



The Effect of Numbered Head Together Learning Model on Learning Outcomes

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Article Info

History Article

Received: Jan 15,2024

Revised: March 06,2024

Accepted: March 06,2024

Keywords:

*Learning Model; Number
Head Together; Social
Science Subject*

Abstract

The learning model is a plan or pattern that is used as a guide in planning classroom learning or tutorial learning. Based on observations from researchers at Mts Al-Huda that class VII students pay less attention to the teacher and are more often busy with their own world when participating in social studies learning, besides that the learning atmosphere is less attractive to students. This study aims to describe the application of the Numbered Head Together learning model to social studies subjects at Mts Al-Huda for the 2021/2022 school year and to determine the effect of the learning outcomes of students who use the Numbered Head Together learning model. By using the Independent T-test, the results obtained were 0.004.

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Introduction

Humans need education in living life. Education is one of the main pillars in determining social change. Changes towards quality progress and welfare of life Education that is responsible for the creation of a plenary generation of the nation, as stated in the outlines of the state policy, namely the realization of an Indonesian society that is peaceful, democratic, just, competitive, advanced and prosperous, within the framework of the State The unity of the Republic of Indonesia is supported by healthy people, independent, faithful, pious, have noble character, love the motherland, are aware of law and the environment, master science and technology, have a high work ethic and are disciplined. Basically, humans are efforts to develop individual abilities/potentials so that they can live optimally both as individuals and as members of society and have moral and social values as a guideline for their lives.

Learning, namely mental and psychological activities carried out by a person can lead to different behavior between before learning and after learning. In other words, learning here is a science that seeks to study, analyze the principles of human behavior in the learning and learning process. Teachers play a fairly important role both in planning and implementing the curriculum. Act as planner, implementer and curriculum developer for the class. Realizing this, how important it is to increase the activity, creativity, quality, and professionalism of teachers. IPS learning objectives will be achieved if students master the subject matter that has been studied. Mastery of student material can be seen through student scores obtained after participating in the learning process. The graduation of students after learning that is expected by every school is the result of learning that achieves completeness.

NHT is a type of cooperative learning designed to influence student interaction patterns and as an alternative to traditional class structures. Meanwhile, according to A'la NHT here is a group learning method and each student is given a number then the teacher calls the student's number randomly. Students are said to have completed their studies if their grades have reached the Minimum Completeness Criteria set by the school, which is 7.5. Here according to Lindgren in Agus Suprijono, learning outcomes include skills, information, understanding and attitudes. From the explanation above, it can be concluded that learning outcomes are the achievement of

educational goals for students who take part in the teaching and learning process. Interactions between educators and students that are carried out consciously, planned both inside and outside the room to improve students' abilities are determined by learning outcomes. This study aims to describe the application of the Numbered Head Together learning model to social studies subjects at Mts Al-Huda for the 2021/2022 academic year and to determine the effect between the learning outcomes of students who use the Numbered Head Together learning model.

Method

This research uses quantitative research methods with quasi-experimental design. Quasi Experimental is used to overcome difficulties in determining the control group in research. The variables involved in this research are variable X and variable Y. Variable The population in this study were all class VII students at Mts Al-huda Duko Timur Larangan Pamekasan for the 2022/2023 academic year, totaling 21 students. In this study, researchers used a saturated sampling technique, namely a sampling technique in which all members of the population were used as research samples, this is because the population at Mts Al-huda is relatively small. In this research, the class VII students of Mts Al-Huda Larangan Pamekasan, which consists of two classes, namely class VII girls which consists of 15 female students and class VII boys which consists of 6 students.

Result and Discussion

Learning with the Numbered Head Together model in the experimental class (VII-B) and applying learning with the conventional model in the control class (VII-A), the researcher first prepared and completed the test instrument in the form of pretest and posttest questions. Next, the test instrument must be validated first so that the instrument is suitable to be used as a pretest and posttest instrument to see the level of student learning outcomes.

From the results of the test validation calculations using the Product Moment Correlation formula with the help of the SPSS application, the 25 questions tested were declared valid. The results of the reliability calculation show that the question instruments are declared reliable.

As for knowing student learning outcomes, they are first given 20 pretest questions to find out students' initial abilities. Data on learning outcomes before being given treatment or before implementing the Numbered Head Together and Conventional learning models will be presented in table form as follows:

Table 1. Pretest Score Class A and Class B

Pretest Score		
No	Class A (Control Class)	Class B (Experiment Class)
1	50	70
2	75	50
3	75	75
4	65	80
5	70	65
6	60	70
7	60	35
8	75	60
9	40	60
10	60	75
11	75	40
12	65	60
13	60	75
14	65	65
15	35	60
Score Total	930	940
Average	62	62,67

Next, students were given treatment using the Numbered Head Together learning model in the experimental class and the conventional learning model in the control class. The following are the results of the posttest scores after being given treatment in the experimental class and control class:

Table 2. Posttest Score Class A and Class B

Posttest Score		
No.	Class A (Control Class)	Class B (Experiment Class)
1	80	85
2	85	85
3	80	85
4	80	85
5	80	80
6	55	85
7	85	50
8	55	70
9	90	55
10	85	85
11	85	55
12	80	90

13	80	85
14	50	85
15	70	85
Score Total	1140	1165
Average	76	77,67

From the table above, it can be seen that the posttest score for the conventional learning model for the control class has an average score of 76. Meanwhile, the posttest score for the experimental class after being treated by applying the Numbered Head Together learning model is with an average score of 77.67.

