

USING NUMBERED HEAD TOGETHER LEARNING MODEL TO IMPROVE STUDENTS' VOCABULARY

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Abstract: The learning process that is carried out in a monotonous way turns out to result in low student absorption of knowledge. Students have many problems, especially lack of vocabulary. This research is aimed to find out whether using Numbered Head Together there is an improvement for students who have problem of lack vocabulary or not. In this research was quantitative research used pre-experimental design with one group of pre-test and post-test. The subject of the study was conducted at SMP NEGERI 2 ERIS which consisted of 18 students. Then, the technique of collecting the data is through pre-test and post-test. The results of this research were as follows: Pre-test, where the writer has not used the Numbered Head Together Learning Model, as a result there is only 1 student who got the highest score was 8 or 11%, with a mean value of 5.2. And for the post-test, the writer has implemented the Numbered Head Together Learning Model, with an average value of 7.16. From the results above, the mean score of the post-test is highest than the mean score of the pre-test. Thus, the final conclusion that the writer to convey is that Using Numbered Head Together Learning Model is able to improve students' vocabulary.

Keywords: *Vocabulary, Increasing, Numbered Head Together (NHT), Learning Model.*

INTRODUCTION

Language is a tool that humans can use when they talk and then convey something related to ideas, goals and functions to establish relationships between around the world. Without language humans are unable to interact each others (Liando, Tatipang & Lengkoan, 2022).

"English language is one of the international languages which are used for communication among countries in the world" (Liando & Tatipang, 2022) and (Mantiri

et al., 2021). English language is an international language. With English is able to make us communicate with people in the whole world. Therefore English is very important to support aspects such as education, technology, social and culture. "English take up a very important position in almost every walk of life: business, commerce, academic field, tourism, etc" (Manado, 2020). In other words, English takes an important role in communication, as a media for every nation to communicate with each other. So in English we have to know what words mean. To find out the meaning of words, we should be learn English vocabulary (Andries, Hampp, Rombepajung & Lengkoan, 2019).

Basically vocabulary is very important for us when speaking in English. "Vocabulary is a fundamental way for humans to communicate" (Parede et al., 2022). In order to speak English fluently and clearly, we also need to add vocabulary to make it easier when we want to talk with humans community (Liando et al, 2022).

Learning model is a framework that is used as a guide in conducting learning that is arranged regularly to achieve good learning objectives. Therefore, why is the learning model so important? because it is very useful, when you are going to teach you already have a concept or basis before doing learning in the class. Thus the learning process in the classroom can be controlled and able to generate an active learning atmosphere. According to Rahayu (2006) "Numbered Heads Together is a learning model that prioritizes students activities in finding, processing, and reporting information from various sources which are finally presented in front of the class". The writer tries to conduct research with the title "Using Numbered Head Together to Improve Students' Vocabulary" (using pre-experimental design on the Seventh grade students at SMP N 2 ERIS).

Statement of the Problem

Based on the problem when the writer found at SMP NEGERI 2 ERIS during English learning that was many students did not have vocabulary in English so it was difficult to carry out the learning process.

RESEARCH METHOD

This research using quantitative method because the data in form of number. Khun (2008: 39), quantitative methods are research techniques used to collect quantitative data relating to numbers and everything that can be measured. The writer used pre-experimental design with one group pre-test and posttest.

In this study was conduct at SMP N 2 ERIS in academic 2021/2022 where the total of students consist of 45 students and the writer take sample from the Second grade students with a total of 18 students. Then, the writer choose multiple choice test as a instrument this research to collect the data, that consist of 20 questions for the pretest and gave 20 questions same as in the pretest. In calculating the standard deviations of pretest and posttest, the writer used formula by Moore, 1983: 251. And then to analyse the mean scores of the pre-test then compare with the mean scores of the post-test, the writer used mean score formula by (Hatch & Farhady 1982:35).

