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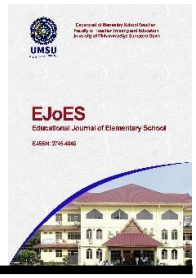

THE INFLUENCE OF THE GUIDED NOTE TAKING LEARNING MODEL ON CLASS IV SCIENCE LEARNING OUTCOMES

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ABSTRCT

This research aims to determine the effect of the Guided Note Taking learning model on learning outcomesfourth grade students in terms of cognitive, affective and psychomotor aspects.This type of research is quantitative research. This research is pre-experimental with a One-Group Pretest-Posttest Design research design. The sample used was 24 students. The instruments used in this research were test sheets, observation sheets and performance tests. Hypothesis testing uses the T test. Before the test instrument is used, a trial is carried out first, namely testing content validity, test validity and test reliability. The test results showed that all test items were valid and reliable, in other words, suitable for use. The results of calculations using the T test on the cognitive aspect obtained a value of tcount 15.530 > ttable 2.06866, so as a basis for decision making Ho is rejected and Ha is accepted. The affective aspect obtained tcount 42.009 > ttable 2.06866, so as a basis for decision making Ho is rejected and Ha is accepted. and psychomotor, the tcount value was 11.306 > ttable 2.06866, so as a basis for decision making, Ho was rejected and Ha was accepted. So it can be concluded that there is a difference in the average pretest and posttest learning outcomes, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School.

Keyword

Science Learning, Guided Note Taking, Learning Outcomes.

1. INTRODUCTION

The process of learning activities in schools involves teachers and students, the teacher as the person who educates, while the students act as recipients of knowledge. Learning is assistance provided by teachers so that the process of acquiring knowledge and knowledge, mastery, skills and habits, as well as the formation of attitudes and beliefs in students, occurs. In other words, learning is a process to help students learn well (Putra, 2022).

Teachers play an important role in teaching because whether a teaching objective is successful or not depends on how the teacher teaches it well or whether it can be understood by the students. So teachers are required to teach so that their students can receive the lessons they give well, this cannot be separated from the application of learning models that are easy for students to understand.According to T. Raka Joni (in Kusumawati, 2019: 7-8) a model is a pattern and sequencegeneral actions of teachers and students in realizing predetermined teaching and learning activities. A teaching program is carried out by a teacher in one face-to-face meeting, which can be carried out using various methods such as lectures, questions and answers, giving assignments and discussions.

Based on the results of observations and interviews with teachers in October 2022 in

class IV of Bina Taruna Private Elementary School, Medan, researchers found that students were less interested in Study,students do not respond to learning from teachers, for example they do not want to ask questions if they do not understand, they do not want to try to solve questions from the teacher, they do not want to express their opinions and they do not want to answer questions from the teacher, which causes student learning outcomes to be low. From student data, information was obtained that 69% of students did not reach the KKM. This data proves that students' science learning outcomes are still low. So it is necessary to apply a learning model that can improve student learning outcomes, so that their interest in learning increases, therefore researchers use Guided Note Taking media to improve student learning outcomes.

It is hoped that this model will not only be able to be a fun thematic science learning model, but the Guided Note Taking learning model will also be able to help students understand the material.According to Suprijono (in Putra, 2022) suggests that Guided Note Taking (GNT) is a model of guided notes developed to help students listen actively. The application of this learning model starts from technique, namely students are asked to fill in the blank points in the handout that has been given by the teacher. The Guided Note Taking learning model or guided note learning model was developed so that the lecture method delivered by the teacher gets students' attention.The Guided Note Taking strategy is a type of learning that uses a summary guide of the main points derived from the learning material plus modifications (Asiyah, 2020).There are many shapes or patterns that can be done for this model, one of which and the simplest is filling in the dots.

The Guided Note Taking learning model or guided notes is a type of active learning model that is chosen to help convey the important points of a lesson delivered using the lecture method. Using the Guided Note Taking learning model by optimizing the use of teaching aids in thematic science learning will have a more interesting impression and will arouse students' interest in learning.

