



## The Application of Numbered Head Together to Strengthen the Students Character Building in Dempet

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### Abstract

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*The study aimed to explain how much influence the application of the Numbered Head Together learning model for strengthening the elementary school student character building in Dempet subdistrict. The research design used an experimental research. The study population was all of students in the fourth grade of elementary school. The sampling technique used purposive sampling. The research instrument used a questionnaire. The collected data was tested with data description, normality test and homogeneity test, hypothesis test. The results obtained Sig. (2-tailed) of 00 < 0.05 and the t-count of t (19.422) The value of t table with df = 91 of 1.9864, so that the t-count > t table (19.422 > 1.9864). Sig. (2-tailed) < 0.05. and the t-count > t table. It could be seen that there was significant influence on the Numbered Head Together method to strengthen the character building of the elementary school students.*

**Keywords:** Numbered Head Together, Character Education, student

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## INTRODUCTION

Development growth in Indonesia is strongly influenced by the level of human resources. To fulfill these human resources, education is one of the main factors. A high level of education will certainly have an impact on development. On the contrary, if the level of education is low, it will be an obstacle factor in development. However, the high level of education is sometimes not supported by character building. That is caused by the lack of someone's character building.

In 2013 curriculum, the character building is an important part in implementation. The 2013 curriculum emphasizes the strengthening of character building. The 2013 curriculum publishes modules and textbooks. Approaches in the modules and K13 textbooks are integrated to the strengthening of character building. The integration of character building (PPK) in the 2013 curriculum is based on developing the potential and quality of school in order to avoid misunderstandings from the educators.

In fact, we need character education from an early age. Personality, which is formed from an early age, does not easily change even if it receives various influences (Utaminingsih & Murtono, 2019). In the character building, it cannot be instant as we think about. The character building must be trained. Each student has a different character, and each student is in charge of his character. For this reason, the teacher plays an important role in developing the character of each student in class and in school. One of strategies to strengthen the students character building in SD Balerejo 1 Dempet by implementing the use of learning model that can



enhance their character building, so that it can be implemented in every single action.

One of models used by the teacher to strengthen the character building at elementary level is by implementing Numbered Head Together (NHT) as a cooperative learning model. According to Hamdani (in Murtono, 2017: 70) Numbered Head Together (NHT) is a learning model in which each student being numbered and divided into a group, then the teacher will randomly mention the students number. NHT is a learning model technique that encourages the students to combine and withdraw conclusions from various ideas and the results of ideas exchange between teammates.

The previous research has already been conducted by Wora and friends (2017) entitled "Student Improvement by Applying the Numbered Heads Together (NHT) Approach to Basic Subjects of Vocational Competence in a Vocational High School in Indonesia" mentioned that Numbered Head Together (NHT) encourages the student involvement. It also increases the students achievement in the learning process.

Based on the previous researches and background of the research aim to show us how much influence of Numbered Head Together (NHT) to strengthen the students character building at the elementary level in Dempet district. The hypothesis of this research is there is significant influence in Numbered Head Together model to strengthen the students character building at the elementary level in Dempet district.

## METHOD

The design of this study was experimental research in which used the comparative method. The population was all elementary students in the fifth grade of Gugus 8 in Gugus Dewi Sartika, Dempet Demak in the academic year of 2019/2020. The research samples were four elementary schools namely SDN Balerejo 1 and SDN Baleromo 2 as the experimental class. Meanwhile, SDN Gempol Denok and SDN Kedungori as the control class. The sampling technique used purposive sampling.

The study used a questionnaire to collect data. Data analysis techniques; data description, normality test, homogeneity test, and hypothesis test (independent sample test) were carried out by using SPSS program.

