



THE EFFECTIVENESS OF PEER TUTORING LEARNING MODEL ASSISTED BY CANVA-BASED LEARNING MEDIA ON MATHEMATICAL UNDERSTANDING AND LEARNING INTEREST OF STUDENT AT SMPN 14 CILEGON

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ABSTRACT

This study aims to determine the effectiveness of the peer tutoring learning model assisted by Canva-based learning media on students' mathematical understanding and learning interest. The background of this study is based on the low mathematical understanding and learning interest of students at SMPN 14 Cilegon in mathematics learning, as well as the lack of variety of learning media used. This study uses a quantitative method with a quasi-experimental design of the nonequivalent pretest-posttest control group design. The subjects of the study were grade VII students of SMPN 14 Cilegon, with class VII C as the experimental class and class VII A as the control class. The research instruments included a mathematical understanding test and a student learning interest questionnaire. The results of the data analysis showed that, 1) the increase in mathematical understanding of students who were given learning with the peer tutoring model assisted by Canva-based learning media was better than those who used conventional learning, 2) the learning interest of students who were given learning with the peer tutoring model assisted by Canva-based learning media was better than those who used conventional learning. From the results of the N-Gain data analysis of the experimental and control classes, a sig. value was obtained. (2-tailed) $0.000 < 0.05$ and for the average learning interest of the questionnaire 83.07 high category in the experimental class, while in the control class obtained an average questionnaire of 71.67. So it can be concluded that there is an increase in mathematical understanding and learning interest of students who use peer tutor learning model assisted by Canva-based learning media better than students who use conventional learning. Thus, the peer tutor learning model assisted by Canva media is effective in improving mathematical understanding and learning interest of students of SMPN 14 Cilegon.

KEYWORDS: *Peer Tutoring, Canva Media, Mathematical Understanding, Learning Interest*

INTRODUCTION

Education is one of the primary goals in the formation of the Indonesian nation, as stated in the Preamble to the 1945 Constitution, namely, to educate the nation. The 21st century expects teachers to be able to use information and technology to develop students' potential, thereby creating a quality nation capable of competing internationally. (Hasibuan & Prastowo, 2019). 21st century education utilizes technology as a tool to improve the quality of learning. (Yustiqvar, dkk., 2019). Minister of Education and Culture Regulation Number 7 of 2020 states that learning resources are teaching materials and various information developed and used in the learning process. The Ministry of Education and Culture (Kemendikbud) implemented a simple concept regarding education reform or curriculum change through the "Merdeka Belajar" program. In this program, teachers are given the freedom to choose how to deliver the curriculum and how to teach in schools. The goal of this "Merdeka Belajar" program is to improve the quality of human resources in education. To support this goal, improving the capabilities of teachers and students is necessary.

According to Hardika Saputra (2022), Mathematics, as a basic science, plays a crucial role in mastering both applied and conceptual aspects of science and technology. Therefore, school mathematics should be utilized as a vehicle for developing students' intelligence, skills, and personality. Furthermore, the use of technology as a learning medium can improve students' mathematical comprehension and interest in mathematics at school. Furthermore, research conducted by (Putri & Syadidul Itqon, 2024) At MTsN 01 Probolinggo, it was found that many students experienced difficulties in mathematical understanding, especially in understanding the material given, with an average score below the Learning Objective Achievement Criteria (LOAC).

According to Siti Indah Fauziyah (2019) Mathematical understanding is very important because mathematical understanding is a goal in learning, providing an understanding that the materials taught to students are not just memorization, but more than that, with understanding students can better understand the concept of the subject matter itself. The indicators of mathematical understanding according to (Praja et al., 2021) namely Defining concepts verbally and in writing, Identifying and creating examples and non-examples, Using models, diagrams and symbols to represent a concept, Changing one form of representation to another form of representation, Recognizing various meanings and interpretations of concepts, Identifying the properties of a concept and recognizing the conditions that determine a concept.

