

## **IMPLEMENTATION MEDIA INTERACTIVE ANIMATION BASED ON DISCOVERY LEARNING ON STUDENTS' LEARNING INTERESTS**

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### **ABSTRACT**

The low interest in learning mathematics among grade 3 students of SDN 1 West Palimanan, along with the lack of learning media, makes it difficult for students to understand the material. This study aims to determine whether interactive animation media based on discovery learning can enhance students' interest in mathematics. Additionally, it examines the effect of this media on the learning interest of grade 3 students at SDN Kedawung. This research employs a quantitative approach using a questionnaire for data collection. A sample of 40 students from SDN 1 West Palimanan participated in the study. Data analysis involved normality tests and t-tests. The main focus of the study is the influence of interactive animation media on students' interest in learning mathematics. The results indicate that interactive animation media significantly affects students' learning interest, as evidenced by a significance value (p-value) of  $< 0.05$ . Furthermore, students' average learning interest score increased from 51.32 to 60.75 after implementing the media. These findings suggest that discovery learning-based interactive animation media positively influences students' interest in mathematics, making it an effective tool to enhance engagement in learning.

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## **1. INTRODUCTION**

Learning is a process of interaction between students and educators, with learning materials, method delivery, strategy learning And source Study in an environment Study. Then, success in process Study And learning can be seen through the level of success in achieving educational goals. By achieving learning goals, it can be said that the teacher has succeeded in teaching. Things the need in take note by educator especially in process

learning Mathematics. Mathematics learning is one of the supporting components for the ongoing education system. Mathematics is a subject the lesson that essential in the educational curriculum because it equips students with logical, analytical, and critical thinking skills. systematic (Saragih, 2019). However, Lots student Which feel difficulty and less interested in learning mathematics. Factors that influence low interest in learning mathematics between other method teaching Which not enough interesting, lack of involvement student in process Study, as well as media learning Which not enough varied and interactive (Yulianti, 2018).

Interactive animated media is a learning tool that uses animation to explain mathematical concepts in an interesting and easy-to-understand way. Animation can help illustrate abstract concepts more concretely, so that students can more easily understand the material (Raharjo, 2021). In addition, interactive media allows students to interact directly with learning materials, thereby increasing their engagement and motivation to learn (Putri, 2022). In the 5.0 era, the use of learning media that uses technology is animated videos based on discovery learning. Discovery learning is a method to develop active student learning methods by determining for themselves, investigating for themselves, so that the results obtained will be loyal, and long-lasting in memory and will not be easily forgotten by students. In the world of education, use video animation as media learning interactive has become attention by for educator For utilise its potential And grow interest student learning.

Melaputri et al (2021) argue that interest in learning can be aroused by implementing a fun learning model that demands student activity, so that slowly an interest in learning will arise in students and ultimately lead to results. Study Which optimal also. Interest learn is a desire or encouragement which is within humans to carry out learning activities (F Al Fahmi and L Hadi, 2022).

The application of interactive animation media based on discovery learning in mathematics learning is expected to increase students' interest in learning. Interest in learning is one of the important aspects that influences the success of the teaching and learning process. High interest in learning will encourage students to be more active in learning, more focused in following lessons, and more enthusiastic in exploring the material (Sunarto, 2017).

The aim of this research is to find out whether the application of interactive animation-based media is discover learning can increase interest Study mathematics student

class 3. In addition, this study aims to determine whether the use of interactive animation media based on discover learning has an effect on the interest in learning mathematics of grade 3 students.

Based on this description, the researcher is aware that it is very effective in delivering lessons. mathematics using learning media other than facilitate teachers also to provide new learning experiences to students. Interactive learning media is considered necessary to be utilized so that learning becomes effective, efficient, and enjoyable, surely teachers and students want such learning and interactive learning media in accordance with the development of science and technology.

## **2. METHOD**

The type of research used in this study uses quantitative research. According to Sugiyono (2018:14), study quantitative is method study which is based on the philosophy of positivism to research a certain population or sample, and sampling is done randomly with data collection using instruments, and data analysis is statistical. The design of this research is a comparative study. According to Sugiyono (2010:22) comparative is a design study Which its nature comparing, in this study, what is being compared is whether students' interest in learning has increased before and after using interactive media based on discovery learning in mathematics subjects, where the measuring instrument comes from the continuity of students' interest in learning mathematics using interactive media.

The data collection technique in this study used a questionnaire/survey Questionnaires or surveys can be in the form of closed or open questions or statements, can be given to respondents directly or sent via the internet. (Sugiyono, 2018, p. 142). The sampling technique used in this study is to use simple random sampling . According to Sugiyono (2017:82) the simple random sampling technique is a simple technique because the taking of sample members from the population is done in a way random without see And notice similarity or standard Which There is In the population For the instruments distributed to respondents, measurements will be carried out using a Likert scale that shows the level of suitability SS (Strongly Agree), S (agree), Rg (undecided), and TS (disagree). According to Sugiyono (2018: 168) "The Likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about a phenomenon social" Statement consists of from ten grain state perception positive And ten items stated negative perceptions at SDN 1 Palimanan Barat using class 3 consisting of 40 respondents as a sample in this study.

