the learning process has several disadvantages such as e-modules that are rigidly designed and do not vary. Therefore, there is a need for an interactive e-module which is equipped with multimedia as an effort to arouse students' interest in learning, as well as with the factor of student interest in smartphones (technology) compared to conventional learning.

The purpose of this study is to determine students' learning interests with the use of interactive emodules in class XII in entrepreneurial subjects at SMK Telkom Pekanbaru. To achieve this goal, information and analysis of the use of interactive e-modules on learning interests are needed, in connection with that, the information referred to in this study is the level of student learning interest with the use of interactive emodules, differences in student learning interests using interactive e-modules, the effectiveness of using interactive e-modules on student learning interests.

LITERATURE REVIEW

Interest is a concentration that contains elements of feelings, pleasure, involuntary desires that are active in nature to receive something from outside (the environment). Interest has the benefit of being a strong driver in achieving achievements. By having an interest in learning, students further strengthen the memory of the lessons given by educators. With a strong memory, learners successfully understand the subject matter given by the educator. So, it is not difficult for students to do questions or questions from students. This results in good grades and increases educator achievement.



According to Nuria in her research, there are two aspects contained by interest, including cognitive aspects and affective aspects. The cognitive aspect contains the notion that interest is always preceded by knowledge, understanding and concepts obtained and developed from experience or the result of interaction with its environment. The affective aspect indicates the emotional degree expressed in the form of a process of judging to determine the activities that are enjoyed. (Nuria 2019)

Learning is a process that occurs in everyone to achieve changes in knowledge, attitudes and behaviors obtained from environmental experience and formal education with the aim of a change that is better than before. In research Rauf et al., (2020) Mardiyana said positive learning behavior will encourage students to establish good relationships with teachers and friends, but if students cannot show positive behavior then they will have difficulty learning. Mardiyana said positive learning behavior will encourage students to establish good relationships with teachers and friends, but if students cannot show positive behavior then they will have difficulty learning. Interest in learning is the energy of the forces that drive a person to achieve learning goals. Interest in learning depends not only on ability, but also depends on whether one chooses the goal of mastery (the purpose of learning), the focus of which is to learn a new ability well; or performance goals, whose focus is on demonstrating or demonstrating our abilities to others. Interest in learning is a feeling of pleasure, interest, attention and involvement of students in teaching Sati et al., (2022). So it can be concluded that interest in learning is a drive, liking and interest of a person towards something to learn with the aim of getting changes in knowledge, attitudes and behavior for the better. According to Rina Dwi Muliani & Arusman (2022) states that there are two factors that influence interest in learning including internal factors and external factors. Internal factors are an influence that comes from within students, namely the attention, attitude, talent, and ability of a student. While external factors are factors that are influenced from outside students such as attention in the learning process, learning facilities and infrastructure, parental guidance on learning at home, facilities and needs and environmental factors. This is a factor that affects interest in learning.

Entrepreneurship is a combination of creativity, innovation and courage to face risks that are done by working hard to form and maintain new businesses. The essence of entrepreneurship is the ability to create something new. through creative thinking and acting innovatively to create opportunities. It can be obtained from teaching and formation through education and training. Entrepreneurship education helps individuals to acquire minimal resources through knowledge sharing and proper information transfer. Therefore, individuals who show interest in entrepreneurship education are more likely to be involved in the entrepreneurial process. The role of entrepreneurship education on entrepreneurial interest can be shown by the formation of entrepreneurial knowledge. Entrepreneurship education that shapes entrepreneurial knowledge enables individuals to increase awareness and interest in entrepreneurship. The indicators of interest in learning used in this study are having a feeling of pleasure in participating in entrepreneurship learning, Have more attention and special in learning entrepreneurship. Have interest in following entrepreneurship subjects, Have involvement in entrepreneurial learning. This is according to research Apriyanto & Herlina (2020) Explain the indicators of interest in learning, namely: having a feeling of pleasure, having an interest in learning, having special attention in learning, having involvement in the learning process.