One of the challenges often faced in mathematics education is the low level of student involvement or interest in learning mathematics. (Hamidah et al., 2024; Kusuma & Hamidah, 2019; Syavina et al., 2025). In line with research conducted by (Dede Nurhayati & Supardi Supardi, 2025) Based on his observations at SMPN 2 Cianjur, it was found that students' interest in learning mathematics was still relatively low. This was further reinforced by an interview with Dewi, a seventh-grade mathematics teacher at SMPN 14 Cilegon, who stated that students had not shown any interest in concentrating on long-term mathematics lessons. They tended to easily become bored and lose focus, especially when learning was delivered solely through lectures. According to Sari et al. (2025) who argues that students who have an interest in learning will find it easier to learn because it is accompanied by a sense of enjoyment and desire within themselves. This statement is supported by previous research which states that interest has a significant effect on learning if students are interested in the subject they are studying. (Alayda et al., 2025; Handayani et al., 2025; Lestari et

al., 2024; Nurhaniyah et al., 2025).

The cooperative learning method is one of the methods that is often used in research, one of the learning models in this cooperative method is peer tutoring, this was confirmed by one of the researchers (Mahsup et al., 2020), Based on the results of the research conducted, the application of the peer tutor learning model can improve learning outcomes with the results of learning observations obtained in good criteria. Based on the policies implemented by the Ministry of Education and Culture and the facts in the field show that this is contradictory, this condition cannot be allowed because considering the ability to understand mathematics and interest in learning is very important for students to have. However, what needs to be considered is whether after using the peer tutor model assisted by Canva media, students' mathematical understanding and interest in learning can increase or not. Therefore, to answer this problem, the researcher is motivated to raise a discussion with the title "The Effectiveness of the Peer Tutor Learning Model Assisted by Canva-Based Learning Media on Mathematical Understanding and Learning Interest of Students of SMP Negeri 14 Cilegon".

METHOD

The type of research used was quasi-experimental quantitative research. Quantitative research is a planned, systematic, and strictly controlled experiment, either in the form of a functional design or a factorial design. This is in accordance with what was conveyed by (Cakrawala et al., 2017) Quantitative research methods are used to determine the effect of a particular treatment on a particular situation. This study uses a True Experimental Design, a type of quantitative research design. The quasi-experimental design used is a Randomized Pretest-Posttest Control Group Design. The paradigm in this study is illustrated as follows:

Experimental Class : O X₁ O

.....

Control Class : O O

Information:

O : Pretest/posttest (mathematical comprehension test)

X₁ : Learning using a peer tutoring model assisted by Canva-based learning media on students' mathematical understanding.

... : classes are selected randomly

Population and Sample

A population is a generalized area of subjects with certain characteristics to be studied and conclusions drawn from. The population in this study was all seventh-grade students at SMPN 14 Cilegon.

Table 1. Research Population

No.	Class	Amount
1.	VII A	30
2.	VII B	32
3.	VII C	30
4.	VII D	35
5.	VII E	24

	Amount	416
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A sample is a portion of the number and characteristics of the population. The sample in this study consisted of a control class and an experimental class. The control class in this study was 30 students in class VII A, consisting of 16 female students and 14 male students, while the experimental class in this study was 30 students in class VII C, consisting of 16 female students and 14 male students.

Research Instruments

a. The student test instrument, in the form of descriptive questions, was given a pretest and posttest related to the data presentation material for grade VII in the 2024/2025 academic year, even semester, to test students' mathematical understanding. The assessment criteria for the mathematical understanding test are as follows:

Table 2. Criteria for assessing mathematical understanding

Mark	Information
25–30	Very Good (A)
20–25	Good (B)
15-20	Enough (C)
10-15	Not Enough (D)
5-10	Very Enough (E)

b. The non-test instrument used was a questionnaire administered to students to determine their interest in learning mathematics in the experimental and control classes after the study. The following is the outline and criteria for assessing learning interest:

Table 3. Student Learning Interest Questionnaire Grid

No	learning interest indicators	Statement	
		Positive (+)	Negative (-)
1	Feeling of happiness	1,2,3	4
2	Interest	5,6,7	8
3	Acceptance	9,10,11	12
4	Active involvement	13,14,15	16
5	Perseverance	17,18,19	20
Amount		15	5

Table 4. Krite Questionnaire Interpretation Criteria

Percentage (%)	Criteria
0-20	Very Weak
20-40	Weak
40-60	Enough
60-80	Strong
80-100	Very Strong

Data Analysis Techniques

The analyses conducted included test data analysis and questionnaire analysis. Test data analysis is data obtained from the results of the test instrument, while questionnaire data analysis is data obtained from the results of the non-test instrument, namely the questionnaire.

a. Descriptive Data Analysis of Mathematical Understanding

Descriptive analysis is the result of mathematical understanding test (pretest/posttest) from experimental class and control class. Descriptive analysis test was conducted using SPSS 29 application. After conducting descriptive analysis test from pretest/posttest of experimental class and control class, N-Gain test was conducted first and finally prerequisite test was conducted using data obtained from N-Gain test result.

1. N-Gain Test of Mathematical Understanding

After obtaining the pretest and posttest scores from the experimental and control classes, a Normalized N-Gain (N-Gain) data analysis was conducted. The N-gain calculation aims to determine whether there has been an increase in mathematical understanding.

$$N - gain = \frac{Spos - Spre}{SMI - Spre}$$

Information:

N-gain: gain normalization

Spre : score pretest,

Spos : score posttest,

SMI : score ideal maximum.

Table 5. N-gain Value Criteria

N-Gain Mark	Criteria
N-gain \geq 0,70	Tall
0,30 < N-gain < 0,70	Currently
N-gain \leq 0,30	Low

2. Data Analysis Prerequisite Test

a. Normality Test

A normality test was conducted to determine whether the data for both classes came from a normally distributed population. The normality test used was the Shapiro-Wilk test. The hypothesis for the N-Gain data normality test is as follows:

H_0 : N-Gain data for the experimental class and control class comes from a population that is not normally distributed.

H_1 : N-Gain data for the experimental class and control class comes from a normally distributed population.

The significance level used is 5% ($\alpha = 0.05$) with the following testing criteria:

If the Sig value $\geq \alpha = 0.05$ then H1 is accepted.

If the Sig value $< \alpha = 0.05$ then H1 is rejected.

b. Homogeneity Test

A homogeneity test is conducted to determine whether the obtained data have statistically similar variances or diversity. To test the homogeneity of variance between two independent samples in this study, the F-test or Levene's test is used, with the following hypothesis formulation:

H0: N-Gain data have non-homogeneous variances.

H1: N-Gain data has homogeneous variance.

The significance level used is 5% ($\alpha = 0.05$) with the following testing criteria:

If the Sig value $\geq \alpha = 0.05$ then H1 is accepted

If the Sig value $< \alpha = 0.05$ then H1 is rejected.

c. Test Of Equality Of Two Means

The test of equality of two means aims to determine whether or not the average mathematical problem-solving ability of students in the experimental class is the same as that of students in the control class.

The significance level used is 5% ($\alpha = 0.05$) with the following testing criteria:

If the Sig value $< \alpha = 0.05$ then H1 is accepted.

If the Sig value $\geq \alpha = 0.05$ then H1 is rejected.

3. Questionnaire Data Analysis

a. Likert scale test

According to (Pranatawijaya & Priskila, 2019), the Likert scale is a scale used to measure the attitudes, opinions, and perceptions of an individual or group of people regarding social events or phenomena. The measurement method is to present a respondent with a statement and then ask them to answer from five answer choices, where the answer values have different answer values. The Likert scale test in this study aims to determine the results of the influence of the questionnaire on student learning interests in class VII SMPN 14 Kota Cilegon.

$$\text{Likert scale formula} = T \times P_n$$

Information:

T: Total number of respondents who chose

Pn: Likert score number choice

In order to obtain interpretation results, you must first know the highest score (X) and the lowest score (Y) for the assessment item using the following formula:

Y = highest Likert score x number of respondents

X = lowest Likert score x number of respondents

Table 6. Questionnaire Interpretation Criteria

Percentage (%)	Criteria
0-20	Very Low
20-40	Low
40-60	Enough
60-80	Strong
80-100	Very Strong

RESULTS AND DISCUSSION

Descriptive Data Analysis Results

Descriptive analysis is the result of a mathematical comprehension test (pretest/posttest) from the experimental and control classes. The descriptive analysis test was conducted using SPSS 29 software as follows:

Table 7. Descriptive Data Analysis

<i>Descriptive Statistics</i>						
	Experimental Class			Control Class		
	<i>Pretest</i>	<i>Posttes t</i>	<i>N-Gain</i>	<i>Pretest</i>	<i>Posttes t</i>	<i>N-Gain</i>
<i>Minimum</i>	30	66	27	26	43	19
<i>Maximum</i>	66	96	94	53	86	75
<i>Mean</i>	41.93	81.80	67.07	38.13	66.17	45.23
<i>Std.Deviation</i>	8.839	9.283	18.111	7.215	9.903	15.752

N-Gain Test Results

The N-Gain test was used to determine the extent to which mathematics learning using a peer tutoring model assisted by Canva-based learning media improved students' mathematical comprehension. The N-Gain calculation was performed using SPSS 29 software, with the results presented in the following table:

Table 8. N-Gain Test Results

	Mean	Minimum	Maximum
Experiment Class	67,0300	27.03	93.75
Control Class	45.2340	18.52	75.44

Data Analysis Prerequisite Test Results

a. Normality Test Results

The normality test in this study was used to determine the distribution of data on the instrument results between the experimental class and the control class both before and after treatment, whether the data was normally distributed or not. This test was conducted using SPSS 26 Software. The normality test for student N-Gain

data used Kolmogorov-Smirnov and Shapiro-Wilk, the following data results were obtained:

Table 9. Normality Test Results

Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Experimental Class	.098	30	.200*	.962	30	.343
Control Class	.110	30	.200*	.953	30	.203

Based on the output above, it is known that the significance value (Sig) for all N-Gain learning outcomes of the experimental class is 0.343, the N-Gain of the control class is 0.203, both in the Kolmogorov-Smirnov and Shapiro-Wilk tests > 0.05 , so it can be concluded that the N-Gain data of the experimental and control classes are normally distributed.

b. Homogeneity Test Results

The homogeneity test aims to determine whether the variance (diversity) of data from two or more is homogeneous (the same) or heterogeneous (not the same). The results of the homogeneity test are as follows:

Table 10. Homogeneity Test Results

Levene Statistic	df1	df2	Sig.
1,215	1	58	0,275

Based on the output above, it is known that the significance value (Sig) is $0.275 > 0.05$ so it can be concluded that the variance of the N-Gain data for the experimental class and the control class is the same or homogeneous.

c. Results of the Test of Equality of Two Means

The test of equality of two means is used to determine whether there is a difference in the means between two paired samples or not, based on the data obtained previously showing that the data is normal and homogeneous, then in this test of equality of two means, the independent sample T-test equal variance assumed test is used with the following results:

Table 11. Result Of Independent Sample T-test

Class	Sig Based On Mean	Information
Learning outcomes of the experimental class and the control class	0,000	H ₀ rejected

Based on the output results of the independent sample T-test equal variance assumed obtained a Sig (2-Tailed) value of $0.000 < 0.05$, it can be concluded that there is a difference in the average learning outcomes of students in the pretest experimental class and the posttest experimental class. Meanwhile, for the paired results obtained a Sig (2-Tailed) value of $0.000 < 0.05$, it can be concluded that there is a difference in

the average learning outcomes of students in the pretest control class and the posttest control class.