2. Research Methods

This type of research is quantitative research. The research is pre-experimental with a One-Group Pretest-Posttest Design research design, because the researcher implements actions, namely the learning model and the research results environment in quasi-experimental research cannot be controlled. The following is the One-Group Pretest-Posttest Design in this research.

3. Results and Discussion

This type of research is quantitative research. The research is pre-experimental with a One-Group Pretest-Posttest Design research design, because the researcher implements actions, namely the learning model and the research results environment in quasi-experimental research cannot be controlled. The following is the One-Group Pretest-Posttest Design in this research.

Table 1. Research Design

O1 X O2

Information :
O1: Pretest Score
O2: Posttest value
X: Treatment

According to(Sugiyono, 2019)Population is a generalized area consisting of objects and subjects that have certain qualities and characteristics determined by researchers to be studied and conclusions drawn. The population in this research was carried out on all students in class IV of Bina Taruna Marelan Elementary School.

Table 2. Research Population

Class	Gender		The number of students
	Man	Woman	
IV	10	14	24

In this study, researchers will use the entire student population in class IV to become the research sample. Data collection techniques use tests (essays) in the form of pretest posttest, observation sheets, performance tests (action tests). Furthermore, before conducting the research, a trial of the instrument was carried out with validity and reliability tests. Test the hypothesis using the t test. The t test was carried out to determine the effect of the Guided Note Taking model on student learning outcomes in science subjects in class IV of SD Bina Taruna Marelan

3. RESULTS AND DISCUSSION

a. Instrument Trial Results

Before the test instrument is given, a trial is carried out first. The test instrument was given

to class V students totaling 25 respondents to test the validity and reliability of the test instrument whether it was suitable for use during the research.

1) Test the validity of the questions

The validity test is used to assess how accurate the test measuring instrument is used. This test was carried out with the help of the SPSS.20 application. The results of the validity test can be seen in the following table.

Table 3. Validity Test Results

Question items	Rcount	Table	Information
1	0.845	0.3961	Valid
2	0.581	0.3961	Valid
3	0.506	0.3961	Valid
4	0.824	0.3961	Valid
5	0.791	0.3961	Valid
6	0.845	0.3961	Valid
7	0.581	0.3961	Valid
8	0.791	0.3961	Valid
9	0.584	0.3961	Valid
10	0.845	0.3961	Valid

Source: (Results processed by researchers, 2023)

The validity data was then consulted with the product moment r table of percent significance level of 5% of 0.05. If rcount > rtable then it can be concluded that the question item is valid. Based on the results obtained, it is known that all test items are valid, in other words, suitable for use.

2) Question Reliability Test

Reliability testing is used to determine the level of consistency of a research instrument. This test was carried out with the help of the SPSS.20 application. The results of the reliability test can be seen in Table 4 below.

Table 4. Reliability Test Results

Reliability Statistics

Cronbach's Alpha	N of Items
,768	10

Based on the basis for decision making in the reliability test, it can be seen that the Cronbach's Alpa value is 0.768 > 0.60, so it can be concluded that the instrument is declared reliable or consistent.

3) Validation of Observation Sheet

The research instrument sheet was validated by the validator, namely Mrs. Karina Wanda, S.Pd., M.Pd as the supervisor. Validation is indicated to determine whether or not the research instrument is suitable for use. The results of the research instrument validation can be seen in the following table

:

Table 5. Validation Results of Student Observation Instruments

No	Rated aspect	Evaluation				
		1	2	3	4	5
Student Observation Sheet Format						
1	Instructions are stated clearly					✓
2	Clarity of numbering system					✓
Content Format						
3	Statements are formulated briefly and clearly					✓
4	Suitability to student activities in the RPP					✓
5	The indicators observed cover all aspects that support the implementation of learning				✓	
Skills						
6	Conformity of language with standard Indonesian language rules					✓
7	The language used is communicative				✓	