## FINDING AND DISCUSSION

### Data Description

The results of descriptive analysis used SPSS from the research variables, as follows :

#### 1. Numbered Head Together variable questionnaire

Table 1. Analysis of NHT questionnaire

Variabel	Valid	Angket NHT	
		Kelas Eksperimen 1	Kelas Kontrol
N		48	45
Mean		52.92	37.7556

<b>Median</b>	53	38
<b>Mode</b>	53	34.00 <sup>a</sup>
<b>Std. Deviation</b>	3.956	3.54295
<b>Range</b>	14	14
<b>Minimum</b>	46	31
<b>Maximum</b>	60	45
<b>Sum</b>	2540	1699

**a. Experimentational Group**

Experimental group contained 48 students obtained the highest score of 60, the lowest score of 46, the average score (mean) of 52.92, mode 58, the median of 58 and standard deviation of 3,956. The research instruments consisted of 12 valid and reliable questions with five answer choices in 5 categories, such as Very low, low, medium, high and very high. So the score of items can be determined as follows:

Table 2 Experimental Group Perception on a NHT

No	Interval	Absolute frequency	Relative frequency	Category
<b>1</b>	46 - 48	9	19%	Very low
<b>2</b>	49 - 51	9	19%	Low
<b>3</b>	52 - 54	14	29%	Medium
<b>4</b>	55 - 57	8	17%	High
<b>5</b>	58 - 60	8	17%	Very High
		48	100%	

Table 2 showed us the students mostly answered for the medium category. It Obtained the average score of 52.92.

**b. Control Group**

The descriptive analysis results of the control class for the NHT questionnaire obtained the highest score of 45, the lowest score of 31, the average (mean) of 37,7556, the modus score of 3, the median of 34, and the standard deviation of 3,54295.

Table 3 Control Group Perception towards NHT

No	Interval	Absolute frequency	Relative frequency	Category
<b>1</b>	31 - 33	3	7%	Very low
<b>2</b>	34 - 36	18	40%	Low
<b>3</b>	37 - 39	9	20%	Medium
	40 - 42	10	22%	High
	43 - 45	5	11%	Very High
		45	100%	

Table 3 showed the students mostly answered low category. The average score obtained of 37.7556 , it was categorized into the medium category, even

though they all were in the medium category, however interval differences in the average score of the control group and the experimental group were strongly clear.

## 2. Variable Questionnaire from the Strengthening of Character Building

Table 4 Descriptive Analysis of from the Strengthening of Character Building

Variable	Questionnaire	
	Experimental Group 2	Control Group 2
<b>N</b> Valid	48	45
<b>Mean</b>	78.5833	53.5208
<b>Median</b>	78.5	56
<b>Mode</b>	81	55
<b>Std. Deviation</b>	4.85024	15.0474
<b>Range</b>	18	68
<b>Minimum</b>	70	46
<b>Maximum</b>	88	68
<b>Sum</b>	3772	2569

### a. Experimental Group

The experimental group obtained the highest score of 100, the lowest score of 76, the average score (mean) of 88,2083, the modus of 88, the median of 59 and the standard deviation of 6.70649. The research instrument consisted of 20 valid and reliable questions with five answer choices in 5 categories, such as Very low, low, medium, high and very high. So the score of items can be determined as follows:

Table 5 Experimental Group Perception towards PPK

No	Interval	Absolute frequency	Relative frequency	Category
<b>1</b>	76 - 80	10	21%	Very low
<b>2</b>	81 - 85	5	10%	Low
<b>3</b>	86 - 90	15	31%	Medium
<b>4</b>	91 - 95	10	21%	High
<b>5</b>	96 - 100	8	17%	Very High
		48	100%	

Based on table 5 showed the students mostly answered medium category. It obtained the average score of 88,2083, so that it could be categorized into the medium category.

### b. Control Group

The descriptive analysis results of the control group for the PPK questionnaire

obtained the highest score of 46, the lowest score of 68 with the average (mean) of 53.5208, the modus of 56, the median of 55, and the standard deviation of 3.0474.

Table 6 Control Group Perception towards PPK

No	Interval	Absolute frequency	Relative frequency	Category
1	46 - 49	5	11%	Very low
2	50 - 53	6	13%	Low
3	54 - 58	17	38%	Medium
4	59 - 63	9	20%	High
5	64 - 68	8	18%	Very High
		45	100%	

Based on table 6 showed that most students answered for the medium category. It obtained the average score of 53.5208.