FINDINGS AND DISCUSSION

The purpose of writing in this part is to present the data obtained using the frequency distribution, mean scores, and standard deviations. This research was quantitative used one group pre-test and post-test design, which consist of 18 students as a subject in this study. To collecting the data, the writer used multiple choice test through pretest and posttest. There are some steps used by the writer to analyzing the data will be present table along with explanation:

Table 1: Students' Achievement of the Pre-test

Student's number	Score T1	\bar{X}	T1²
1	3	5.2	9
2	5	5.2	25
3	8	5.2	64
4	3	5.2	9

5	4	5.2	16
6	8	5.2	64
7	7	5.2	49
8	5	5.2	25
9	7	5.2	49
10	6	5.2	36
11	4	5.2	16
12	5	5.2	25
13	3	5.2	9
14	4	5.2	16
15	6	5.2	36
16	3	5.2	9
17	6	5.2	36
18	7	5.2	49
Total	$\Sigma T1 = 94$		$\Sigma T1^2 = 542$

Table 1 the writer showed the data from total of the students was 18. Therefore from 18 students, it can be seen that 2 students got the highest score of 8 .The lowest scores was three 3 obtained by 3 students. This table also shows that scored 7 achieved 3 students, scored 6 achieved 3 students, and also scored 5 achieved 3 students and the last 4 scored 5 were achieved by 3 students. The writer was calculate the data above by the formula mentioned in chapter III page 15, which follows:

Table 2 : The Computations of Mean Score and Standard Deviations of the Pre-test (T1)

Mean Score of T1 : $\bar{X} = \frac{\Sigma X}{n}$	Standard Deviations (s) :
	$S = \frac{\sqrt{\Sigma x^2}}{N} - (X)^2$
$\Sigma X = 94$	$\Sigma X^2 = 542$

$$n = 18$$

$$s = \frac{\sqrt{542}}{18} - (5.2)^2$$

$$x = \frac{94}{18}$$

$$s = \sqrt{30.1 - 27}$$

$$X = 5.2$$

$$s = 3.1$$

After finished to computed mean score and standard deviation on the pre-test (T1), it can be said that the standard deviation is smaller than the mean ($3,1 \leq 5,2$), it means that the lower the standard deviation, the closer to the mean value. Next the writer presented the Frequency Distribution Matrix of Pre-test (T1) which follows:

Table 3: Frequency Distribution Matrix of Pre-test (T1)

Score	Tally	Frequency	Freq-%
8	II	2	11%
7	III	3	17%
6	III	3	17%
5	III	3	17%
4	III	3	17%
3	IIII	4	22%

Table 3 showed the frequency distribution matrix of scores achieved by 18 students who have taken part in the pre-test. From 18 students, it can be said that 2 students got the highest score of 8 or equal to 11%. The lowest scores was three (3) or 22% obtained by three students. This table also shows that 3 students scored 7 or 16%, 3 students scored 6 or 16%, 3 students also scored 5 or 16% and the last 4 points were achieved by 3 students.

Table 4: Students' Achievement on the post-test (T2)

Student's number	Score T2	\bar{X}	T2²
1	6	7.16	36
2	7	7.16	49
3	9	7.16	81
4	5	7.16	25
5	7	7.16	49
6	10	7.16	100
7	8	7.16	64
8	7	7.16	49
9	8	7.16	64
10	8	7.16	64
11	7	7.16	49
12	7	7.16	49
13	6	7.16	36
14	7	7.16	49
15	7	7.16	49
16	5	7.16	25
17	7	7.16	49
18	8	7.16	64
Total	$\Sigma T1 = 129$		$\Sigma T2^2 = 952$

Table 4 the writer showed the data obtained 18 students which students took part in the post-test. Meanwhile, from 18 students, can be conclude where 1 student got the highest score of 10. The lowest scores was 5 achieved by 2 students. This table also shows that there is 1 student who got a score of 9, 4 students got a score of 8, 8 students got a score of 7, and the last score of 6 was achieved by 2 students.

Table 5: The Computations of Mean Score and Standard Deviations of the Post-test (T2)

Mean Score of T1 : $\bar{X} = \frac{\sum X}{n}$	Standard Deviations (s) :
	$S = \frac{\sqrt{\sum X^2}}{N} - (\bar{X})^2$
$\sum X = 29$	$\sum X^2 = 952$
$n = 18$	$s = \frac{\sqrt{952}}{18} - (7.16)^2$
$\bar{X} = \frac{129}{18}$	$s = \sqrt{52.8 - 51.2}$
$\bar{X} = 7.16$	$s = 1.6$