8	Easy to understand language					✓
	Total score				8	30
	Total Score	**38**				
	$\boldsymbol{Nilai} = \frac{\boldsymbol{Total\ Skor}}{\boldsymbol{Jumlah\ skor\ maksima}} \times \mathbf{100\%} = \frac{\mathbf{38}}{\mathbf{40}} \times \mathbf{100\%} = \mathbf{95}$	**Very good**				

b. Data Description

The results of data collection were obtained from pretest and posttest scores, while observations were used to provide an overview of the implementation of the research. The observation results show that students' activities in learning are viewed from several aspects.

1) Student Cognitive Learning Results

Implementation of research begins with preparing a Learning Implementation Plan (RPP), research instruments, attendance list, pretest and posttest questions, answer sheets, media (handouts), and materials. Before being given treatment, students are given a pretest to determine the student's initial abilities. After the teacher applies the learning model, students are then given posttest questions. The posttest was given to see students' abilities after receiving treatment. The following student learning results can be seen in the table below.

Table 6.Student learning outcomes

No	Student Code	*Pretest*	*Posttest*
1	A A	20	75
2	A.I	50	75
3	US	40	80
4	E.W	40	80
5	FAR	50	80
6	E.P	40	100
7	FAS	50	85
8	JMRMT	50	90
9	M.A	50	90
10	MRK	60	85
11	M.S	40	80
12	DA	40	95
13	MDAN	20	85
14	MRY	50	80
15	MR	60	80
16	NAF	40	75
17	PSAs	50	90
18	RZN	60	80
19	R.A	20	85
20	RW	50	90
21	BC	50	90
22	TH	40	80
23	UB	50	85
24	RR	40	80
Total		**1060**	**2015**

Average	**44,167**	**83,958**
Standard deviation	**11,149**	**6,288**
Minimum	**20**	**75**
Maximum	**60**	**100**
Variance	**124,305**	**39,539**

Based on the results of the student pretest, it is known that the students' initial ability results have an average of 44.167 with a maximum score of 60 and a minimum of 20. This is indicated by the fact that many students are not able to remember the learning material. Students are still confused about answering the questions given. The frequency distribution data for student pretest scores is as follows:

Table 7. Frequency of Pretest Scores

Pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	3	12.5	12.5	12.5
	40	8	33.3	33.3	45.8
	50	10	41.7	41.7	87.5
	60	3	12.5	12.5	100.0
	Total	24	100.0	100.0	

Based on the results of the student posttest, it is known that the average student ability is 83.95 with a maximum score of 100 and a minimum of 75, which means that student learning outcomes have improved after receiving treatment. During learning, students actively participate in learning. The frequency distribution data for students' posttest scores is as follows:

Table 8. Frequency of Posttest Scores

Posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	75	3	12.5	12.5	12.5
	80	9	37.5	37.5	50.0
	85	5	20.8	20.8	70.8
	90	5	20.8	20.8	91.7
	95	1	4.2	4.2	95.8
	100	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

The following is a comparison of student pretest and posttest assessments which can be seen in the table below.

Table 9. Student Pretest Posttest Results

Statistics

		Pretest	Posttest
N	Valid	24	24
	Missing	0	0
Mean		44.17	83.96
Std. Error of Mean		2,325	1,311
Median		50.00	82.50
Mode		50	80
Std. Deviation		11,389	6,423
Variance		129,710	41,259
Range		40	25
Minimum		20	75
Maximum		60	100
Sum		1060	2015

Based on the table above, it shows the students' pretest and posttest results. It can be seen that the average value (Mean) is very different from the pretest value of 44.17 and the posttest value of 83.96. The mean value (Median) for the pretest was 50.00 and the posttest was 82.50. The pretest Mode value is 50 and the posttest is 80. The pretest Standard Deviation is 11.389 and the posttest is 6.423. The pretest variance was 129.710 and the posttest was 41.259. It can be seen that there are differences in student learning outcomes before and after being given treatment, namely the Guided Note Taking (GNT) learning model.