Two variables showed that there was the average difference between the control group and the experimental group. After learning the model numbered Head together (NHT), it showed positive results towards increase of the strengthening of elementary school student character in Dempet District.

### Analysis Precondition Test

#### Normality test

Normality test used Saphiro-Wilk test with sig value for all classes  $> 0.05$ . The normality test results, as below:

a. Sig value of Numbered Head Together Variable for NHT experimental group obtained  $(0.089) > \text{significance level } (0.05)$ , and sig of the control group obtained  $(0.144) > \text{significance level } (0.05)$ , so it could be concluded that all data had normal distribution.

b. Sig value of Strengthening of Character Building Variable for NHT experimental group obtained  $(0.120) > \text{significance level } (0.05)$  and sig of the control group  $(0.728) > \text{significance level } (0.05)$ , so it could be concluded that all data are normal distribution.

Both the result of the normality test of all variables from Numbered Head Together variable and the strengthening of character building variable showed us that they had normal distribution. So that hypothesis test could be conducted.

#### Homogeneity Test

After testing with SPSS for NHT variable, the result of homogeneity test obtained significance value (sig) Based on Mean of 0, 606  $> 0.05$ , so it could be concluded that the NHT variable answers in the experimental group and control group were the same or homogeneous.

Meanwhile, variable of the strengthening of character building obtained the significance value (sig) Based on Mean of 0, 234  $> 0.05$ , so it could be concluded that the PPK variable answers in the experimental group and the control group were the same or homogeneous. Thus, the 2 variables were homogeneous, so that one of the requirements from the independent sample t test could be fulfilled.

### Hypothesis test

To answer the formulation of problem, it was necessary to hold a hypothesis test using the independent sample t test. T test results could be seen in Table 11, as below:

Table 7 Independent Sampel t test.

		<b>Independent Samples Test</b>				
		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
<b>Nilai Post Test</b>	Equal variances assumed	.268	.606	19.422	91	.000
	Equal variances not assumed			19.491	90.816	.000

Based on the table 11 showed the Sig value (2-tailed) of 00 <0.05 and the value of t-count (19.422). The value of t table with df = 91 obtained of 1.9864, so the value of t-count > t table (19.422 > 1.9864). Because Sig. (2-tailed) <0.05. and t-count > t table, then Ho was rejected and Ha was accepted. It meant that there was a significant influence on the Numbered Head Together method for strengthening the character building at the elementary school students.

### DISCUSSION

The result of descriptive analysis for 3 variables of Numbered Head Together, talking stick and strengthening of the character building categorized answers into the medium and high categories, while the average answers were categorized into the medium. It showed that by implementing the Numbered Head Together model, the students' perceptions about the strengthening of character building were better than conventional class or control class.

The results of data process with the t test for the Numbered Head Together variable obtained the t-count of 19.422 with t table of 1.9864, so that the value of t-count > t table (19.422 > 1.9864). For the Talking Stick variable, the t-count obtained of 27.995, so the t-count > t table (27.995 > 1.9864). Meanwhile, questionnaire variable of the Strengthening of Character Building obtained the t count of 23,879, so the t-count > t table (23,879 > 1.9864). Sig value (2-tailed) for all variables obtained of 00, then sig value < 0.05. Based on all the variables after the t test, it obtained the t-count > t table and Sig. (2-tailed) <0.05, then Ho was rejected and Ha was accepted. It could be concluded that there was significant influence on the Numbered Head Together method for the Strengthening of Character Building at elementary school students.

The results of this study were relevant to the research of Santiana, Sudana and Garminah (2014) It told us that NHT as cooperative learning model had significant influence on improving mathematics learning outcomes at elementary school

students. This study was also in line with the research of Siregar (2018) the results of the study said that there were significant influence towards the character building by implementing the Numbered Head Together learning model on the Respiratory system material in the eleventh grade of SMA Negeri 1 Silangkitang District. South Labuhanbatu in the Academic Year of 2017 / 2018. The previous two researches had the same result, they gave influence towards the students character and achievement.

