

**THE INFLUENCE OF USING NHT TECHNIQUE TOWARD STUDENTS'
READING COMPREHENSION AT THE TENTH GRADE
OF SMA NEGERI 1 BATANGHARI
ACADEMIC YEAR 2014/2015**

By

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Abstract: The objective of the research is to know whether there is influence of using Number Head Together technique toward students' reading comprehension. The subjects of this research are two classes consist of 26 students of class X1 as experimental group and 27 students of class X2 as control group. The design of this research is quasi experimental design. In collecting the data, the researchers use a test. The test consists of pre-test and post-test. To analyze data, the researcher uses t_{test} formula. The result of the research shows that $t_{count} = 3,81$ and $t_{daf} 2,70$ (on criteria 1) and $t_{daf} = 2,02$ (on criteria 2). So, the null hypothesis (H_o) is rejected and the alternative hypothesis (H_a) is accepted. It means that there is influence of using Number Head Together technique toward students' reading comprehension at the tenth grade of SMA N 1 Batanghari Academic Year 2014/2015.

Key words: Number Head Together Technique, Reading Comprehension.

INTRODUCTION

Reading is a process of understanding text for getting information. Practically, Reading is a complex that involves visual activity and thinking. It is an activity to add insight and knowledge.

In this modern era, especially students required well-informed in order not to miss the information.

In pre survey, the researchers found some students problems: (1) the students cannot identify the main idea of the text; (2) the students cannot analyze the detail specific information of the text and (3) the

students do not understand the meaning of short functional text because of lack of vocabulary.

Actually teaching-learning in reading undertaken by teachers are good enough, but the teacher does not use a wide variety of existing technique.

The teacher still use the same technique in every learning process, it makes the students uninterested and unmotivated to read, so that students lack interest in reading. Problem mostly occurs to students in reading class; they meet difficulties to comprehend reading

text. The table below is the data that obtained from the presurvey:

Table 1.1. Student's reading score of SMA N 1 Batanghari at the tenth grade in academic year 2014/2015

No	SCALE	CATEGORY	SUM	PERSENTAGE
1.	0-49	Bad/Poor	15	53%
2.	50-69	Enough	7	26%
3.	70-80	Good	3	14%
4.	81-100	Excellent	2	7%
	TOTAL		Σ Students 27	100%

Source: Score List From the English Teacher of SMAN 1 Batanghari

From the table above the researchers know that 53% or 15 from 27 students got bad score in English, 26% or 7 from 27 students got enough score, 14% or 3 from 27 students got good score and 7% or not more than 2 students got excellent score. It means that the students are not successful in comprehending the text.

Considering the problems above, the researchers offer another technique for the students to increase the student ability in reading. In this research, the researchers use Number Head Together (NHT) Technique. NHT is one type of cooperative learning that emphasizes the special structure designed to influence the

patterns of student interaction and has a goal to increase academic mastery.

The objective of the research is to know whether there is influence of using number head together technique toward students' reading comprehension at the tenth grade of SMA N 1 Batanghari Academic Years 2014/2015.

THEORITICAL REVIEW

a. Reading Comprehension

McNamara (2007, p.3) states that reading is an extra ordinary achievement when one considers the number of levels and components that must be mastered. Moreover, Brown (2001, p.30) says that reading comprehension is only a term referring to reading skill through the important thing is not on the pronouncing on load reading, but it is the understanding taken into consideration. While according to Johnson (2008, p.16), reading is constantly developing skill. Like any skill, they get better at reading by practicing.

b. Reading Strategies

Brown (2001, p.306) states that there are five strategies of reading comprehension which can be practically applied to your classroom technique, they are:

- 1) Identify the purpose in reading.
- 2) Use grapheme rules and pattern to aid in bottom-up decoding.
- 3) Use efficient silent reading techniques for relatively rapid comprehension.
- 4) Skim the text from the main ideas.
- 5) Scan the text for specific information.