Likert Scale Test Results

After knowing the results of the mathematical comprehension test, the next step was to determine the students' learning interest and ability. This questionnaire used a Likert scale with the help of Microsoft Excel 2016 software, with the following results:

Table 12. Learning Interest Questionnaire Results

Aspect	Score Maximum	Control Class		Experimental Class	
		Average Percentage	Criteria	Average Percentage	Criteria
feeling of happiness	600	78%	Strong	80%	Strong
Interest	600	79%	Strong	80%	Strong
Reception	600	80%	Strong	82%	Strong
active involvement	600	69%	Strong	74%	Strong
Perseverance	600	70%	Strong	76%	Strong

Table 13. Conclusion of the Results of the Learning Interest Questionnaire

Control Class		Experimental Class	
Average Percentage	Criteria	Average Percentage	Criteria
78%	Strong	80%	Strong
79%	Strong	80%	Strong
80%	Strong	82%	Strong
69%	Strong	74%	Strong
70%	Strong	76%	Strong

In the experimental class, as seen in the questionnaire results table, learning interest increased, while in the control class, which only used conventional learning, it also increased, but the increase was greater in the experimental class. This indicates that there is an influence on student learning interest when using the peer tutoring learning model supported by Canva-based learning media.

Discussion of Mathematical Understanding

The results of the mathematical comprehension test obtained from students in the experimental class indicate that they were able to solve the given problems well. This can be seen in the appendix containing the results of the post-test of mathematical comprehension of students in the experimental class. Based on the analysis of each question item, it was found that students in the experimental class managed to obtain a maximum score of 5 on several indicators, indicating that their answers had met all aspects of mathematical comprehension that had been determined by the researcher.

As an illustration, the following is an example of a student's answer from the experimental class:

a. Question item 1 (C2 Understanding)

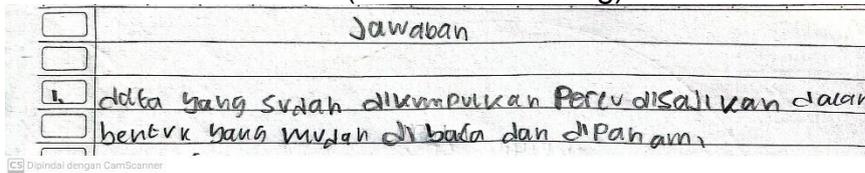


Figure 2. Answers to Question 1 for Experimental Class

Shows the work results of students with high ability categories who successfully answered question number 1 perfectly. The student was able to define question number 1, meaning the student was able to understand. Based on the results of the answers of one of the students in the experimental class on question number 1, it can be concluded that learning using a peer tutor learning model assisted by Canva-based learning media is better than using conventional learning.

b. Question 2 (C3 Applying)

No	dada ekstrakurikuler	Banyak siswa	Bukan contoh
1	Pramuka	4	1 Pramuka 4
2	Voli	3	2 voli 3
3	Pencak silat	2	3 Pencak silat 2
4	Blank out ekstrakurikuler	1	4 tidak ekstrakurikuler
Jumlah siswa		10	

Figure 3. Answers to Question 2 for Experimental Class

Shows the work results of students with high ability categories, who successfully answered question number 2 perfectly. The student was able to apply which examples and non-examples. Based on the results of one student's answer to question number 2, it can be concluded that learning using a peer tutoring learning model assisted by Canva-based learning media is better than learning using conventional learning.

c. Question item 3 (C3 Applying)

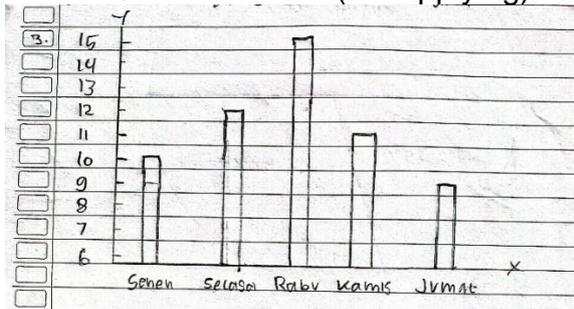


Figure 4. Answers to Question 3 for Experimental Class

Shows the work results of students with high ability categories, who successfully answered question number 3 perfectly. The student was able to apply and present data in the form of a bar chart. Based on the results of one student's answer to question number 2, it can be concluded that learning using a peer tutoring learning model assisted by Canva-based learning media is better than learning using conventional learning.