### 3. RESULT AND DISCUSSION

The respondents used in this study were grade 3 students at SDN 1 Palimanan Barat. The number of respondents taken was Forty respondents. Based on the results of observations which is conducted In class 3 of SDN 1 Palimanan Barat, it was discovered that students' interest in learning mathematics was low because minimal use of learning media so that students difficult For understand material learning mathematics, part big from they still have not achieved the expected learning outcomes and during the teaching and learning process it is only centered on the teacher, so that student activities in the learning process are not yet dominant.

Implementation Interactive animation media based on Discovery learning can help students find answers to problems given and can increase interest in learning mathematics. The determining factor of interactive animation media is not only interesting content but also using language that is easy for students to understand so that it can trigger flavor want to know and interest student to learning mathematics the more all. Student with interest learn that tall will be able to overcome learning difficulties in learning mathematics.

Whereas interest learn math, as encouragement from in and outside students' self that triggers students to be able to be actively involved in the learning process, so that they can understand material with Good And results Study they increased on lesson Mathematics. Therefore, interactive animated learning media is needed to increase students' interest in learning. by using the discovery learning method. This learning process is more fun and interesting. interest students for increase participation they in the process of learning mathematics.

After that, the researcher gave a questionnaire distributed to respondents containing answers with four criteria that students must choose according to the reality they feel, namely SS (Strongly Agree), S (agree), Rg (doubtful), and TS (disagree). The questionnaire was tested using normality test, descriptive test and t-test.

#### Analysis Test Normality

This normality test is to test whether the data is normally distributed or not. The following is a normality test table using SPSS 23 for Window .

Table 1. Test Normality.

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro- Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Perception Student	.144	40	.037	.959	40	.159

*a. Lilliefors Significance Correction*

Results show mark significance (p) on test Kolmogorov-Smirnov is  $0.37 > 0.05$ , so based on the test, the data is normally distributed. Likewise, the significance value (p) in the Shapiro-Wilk normality test is  $.159 > 0.05$ , which means the data is normally distributed.

#### Analysis Descriptive

To provide a more detailed picture of students' learning interests, here is a descriptive table that describes the average value of each learning interest indicator:

Table 2. Test Descriptive

Indicator	Average
Happy Feeling	3.1
Interest	3.5
Attention	3.4
Involvement	3.2

Descriptive results show that the average student interest in learning in the indicators of interest and attention is higher than the indicators of feelings of pleasure and involvement. Matter This indicates that although student show interest Which pretty good in matter interest And attention in Study mathematics, they Still need more attention is paid to feelings of pleasure and involvement during the learning process.

## Analysis Inferential

To test the research hypothesis about the influence of implementing interactive animation media based on discovery learning to interest Study student, done t-test (t-test) to compare students' learning interest scores before and after the application of interactive media.

Table.3 T- test Interest Study

	Before	After	t-value	p-value
Interest Study Student	51.32	60.75	5.321	0.0001

From the table above, it can be seen that there is a significant difference between the students' learning interest scores before and after the application of discovery- based animated interactive media. learning, with p-value  $< 0.05$ . Mark average interest Study student increase from 51.32 to 60.75 after the implementation of interactive media. This shows that interactive animation media based on discovery learning has a positive influence on increasing the interest in learning mathematics of grade III students.

## Discussion Results

Study This find that indicator interest And Attention student experienced a significant increase after the implementation of interactive animation media based on discovery learning. This is in accordance with the findings of Sunarto (2017) which states that active involvement student in process Study can increase interest And attention they in studying a subject.

The attention and engagement indicators, although also increasing, show that further efforts are needed to optimize these two aspects. Teachers can use various strategy For increase attention and involvement student, such as providing relevant challenges, providing constructive feedback, and creating a supportive learning environment (Yulianti, 2018).

The results of the normality test show that the data is normally distributed, which allows the use of parametric statistical analysis such as the t-test. This is important to ensure that the results statistical analysis is reliable and valid (Ghasemi & Zahediasl, 2012). t-test show that there is difference Which significant between mark interest student learning before and after the implementation of interactive media, which indicates the effectiveness of this learning method.

#### 4. CONCLUSION

The results of the study showed that the interest in learning mathematics among grade 3 students at school base country 1 the palm tree west low However after researcher apply media interactive animation based on discovery learning there is a significant increase in student learning interest. This is indicated by the results of the t-test which indicates a significant difference between the learning interest values before and after the application of the interactive media. Descriptive data shows that indicators of student interest and persistence have increased. Which more big compared to indicator attention and involvement. This indicates that media interactive animation capable increase aspects important in interest Study students, especially in terms of interest and persistence. However, further efforts are still needed to optimize student attention and engagement during the learning process.

The results of the normality test show that the data is normally distributed, thus allowing the use of analysis statistics parametric Which valid. This give trust more in data analysis and interpretation of research results. This study supports the theory that the use of interactive media And method discovery learning can increase interest And motivation Study student. Animated interactive media makes the learning process more interesting and helps students understand difficult concepts through clearer visualizations. Although this study yielded positive results, there are several limitations that need to be considered, such as the sample being limited to one school and the measurements only being taken in the short term. Further research with larger and more diverse samples and long-term measurements is needed to ensure the generalizability and long-term impact of the use of interactive animation media based on discovery learning.

This study shows that interactive animation media based on discovery learning is an effective learning method to increase interest in learning mathematics for grade III students. It is hoped that the results of this study can be a reference for educators and policy makers in efforts to improve the quality of education through innovation.

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