1. Modules are teaching materials that are arranged in a systematic, planned manner with easy-to-understand language to help individual students achieve their learning goals. Laili et al., (2019) Explaining that e-modules are independent teaching materials that are arranged systematically which in their use use use electronic media in the form of interactive multimedia. Simanjuntak et al., (2019) Interactive multimedia is the integration of several media elements (audio, video, text, animation, etc.), into a single whole that creates benefits for teachers, students, and other users. Multimedia is used by teachers to deliver teaching materials and build a conducive atmosphere and motivate students to learn. Interactive e-modules have advantages and benefits that can foster student learning interest, namely interactive e-modules can be used flexibly without any space and time limitations, The use of e-modules can improve students' ability to think critically because e-modules are designed so that students can learn independently. The use of e-modules can also increase student learning motivation because the content contained in the e-modules is



neatly packaged with the aim make it easier for students to understand the subject matter, In addition, the use of interactive e-modules also aims to describe the material conceptually so as to increase students' understanding and memory of the material Wulandari et al., (2021). In the use of interactive e-module teaching materials, there are several things that need to be prepared so that interactive e-module teaching materials can be used effectively and efficiently so as to create learning that attracts the attention of students. The steps that need to be prepared in the use of interactive e-module teaching materials are as follows: Preparation. In order for the use of interactive e-modules to be used effectively, the preparation that must be done is for each student's smartphone to be connected to the internet network. Then the teacher sends a file or link of an interactive e-module to the students that includes the material according to the learning syllabus. Students can access the link or download the interactive e-module file through the link provided by the teacher.

- 2. Implementation/presentation. After the teacher provides the student with the interactive e-module link or file, the student can download the file or open the interactive e-module link. Before learning begins, students can learn the material contained in the interactive e-module. Then students can discuss with their peers and students are given the opportunity to ask questions related to material that is not understood. The teacher provides an explanation related to the material discussed and provides understanding to students regarding the material that is not understood. Then at the end of the lesson, students can work on the assignment as an evaluation. From the evaluation that has been done by students, teachers can analyze how high the level of student understanding when viewed from the results of the task.
- 3. Follow-up activities. The purpose of this follow-up activity is to find out whether the implementation of learning activities has achieved learning objectives. In addition, this activity is to strengthen students' understanding of the material delivered through the teaching materials. In follow-up activities, teachers give interactive quizzes to students.

Sulistyowati et al., (2022) Explaining interactive e-modules can increase student learning interest because the higher the student's interest in learning, the more optimal students will achieve achievements. In line with research Rois et al., (2016) says that If someone learns something with interest then it is expected that the results will be good, but if someone does not have the interest to learn something then it is not expected that someone can succeed well. This is because when students feel interested and comfortable in the learning process, it will increase student understanding of the material being studied. Student interest and comfort in learning the subject matter can be obtained from the use of interactive teaching materials, namely e-modules.

METHOD

This study used a type of experimental research with the research design used was One Group Pretestposttest Design. This research was conducted at SMK Telkom Pekanbaru Jl. Esemka No.5, Simpang Baru, Kec. Tampan, Pekanbaru City. The study was carried out for approximately 6 months from July 2023 to December 2023. The instruments in this study used learning interest questionnaire sheets and observation sheets. Learning interest questionnaires are given before and after the use of interactive e-modules and observation sheets are instruments used to collect data through field observations. The observation made was to observe the correctness of using interactive e-module teaching materials during the classroom learning process in entrepreneurship subjects. The data analysis techniques used are descriptive analysis, t-test and Ngain test (Gain Normality)

RESULTS AND DISCUSSION

Based on the results of observations of learning activities, it shows that the teacher has carried out the steps of using the Interactive E-Module systematically from the opening activity (preparation) to the closing activity (follow-up). From the observations that have been carried out, the results show that students' reactions are categorized as very good when participating in learning with descriptive, narrative, argumentative, or



persuasive exposure material about products / services using the Interactive E-Module. This can be seen from the assessment that shows the average score of observation results which shows 3.95. This means that the implementation of learning using Interactive E-Modules in class XII SMK Telkom Pekanbaru is included in the very good category. In addition, from the observations, almost all students carried out the aspects assessed, such as enthusiasm in asking opinions, asking, and answering questions. The data obtained from the observation sheet succeeded in increasing the interest in learning students through student activity data.