b. Question 4 (C4 Analyze)

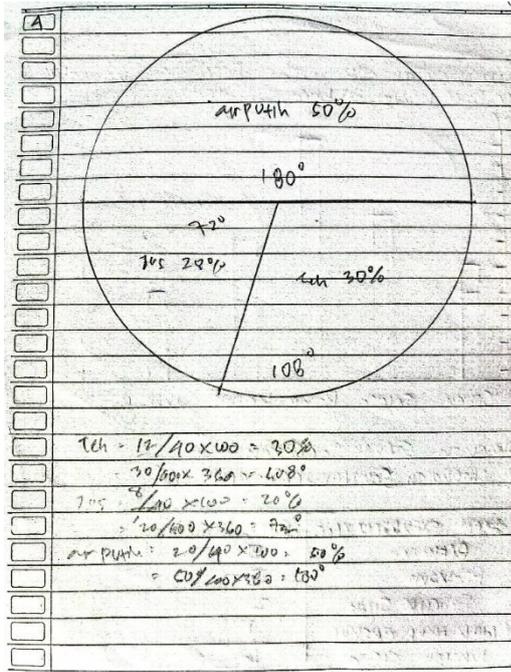


Figure 5. Answers to Question 4 for Experimental Class

Shows the work results of students with high ability categories, who successfully answered question number 4 perfectly. The student was able to analyze and interpret the results of solving question number 4. Based on the results of one student's answer to question number 4, it can be concluded that learning using a peer tutor learning model assisted by Canva-based learning media is better than using conventional learning.

c. Question 5 (C5 Evaluate)

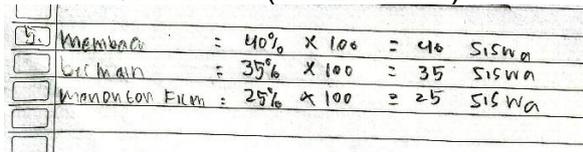


Figure 6. Answers to Question 5 for Experimental Class

Shows the results of student work with a moderate ability category, where the student almost succeeded in answering question number 5 perfectly. Based on the results of one student's answer to question number 5, it can be concluded that learning using a peer tutor learning model assisted by Canva-based learning media is better than using conventional learning.

d. Question 6 (C4 Analyzing)

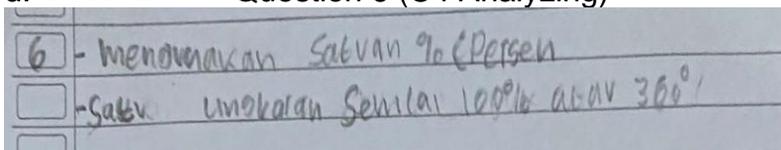


Figure 7. Answers to Question 6 for Experimental Class

Shows the work results of students with high ability category, who successfully answered perfectly on question number 6. The student was able to complete and state the requirements of question number 6. Based on the results of one student's answer

on question number 6, it can be concluded that learning using peer tutor learning model assisted by Canva-based learning media is better than using conventional learning. Meanwhile, in the control class, the results of one student's answer are as follows:

a. Question item 1 (C2 Understanding)

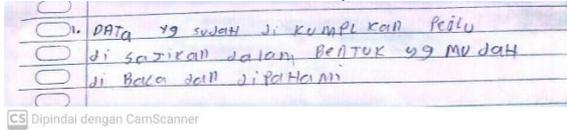


Figure 8. Answers to Question 1 for the Control Class

Shows the work results of students with high ability category, who successfully answered perfectly on question number 1. The student was able to define on question number 1, meaning the student was able to understand. Based on the results of the answer of one of the students in the control class on question number 1, it can be concluded that the student was able to understand and solve question number 1.