2) Affective Learning Outcomes

Affective learning outcomes are obtained from observations from data analysis of teacher observations of students' characters during science learning by implementing the Guided Note Taking Learning Model. Where these observations were carried out using an instrument for assessing the achievement of national character. The results of observing student activities in terms of the affective aspect obtained scores which can be seen in the following table.

Table 10. Frequency Distribution of Student Activity Observation Results

Affective Aspect	Assessment Score							
	Not Seen Yet		Starting to See		Starting to Develop		Become a habit	
	F	%	F	%	F	%	F	%
Religious	0	0%	9	37.5 %	11	45.8 %	4	16.7 %
Participation	1	4.2 %	9	37.5 %	11	45.8 %	3	12.5 %
Discipline	0	0%	11	45.8 %	11	45.8 %	2	8.3%
Honest	1	4.2 %	10	41.7 %	12	50%	1	4.2%
Not quite enough answer	1	4.2 %	4	16.7 %	10	41.7 %	9	37.5 %
Communicative	2	8.3 %	4	16.7 %	12	50%	6	25%
Cooperation	1	4.2 %	8	33.3 %	10	41.7 %	5	20.8 %
Environmental care	0	0%	11	45.8 %	11	45.8 %	2	8.3%
Responsive	1	4.2 %	10	41.7 %	10	41.7 %	3	12.5 %

Based on the results of observations of student activities during learning in terms of the affective aspect, it was found that students showed religious behavior by praying before and after learning as a form of practicing the teachings of their religion, with the highest score being 11 students (45.8%) in the category "Starting to develop". Students who showed participation behavior by showing curiosity when the teacher conveyed information and motivation during the learning process, with the highest score were 11 students (45.8%) in the "Starting to develop" category. Students who showed disciplined behavior by arriving on time in class and behaving in an orderly manner during the learning process, with the highest scores were 11 students (45.8%) in the categories "Starting to appear" and "Starting to develop".

Students who showed honest behavior by showing honest behavior in collecting data, with the highest score were 12 students (50%) in the "Starting to develop" category. Students who showed responsible behavior by showing responsible behavior in carrying out assignments, both individual and group assignments, with the highest scores were 10 students (41.7%) in the "Starting to develop" category. Students who showed communicative behavior by showing communicative behavior during group discussions and class discussions, with the highest score were 12 students (50%) in the "Starting to develop" category.

Students who showed cooperative behavior by showing cooperative behavior during group discussions with the highest scores were 10 students (41.7%) in the "Starting to develop" category. Students who showed environmentally caring behavior by showing environmentally caring behavior during the learning process, with the highest scores were 11 students (45.8%) in the categories "Starting to be seen" and "Starting to develop". Students who showed responsive behavior by answering questions from the teacher regarding previous lesson material, with the highest scores were 10 students (41.7%) in the categories "Starting to be seen" and "Starting to develop".

3) Psychomotor Learning Results

Psychomotor learning outcomes are obtained from the analysis of student activities on indicators of presenting the results of their work. By referring to this indicator, researchers can see students' psychomotor learning outcomes.

Table 11. Frequency Distribution of Performance Tests

Aspect Psychomotor	Assessment Score					
	0		1		2	
	F	%	F	%	F	%
Visual (Notice)	0	0%	10	41.7%	14	58.3%
Oral (Ask)	7	29.2%	3	12.5%	14	58.3%
Oral (Answer)	7	29.2%	11	45.8%	6	25%
Motorcycle (Play)	0	0%	7	29.2%	17	70.8%
Emotion (Brave)	6	25%	18	75%	0	0%