C. Reading Model

Harris (1994, p. 2) Reading model can be divided into three models:

- 1) Bottom-up Model
- 2) Top-down Model
- 3) Interactive Model

d. The Procedure of Teaching Reading

Pakhare (2007, p.6) says that the procedures of teaching reading comprehension are as follow:

- 1) Pre-Activities
- 2) While-Activities
- 3) Post-activities

e. The Definition of NHT

According to Lie (2010,p.59), NHT is a type of cooperative teaching smart and not all students are considered together. Furthermore, Kagan (1999, p. 10), Number head together is a simple structure consisting of four steps: students number off, teacher announces a question and a time limit, students put their heads together, and teacher calls a number.

Lie (2010, p.60) states that procedure of teaching reading using NHT:

- 1) Students are divides into some groups; each student in each group gets a number.
- 2) Teachers give assignments and work on each group.
- 3) The groups discuss the correct answers and ensure that each member of the group can do / know the answer.
- 4) Teacher calls one student number and called number to report the results of their cooperation.

f. The Advantage and disadvantage of NHT

According Trianto (2010,p.83) the advantages of NHT technique are:

- 1) Each group member has many opportunities to contribute
- 2) Interaction is more easily
- 3) Many ideas that emerged
- 4) More tasks that can be implemented
- 5) Teachers are more easily monitor contributions.

According to Trianto (2010,p.83) not only advantages of NHT Technique but also disadvantages are as follow:

- 1) Need more time
- 2) Require more socialization
- 3) Lack of opportunities for individual contributions
- 4) Students more easily break away from the engagement and did not pay attention.

RESEARCH METHOD

This research is quantitative research. In the research, the researchers will use quasi experimental design.

This research will use pre-test and post-test control group design. The researchers will administer pre-test and post-test to both experimental and control groups. In this research the researchers want to

know whether there is influence of using Number Head Together technique toward students' reading comprehension.

Table 3.1.1: The design of the research.

Group Category	Pre-test	Treatment	Post-test
K1 (Experimental class)	T ₁	X ₁	T ₂
K2 (control class)	T ₁	O	T ₂

Source : quantitative research design.

Note :

K1 : Experiment class

K2 : Control class

T₁ : Pre-test

T₂ : Post-test

X₁ : Treatment by using number head together technique

O : No treatment

(Sugiyono: 2010,p. 112)

a. Population and Sample

According to Sugiyono (2008,p. 215) "population is the large group about which the generalization is made. It is defined as all members of any well-define class of people, events, or objects". In this case this research will take the tenth grade of SMA N 1 Batanghari AcademicYear 2014/2015. The total numbers of population in tenth grade are 156

students that consist of 6 classes; they are X1, 2, 3, 4, 5, and 6.

According to Franenkel and Wallen (1990,p.481) “sample is the group on which information is obtained, preferably selected in such a way that the sample represent the larger group (population) from which it was selected”. A sample is the small group that is observed in research. Sample is a part of population that is observed (Suharsimi, 2002, p.108). Further, Sugiyono (2010, p. 81) said that “sample is part of whole and characteristic from population itself.” From the sampling technique above, it can be concluded that the total sample in this research are 56 students. The students of the tenth grade of SMA N 1 Batanghari divided into two classes.

Arikunto (2006: 130) sates that “A good sample is one that is representative of the population from which it was selected. Selection of a sample is very important step in concluding a research study”. The sampling technique of this research, the research used cluster random sampling, because in the reading

score in the tenth grade are average same.

b. Data Collecting Technique and Data Analizing Technique

In collecting the data, the researchers use test. The test consits of pre-test and post-test. Pre-test is used to find out the students’ scores before the treatment will be applied, and post-test is used to measure how far the influence of the students’ reading comprehension using NHT Technique.

After giving the test and finding the result of the test, student’s score of pretest and posttestwill be calculated to find out the normality of test and the homogeneity of test. The objective of normality of test is to know distribution of the data following whether it is normal distribution or no. Some statistics technique especially parametric statistic said that the data must follow the normal distribution. And the objective of homogeneity of test is to know whether the variance of the data homogeneous or not.

The formula of homogeneity of test as follow;

$$F_{ratio} = \frac{HighestVariance}{LowestVariance}$$

The variance of the data is homogeneous if F_{ratio} is less or equal to F_{table} . After the result of Normality and Homogeneity of test is gotten, the researcher continues to hypotheses proposed by the researcher are proved or not. The hypothesis test can be measured by t-test formula.