Based on data from the sample, the standard deviation is smaller than the mean (1,6 ≤ 51,2), which means that the lower standard deviation, the closer to the mean value. Next the writer presented the Frequency Distribution Matrix of Post-test (T2), which follows:

Table 6 : Frequency Distribution Matrix of Post-test (T2)

Score	Tally	Frequency	Freq-%
10	I	1	5%
9	I	1	5%
8	IIII	4	22%
7	IIII III	8	44%
6	II	2	11%
5	II	2	11%

Table 5 presented the frequency distribution matrix of scores obtained from 18 students who took part in the post-test. From 18 students, it can be said that 1 student got the highest score of 10 or equivalent to 5%. The lowest scores was (5) or 11% achieved by 2 students. This table also shows that there is 1 student who got a score of 9 or 5%, 4 students got a score of 8 or 22%, 8 students got a score of 7 or 44%, and the last score of 6 was achieved by 2 students.

Based on the findings before which show the frequency distribution, mean and standard deviations of T1 and T2, the writer made a figure the frequency polygon combination of the pre-test and post-test as follow:

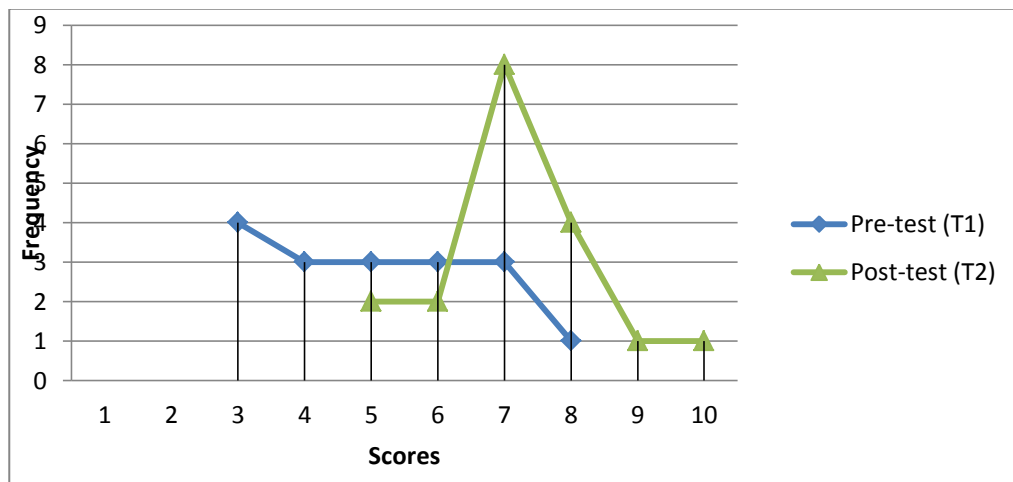


Figure 1: The combination of frequency polygon of all the students score that they achieve in T1 and T2

DISCUSSION

After applied the treatment or using Numbered Head Together Learning model could improve students vocabulary. Therefore, the results of the data in this study have an influence on students who lack vocabulary to students who already have a lot of vocabulary. Student achievement or score, the writer has shown in the previous section. In the pre-test, the highest score of 8 was accomplished by 2 students and the lowest score of 3 was achieved by 4 students. In the post-test one student achieved the highest score that is 10 and two students got the lowest score that is 5.

The mean score on the pre-test is 5.2 and the post-test is 7.16, and the standard deviation is also 1.6 for the pre-test and 3.1 for the post-test standard deviation. Thus, this research provides the fact that students' vocabulary can be significant improved by using the Numbered head together learning model.

CONCLUSION

After applying the Numbered Head Together Learning Model, it can be concluded that students can improve vocabulary. The writer will be given some facts that support this research:

- 1) This research is quantitative research which is used to improve students' vocabulary at SMP Negeri 2 Eris, at the eight grade students they consists of 18 students.
- 2) The mean score for the post-test was highest than the pre-test $7.16 \geq 5.2$, in other words that the vocabulary of the students can be improved.
- 3) Using Numbered head together learning model has an influence on students, namely : rebuild students' interest in learning, because in the NHT procedure students work together so that it makes it easier for students and enjoys learning.
- 4) Using the Numbered head together learning model also has an influence on teachers which can help teachers to make fun and rebuild students' interest in learning when learning in class.

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