To see the increase in student interest in learning before and after the use of interactive e-modules, descriptive analysis was used. The results of the descriptive analysis of the level of student learning interest can be seen in Table 1:

Table 1. Average level of interest in learning entrepreneurship students before the use of interactive e-

modules		
Frequency	Percentage	
0	0	
0	0	
20	61%	
13	39%	
0	0	
	Frequency 0 0 20	

Based on Table 1, it can be seen that respondents' answers to the interest in learning entrepreneurship before using the interactive E-module as many as 20 students were in the medium category by 61% and as many as 13 students were in the low category by 39%. Thus it can be seen that the level of interest in learning entrepreneurship students so far has not been optimal and this needs to be improved again by using the Interactive E-Module can be seen in Table 2:

 Table 2. Average level of interest in learning entrepreneurship students after the use of interactive e-modules

Interval	Frequency	Percentage
50,4-60	33	100%
40,8-50,4	0	0
31,2-40,8	0	0
21,6-31,2	0	0
12 - 21,6	0	0

Based on Table 2, it is known that respondents' answers to interest in learning entrepreneurship after the use of the Interactive E-Module are in the very high category. This can be seen in the category of student learning interest after the use of the 100% Interactive E-Module is in the very high category of 33 students. This means that students' interest in learning entrepreneurship after using the Interactive E-Module has increased by a very high category. This is in accordance with the results of the study Septiani et al., (2023) which states that Interactive E-Modules can increase students' interest in learning.

To find out the difference between the level of student learning interest without using the Interactive E-Module and student learning interest using the Interactive E-Module, a t-Test was carried out. Before looking at the level of difference in student learning interest, a normality test was carried out to see the assumption of normally distributed data. The test results can be seen in the following table 3:



Table 3. Pretest and Posttest Normality Test Results with Shapiro-Wilk

Nilai	Signifikan
Pre test	0.304>0.05
Post test	0.062>0.05

The shapiro-wilk test is used considering that the number of objects to be tested is less than 100. Shapiro-wilk test data is said to be normal if the significance value is more than 0.05. In Table 3 it can be seen that the significance value for the pretest data is 0.304, this data is greater than 0.05 while the posttest value gets a significance value of 0.062, where the data is greater than 0.05 so that it can be interpreted that the pretest and posttest value data obtained are normally distributed. After the value data is normally distributed, a t-test is then carried out to see the difference in student learning interest without using the Interactive E-Module and with the use of the Interakif E-Module. The results of the analysis can be seen in Table 4 below:

Table 4. T Test Results with Paired Test T Test samples

	Mean	Std. Deviation	Т	df	Sig. (2-tailed)
Pretest Posttest	-22.061	3.579	-35.410	32	.000

Based on Table 4, it can be seen that the value is 0.000<0.05, meaning that there is a significant difference between student learning interest without using Interactive E-Modules and student learning interest using Interactive E-Modules with an average value difference of -22,061. To determine the effectiveness of using the Interactive E-Module to increase student learning interest, a Normality Gain Test was carried out with the help of SPSS for windows version 22 calculations. A treatment is said to be effective if the NGain score meets the criteria, in this study the effectiveness category based on the opinion of Hake, R.R as follows:

>76 : Effective

56-75 : Moderately Effective

40-55 : Less Effective

<40 : Ineffective

The N-Gain results can be seen in Table 5 as follows:

Table 5. N-Gain Score Test Calculation Results

Interest in Learning	Average	N-Gain Score	
Pretest	32,394	- 0,7968	
Posttest	54,454		

Based on the results of the N-Gain Score Test in Table 5 above, it shows the mean value of the prequestionnaire of students' entrepreneurial learning interest before the use of the Interactive E-Module, which is 32,394. Furthermore, the increase in the student entrepreneurship learning interest questionnaire post after the use of the Interactive E-Module was 54,454. The mean value of N-gain score is 0.7968, so $0.7968 \ge 0.7$ is included in the high category. So it can be concluded that the use of Interactive E-Modules is effective with high categories for students' entrepreneurial learning interest at SMK Telkom Pekanbaru.

Use of Interactive E-Modules to Increase Students' Entrepreneurial Learning Interest

The hypothesis in this study is that there is an increase in entrepreneurial learning interest of class XII students with the use of Interactive E-Modules at SMK Telkom Pekanbaru. Based on the results of descriptive



analysis, the level of student interest in learning without using the Interactive E-Module showed in the medium category of 61% and in the low category of 39%. The data shows that students' interest in learning needs to be optimized and improved. After the implementation of learning using the Interactive E-Module, the results of the descriptive analysis showed that student learning interest with the use of the Interactive E-Module increased in the very high category by 100%. This shows that there is an increase in student interest in learning with the use of Interactive E-Modules. This is in line with research Septiani et al., (2023) which shows that Interactive E-Modules can increase students' interest in learning. Differences in Student Learning Interest using the Interactive E-Module can be known through data that has been analyzed through t-tests. Based on the results of the t test with the Paired Test sample T Test, it is known that the value is 0.000<0.05, meaning that there is a significant difference between student learning interest without using the Interactive E-Module and student learning interest using the Interactive E-Module with an average value difference of -22,061. This is according to research Sulistyowati, (2022) The results showed that there were differences in students' learning interests before and after using the Interactive e-module. On the other hand, the use of interactive emodules is effective to increase students' interest in learning entrepreneurship. Through data analysis using the N-Gain Score Test, based on the results of the calculation of the average value of the student's preentrepreneurship learning interest questionnaire before the use of the Interactive E-Module showed a value of 32,394 and after the use of the Interactive E-Module, the average value of students' entrepreneurial learning interest showed a value of 54,454. The mean value of N-gain score is 0.7968, so $0.7968 \ge 0.7$ is included in the high category. This is according to research Almahera et al., (2023) which shows that interactive Emodules are effective for increasing the level of interest in learning students.

CONCLUSIONS AND RECOMMENDATION

Before the use of the Interactive E-Module, the average student interest in learning was in the medium category of 61% and in the low category of 39%. This shows that students' learning interests need to be optimized and improved. After the use of the Interactive E-Module, the average student interest in learning increased to be in the very high category by 100%. So this shows that there is an increase in student learning interest from low and medium categories to increase in the very high category.

There are differences in student learning interests after the learning process with the use of Interactive E-Modules and before the use of Interactive E-Modules. Student interest in learning using the Interactive E-Module shows the high value of student interest questionnaire posts. In addition, the pre-questionnaire of student learning interest who did not use the Interactive E-Module showed a lower average score of 32,394 compared to the average value of the student learning interest questionnaire post who used the Interactive E-Module, which was 54,454. So that through the T Test Results with the Paired Test sample T Test, it can be seen that the value is 0.000<0.05, meaning that there is a significant difference between student learning interest without using the Interactive E-Module and student learning interest using the Interactive E-Module with an average value difference of -22,061.

The use of Interactive E-Modules is declared Effective in increasing the interest in learning entrepreneurship of grade XII TKJ 1 students at SMK Telkom Pekanbaru. This can be seen through the N-gain Score test which shows the mean value of N-gain score is 0.7968, then $0.7968 \ge 0.7$ is included in the high category.

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