b. Question 2 (C3 Applying)

JENIS	Jumlah
BOLA VOLI	3
PANCIKAN	4
PENCAK SILAT	2
BUKAN SAMA	
	3 BOLA VOLI 3 PANCIKAN 4
PENCAK SILAT 2	

Figure 9. Answers to Question 2 for the Control Class

Shows the work results of students with medium ability category, who almost succeeded in answering question number 2 perfectly. The student did not really understand and correctly apply which examples and non-examples in presenting data in question number 2, the student did present data in a table but the table that the student presented was not in the form of a table but rather formed a square. Based on the results of one student's answer to question number 2, it can be concluded that learning using a peer tutor learning model assisted by canva-based learning media is better than using conventional learning.

c. Question item 3 (C3 Applying)

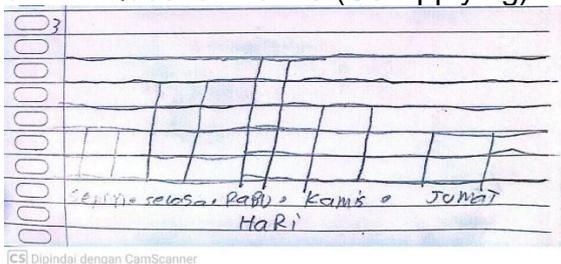


Figure 10. Answers to Question 3 for the Control Class

Shows the work results of students with low ability categories, who have not been able to answer perfectly on question number 3. The student has not been able to apply and present data in the form of a bar chart. Based on the results of the answer of one of the students in the control class on question number 3, it can be concluded that learning using a peer tutoring learning model assisted by Canva-based learning media is better than that using conventional learning.

d. Question 4 (C4 Analyze)

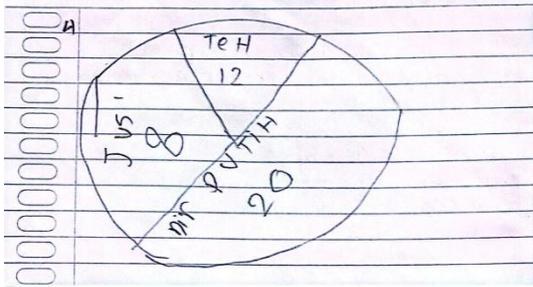


Figure 11. Answers to Question 4 for the Control Class

Shows the work results of students with low ability categories, who have not been able to answer perfectly on question number 4. The student has not been able to analyze and interpret the results of solving question number 4. Based on the results of the answers of one of the students in the control class on question number 4, it can be concluded that learning using a peer tutor learning model assisted by Canva-based learning media is better than using conventional learning.

e. Question 5 (C5 Evaluate)

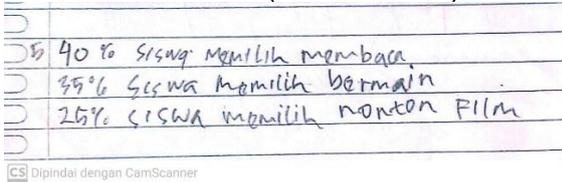


Figure 12. Answers to Question 5 for the Control Class

Shows the work results of students with low ability categories, where the student has not been able to answer perfectly on question number 5. Based on the results of the answers of one of the students in the control class on question number 5, it can be concluded that learning using a peer tutor learning model assisted by Canva-based learning media is better than using conventional learning.

f. Question 6 (C4 Analyzing)

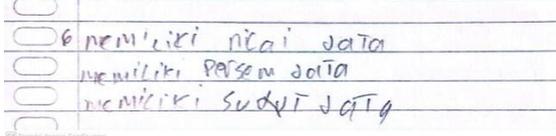


Figure 13. Answers to Question 6 for the Control Class

Shows the work results of students with low ability categories, where the student has not been able to answer perfectly on question number 6. Based on the results of the answers of one of the students in the control class on question number 6, it can be concluded that learning using a peer tutor learning model assisted by Canva-based learning media is better than using conventional learning.