Based on the performance test which is reviewed from the psychomotor aspect, it is known that 14 students (58.3%) paid attention to the teacher directly without being asked by the teacher, 14 students (58.3%) asked questions more than once, and 14 students answered questions. more than once as many as 6 students (25%), students who tried to complete the ven diagram given by the teacher were 17 students (70.8%) and students who dared to show and explain the ven diagram after being helped by the teacher were 18 students (75%).

c. Hypothesis testing

This research aims toThe influence of using the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at SD Bina Taruna Marelan. The analysis used is the T test with the help of SPSS for Windows version 20 software, which can be seen in detail as follows:

1) Cognitive Aspect

Table 12. Cognitive Aspect T Test Results

Paired Samples Test

		Paired Differences					Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	t	df	
Pair 1	Pretest - Posttest	-39,792	12,552	2,562	**-15,530**	**23**	**,000**

Based on the output table in the Paired Sample Test, the Sig value is known. (2-tailed) is 0.000 < 0.05, so as the basis for decision making, Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average cognitive learning outcomes from the pretest and posttest, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School.

Based onThe output table in the Paired Sample Test shows that the t count is negative, namely -15.530. The calculated t value is negative because the average value of cognitive learning outcomes from the pretest is lower than the posttest learning outcomes. In the context of a case like this, a negative t value can have a positive meaning, so that the t count becomes 15.530.

Next, look for the t table value, where the t table is searched based on the df value (degree of freedom) and the significance value (α/2). From the output above, it is known that the df value is 23 and the sig value. 0.05/2 = 0.025. This value is used as a reference in finding the t table value in the statistical table t value distribution which can be seen in the attachment. So the t table value is 2.06866. Thus, because the calculated t value is 15.530 > t table 2.06866, then as a basis for decision making Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average cognitive learning outcomes from the pretest and posttest, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School.

2) Student Affective Learning Results

Table 13. Affective Aspect T Test Results

Paired Sample Test

	TestValue = 0			
	t	df	Sig. (2-tailed)	Mean Difference
Student Affective Learning Outcomes	**42,009**	**23**	**,000**	24,708

Based on the output results above, it is known that the calculated t value is 42.009. The df (degree of freedom) value is 23. The Sig (2-tailed) value is 0.000 < 0.05 as the basis for decision making: Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average pretest and posttest affective learning outcomes, which means there is an influencethe use of the Guided Note Taking

learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School.

Thus, because the calculated t value is 42.009 > t table 2.06866, then as a basis for decision making Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average affective learning outcomes from the pretest and posttest, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School.

3) Student Psychomotor Learning Results

Table 14. T Test Results for Psychomotor Aspects

Paired Sample Test

	TestValue = 0			
	t	df	Sig. (2-tailed)	Mean Difference
Student Psychomotor Learning Outcomes	**11,306**	**23**	**,000**	6,292

Based on the output results above, it is known that the calculated t value is 11.306. The df (degree of freedom) value is 23. The Sig (2-tailed) value is 0.000 < 0.05 as the basis for decision making: Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average psychomotor learning outcomes from the pretest and posttest, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School.

Thus, because the calculated t value is 11.306 > t table 2.06866, then as a basis for decision making Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average psychomotor learning outcomes from the pretest and posttest, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School

4. CONCLUSION

Learning results based on cognitive aspects show that the t value is 15.530 > t table 2.06866, so Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average cognitive learning outcomes from the pretest and posttest, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School. Learning results based on the affective aspect show that the t value is 42.009 > t table 2.06866, so Ho is rejected and Ha is accepted. So it can be concluded that there is a difference in the average affective learning outcomes from the pretest and posttest, which means there is an influencethe use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School. Learning outcomes based on the psychomotor aspect show that the t value is 11.306 > t table 2.06866, so as the basis for decision making, Ho is rejected and Ha is accepted, so it can be concluded that there is a difference in the average psychomotor learning outcomes of the pretest and posttest, which means there is an influence.the use of the Guided Note Taking learning model on student learning outcomes in fourth grade science learning at Bina Taruna Marelan Elementary School.

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