To find out whether there is an influence between the Numbered Head Together learning model on learning outcomes before and after treatment, it is necessary to test the hypothesis using an independent test. However, before the data is processed using the t-test, the data is tested using a normality test.

Table 3. Output Normality Test

		Unstandardized Residual
N		15
Normal Parameters^a		
	Mean	.00000
	Std. Deviation	9,24419775
Most Differences	Extreme	
	Absolute	,155
	Positive	,153
	Negative	,155
Kolmogorov-Smirnov Z		,601
Asymp. Sig. (2-tailed)		,863
a. Test distribution is Normal.		
b. Calculated from data.		

Based on the results of the normality test using the SPSS application above, it can be seen that the result of the normality test is 0.863. The data is said to be normal if the significance level is > 0.05 . In this study the significance level was $0.863 > 0.05$. So it can be concluded that the data is normally distributed.

After carrying out the normality test, the next step is to conduct an independent t-test. The results are:

Table 4. Output Independent Samples T-Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std.E error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Learning Outcomes	Equal variances assumed	,111	,742	-28,126	28	,004	-15,000	4,79914	-24,83059	-5,16941	
	Equal variances not assumed			-27,931	27,931	,004	-15,000	4,79914	-24,83102	-5,16898	

Based on the results of the table above, it can be seen that the independent t-test results are 0.004 with a significance level of 0.05. To make a decision can be seen after analyzing the data with the hypothesis:

- Ho: there is no significant effect between the Numbered Head Together method on social studies learning outcomes for class VII students of Mts Al-Huda Ban Pamekasan.
- Ha: there is a significant effect between the Numbered Head Together method on social studies learning outcomes for class VII students of Mts Al-Huda Prohibition of Pamekasan

The t-test criteria are as follows:

- If significance > 0.05 then Ho is accepted and Ha is rejected.
- If the significance < 0.05 then Ho is rejected and Ha is accepted.

Referring to the sentence above, $0.004 < 0.05$ so that it can be concluded that H_0 is rejected and H_a is accepted. It can be concluded that there is a significant influence between the Numbered Head Together learning model on student learning outcomes in the social studies subject at Mts Al-Huda Larangan Pamekasan.

After knowing the abilities of the two classes, the next step is to give treatment in a different way to the same subject, namely social studies. The experimental class (VII B) applies the Numbered Head Together learning model, while the control class applies the conventional learning model.

To find out how much influence the Numbered Head Together learning model has on learning outcomes in social studies subjects for class VII students at Mts Al-Huda. So the calculated t-value obtained with the help of the SPSS application is 0.004 in table 4, so the interpretation of the t value is consulted as follows:

Table 5. Categorical t-Score

T Score	Interpretasi
0,800 - 1,000	High
0,600 - 0,800	standart
0,400 -0,600	Almost Low
0,200 -0,400	Low
0,000 - 0,200	Very Low (no Correlation)

Based on the table above, it can be seen that the calculated t value of 0.004 is in the interval between 0.000 to 0.200 with a very low interpretation. This means that there is a significant influence between the Numbered Head Together learning model on the learning outcomes of students in social studies at Mts Al-Huda Larangan Pamekasan which is included in the "Very low" category.

So it is known that the Numbered Head Together learning model influences students' social studies learning outcomes. Classes taught with the Numbered Head Together learning model have higher scores than those using the conventional learning model. This is because the Numbered Head Together learning model involves student activity. With full student involvement during the learning process, students' understanding and memory of the material being taught will become stronger. This also influences student learning outcomes for the better.

Conclusion

The teacher provides conclusions or final answers to all questions related to the material presented. There is a significant influence between the Numbered Head Together (NHT) cooperative learning model on the learning outcomes of class VII Mts Al-Huda Larangan Pamekasan. This is proven by the value generated by students after applying the Numbered Head Together model which is higher than the conventional model. This is proven by the results of the independent test, namely 0.004, interpreted with a significance level of 0.05. So $0.004 < 0.05$ so that a decision can be made that H_0 is rejected and H_a is accepted. It can be concluded that there is a significant influence between the Numbered Head Together learning model on student learning outcomes in the social studies subject at Mts Al-Huda Larangan Pamekasan.

The effect of the Numbered Head Together (NHT) type of cooperative learning model on the learning outcomes of class VII Mts Al-Huda Ban Pamekasan is in the very low category. ". It is known from the results of the t table which is calculated using the SPSS application assistance of 0.004 when consulted with the interpretation of the t value, then 0.004 is between the intervals of 0.00 to 0.200. So the results of the research were stated as "there is an influence", namely with the interpretation "very low".

Suggestion

Based on the results of the research, the authors would like to provide the following suggestions:

1. For school principals: the Numbered Head Together (NHT) type cooperative learning model can be used as a reference for making school policies in the context of preparing good learning programs.
2. For teachers: it is hoped that they will continue to apply the Numbered Head Together (NHT) type cooperative learning model adapted to the material being taught. So that students are more interested and excited during the learning process takes place.

3. For students: with research it is hoped that students will more easily absorb the material being studied and gain understanding so that they can improve their learning outcomes.

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