The results of this study said that Numbered Head Together was one of the learning models suitable for strengthening the character building. Because the Numbered Head Together had techniques or models that could improve the students character. It aimed to encourage the students to be braver, confident, independent, responsible, creative and able to think critically, logically and innovatively. According to Shoimin (2014: 108) the NHT learning model have strengths and weaknesses. The advantages of NHT learning, such as 1) each student is ready, 2) the students can have a serious discussion in earnest, 3) the smart students can teach ordinary teammates, 4) intensively, there is interaction between the students in answering questions and 5) the students will not dominate in groups, because they have their own number.

Furthermore, NHT was a learning model that had The characteristic. The teacher only appointed a student who represented his group. When appointing the students, the teacher would not mention representative students in the group. According to Muhammad Nur (2005: 78), by implementing NHT, it will encourage the students to engage in discussion. It is also an excellent effort to increase individual responsibility in group discussions. In addition, the NHT learning model provides opportunity for the students to share ideas and the students will consider the most appropriate answers. In this case, it would give positive effect towards the student motivation. The students would try to understand the concepts or to solve the problems discussed.

The Number Head Together (NHT) is a cooperative learning model suitable for fostering the character of responsibility. In this learning model, it will encourage the competent students are willing to assist the mediocre students, even though they might not be mentioned. Moreover, the ordinary students are expected to be more enthusiastic in understanding the problems and answers, they may feel that they will be appointed to answer (Widdiharto, 2004).

In line with the above research, the Research conducted by Damantari (2018) the results showed that the Numbered Head Together Learning Model could improve social attitudes in fourth grade students of SD N TegalGondo I Klaten in academic year of 2017/2018. It could be seen in the number of students who achieved social attitudes had been categorized into cultured category. From 34 students in the pre cycle, there were 15 students or 44.12% obtained the average score of 3.18. 17 students or 50% increased in the first cycle with an average of 3.32. In the second cycle, 24 students or 70.59% obtained the average score of 3.45. In the third cycle, 33 students or 97.06% obtained the average score of 3.62. So it could be concluded that the application of the Numbered Head Together (NHT) Learning Model could improve social attitudes in the fourth grade students at SD N TegalGondo I in academic year of 2017/2018. Another opinion says that teachers

can insert characters in learning by introducing local cultural values (Rohmah, Sa'idatur., Achmad Hilal Madji., 2022)

The effect of effectiveness of the NHT model is to improve students' critical thinking skills (Fitriyani & Supriatna, 2020). Another research related to Lince (2016). From the results of his research stated that the NHT Learning Model could increase the students thinking ability in mathematics. The use of NHT learning model was strongly more effective than a conventional learning method. This opinion is Dadri (2019), Prayekti & Utomo (2018), (Kane et al., 2016) reinforced by the results of research conducted by where the application of the NHT model is proven to be effective in improving students' critical thinking skills and learning outcomes. Another opinion conveys that the NHT model is proven to be effective in improving students' creative thinking skills, this is because the learning carried out is fun (Elendiana & Prasetyo, 2021)

Based on the results of research, the experts opinion and the relevant researches, the research could be concluded that the Number Head Together model was effective for strengthening character building compared to the conventional model, because NHT learning model provided us opportunities for the students to share ideas and consider the right answers. It also encouraged the students to increase their team work. As well as involving all of students reviewing the materials and their understanding of the contents was accepted and proven, it was because there was significant influence on the Numbered Head Together model to strengthen the elementary school students character building in Dempet.

## CONCLUSION

The conclusion of this research was the Number Head Together learning model was effectively used to strengthen the character building compared to the conventional model, because the NHT learning model provided opportunities for the students to share ideas and to consider the right answers and also encourage the students to improve their team work. As well as involving all of students reviewing material and checking their understanding of the contents of the lesson.

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