Based on the description of the research results, that in learning using the peer tutoring learning model assisted by the Canva application is more effective and makes it easier for students to improve their mathematical understanding and interest in learning mathematics. This is because learning using the peer tutoring learning model can make students more enthusiastic in learning because it is delivered in language that is easy to understand and more familiar with their peers. In addition, the learning media used tends to be less boring, although in the study, teachers need to be careful so that students can follow and be enthusiastic in learning well. This is very different from learning that only prioritizes material without using appropriate learning models and media. In fact, learning and learning media are inseparable components, because the presence of digital media can help achieve the desired goals. This is in line with

research conducted by (Hamidah et al., 2022) which states that the use of audio-visual learning media with the help of the Canva application can increase learning effectiveness, improve the quality of scientific education by creating an engaging and inspiring classroom for students to play an active role in their education. Research shows that Canva can be used as an effective tool for teaching in learning situations. This is also supported by research (ROKHIM, 2021) which states that the use of Canva-based interactive media can improve learning outcomes in data presentation materials. And also by research (Khairunnisa et al., 2022) which states that through the Use of Canva Interactive Media". In 2023, which states that the results of this study indicate that the use of Canva-based interactive media is effective in improving student learning outcomes in data presentation materials. In line with research conducted by (Sartika, 2022) that based on the research results, it shows that there is a significant increase in the mathematical understanding ability of students who are given treatment using the peer tutor method compared to students who are not given treatment.

Discussion of Student Learning Interests

After the research was conducted, a pretest and posttest instrument was tested on mathematical comprehension. The researchers also administered a written questionnaire to assess students' learning interest, comprising 20 statements, to which students in the experimental and control classes had to respond after completing the posttest.

Based on the results of the questionnaire on learning interest, which was tested using a Likert scale, it was evident that there was a difference in learning interest between the experimental and control classes after the intervention using the peer tutoring model with the aid of Canva-based learning media, compared to the control class, which only used conventional learning. Students who received the intervention developed a greater sense of enthusiasm and passion for the classroom learning process. They were highly active and enthusiastic when learning was directed in study groups and guided by their peers. This was because they felt more comfortable when they encountered difficulties understanding the material. They were not shy about asking questions because the tutors they had chosen were responsible for guiding their group members like teachers and used language that was comfortable with their peers. Meanwhile, students who were not given treatment were still classified as having low learning interest, this was very much realized by the researcher when the research was conducted in the control class which used conventional learning, students tended to look bored during the learning because the learning was not varied so that students seemed unenthusiastic about learning. This is in line with research conducted by researchers (Khairunnisa et al., 2022) which states that through the use of Canva interactive media in 2023, which states that the results of this study indicate that the use of Canva-based interactive media is effective in improving student learning outcomes in data presentation material.

In line with research (Faradila & Aimah, 2018) which states that the use of learning media in the teaching and learning process can also stimulate students' interest and desire to learn. This is also supported by research. (Setiyani & Narsan, 2024) which states that Canva-based video learning media on the topic of force and motion can increase students' interest in learning. This is in line with research. (Jannah et al., 2023) Based on the analysis and discussion described above, it can be concluded that the use of the Canva application as a learning media can be used as a reference for using

appropriate learning media in innovative learning processes, especially in mathematics learning, so that students have an interest in learning. This is further supported by (Wulandari & Mudinillah, 2022) which states that Canva makes it easier for teachers and students to carry out technology-based learning processes, skills, creativity, and other benefits, this is because the design results using Canva can increase students' interest in learning activities and increase students' interest in learning by presenting teaching materials and materials in an interesting way.

CONCLUSION

Based on the research that has been carried out, it can be concluded that:

1. The improvement in mathematical understanding of students who were given learning with a peer tutor model assisted by Canva-based learning media was better than those who used conventional learning at SMP Negeri 14, Cilegon City.
2. The learning interest of students who were given learning with a peer tutoring model assisted by Canva-based learning media was better than those who used conventional learning at SMP Negeri 14, Cilegon City.

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