RESULT AND DISCUSSION

This research was conducted at the tenth grade of SMA N 1 Batanghari from February until March. In this research, researchers took the tenth grade as population. There are 156 students which consist of six classes; they were X1, X2, X3, X4, X5, and X6. As the sample, the researcher took two classes; they are X1 as experiment class and X5 as control class. The sample was taken by cluster random sampling. The total sample of research was 53 students.

The research covered try-out and test. Try out was done to measure the validity and reliability of the instrument. If the result of try-out

had been valid and reliable, so the instrument could be used as the instrument for the research. After the researchers gained the data from try-out, the researchers did pre-test in experiment and control class. Then, the researchers did treatment in both of classes. Finally, the researchers did the post test.

Before conducting the research, the researchers did the try-out to know the validity and reliability of instrument. The try out was done on February 17th, 2015. The researchers took other class to do it. The test was conducted in order to know the quality of test as the instrument of the research. The kind of the test was multiple choice as many as 50 items that comprised of five options. The student got 1 score if the answer was correct and 0 score if incorrect. From the try-out test, it found that 40 items were valid and reliable.

After analyzing the data, researchers got score $r_{xy}=0,42$ for the first item. By seeing $\alpha = 5\%$ and $n=25$. It found that $r_{table}= 396$ While the criteria of validity is $r_{count}>r_{table}$. Based on the calculation above, it

can be seen that the first item is valid.

After getting the result of data in try-out test, the researchers calculated the data using *Product Moment* formula to know its correlation, after that the correlation was include into spearman brown formula to know the reliability of the test. The result of reliability is 0,98. It means that the instrument was reliable and already to use in the research.

After researchers got the result of validity and reliability of the instrument, the researchers conducted the pre-test. The function of pre-test is to know the students' ability in reading comprehension before giving treatment. And from the pre-test, the researcher found that in experiment class, the highest score of pre-test is 60, and the lowest score is 25; whereas in control class the highest score is 55 and the lowest score is 20. After that the researchers conducted the post-test. The post test was administered after treatment. The post test was administered in order to see the significance influence of students' reading

comprehension using NHT technique. Then after getting the result of the data of post-test, the researcher found that in experiment class the highest score is 85 and the lowest score was 50; whereas in control class the high score of post test was 80 and the lowest score of post-test was 45.

By using the pre-test and post-test data, the researchers could continue the calculation to find out the normality and homogeneity of test. The normality was employed to know whether that test come from the population have the normality distribution or not. Based on the calculation it was obtained that χ^2_{Count} of pre-test and post-test of experiment and control class were lower than χ^2_{daf} for the significance level of 5% ($\alpha = 0.05$) and also 1% ($\alpha = 0.01$) in the reality. It means that both samples in this research come from the population that has normal distribution. Then homogeneity of test was employed to know whether the variance of the data homogeneous or not. Based on the calculation it is obtained that F_{Ratio} of

pre and post test is lowest than F_{Table} for the significance level of 5% ($\alpha = 0,05$) and 1% ($\alpha = 0,01$). It means that both of samples in this research come from the population have the variance equality.

Then, the researchers continued to find out the result of hypothesis. The researchers used t-test to prove the hypothesis proposed toward the result of post-test. Based on the calculation of post- test score and the result of criteria of the hypothesis on the table above, the result found that $t_{Count} = 3,81$; moreover the researcher looked at t_{Table} for the significant level $\alpha = 1\%$ showed $t_{Table} = 2.70$ and for the significant level $\alpha = 5\%$ showed $t_{Table} = 2.02$ or it means $t_{Count} \geq t_{Table}$. It means that there is influence of using Number Head Together Technique toward reading comprehension for students at the tenth grade of SMA N 1 Batanghari Academic Year 2014/2015.

DISCUSSION

Based on the result of this research, the researchers found that reading comprehension in experiment class is good enough than control class. From the result of post-test, the researchers got the data such as the score of post-test is higher than pre-test. The score maximum for experiment class is 85 and minimum 50. The score maximum for control class is 80 and minimum 45. It means that the students were taught by using Number Head Together Technique are better than the teacher taught by using conventional technique. In teaching reading comprehension using Number Head Together technique, students are easier to comprehend the text.

The result of calculating data from pre test and post test in experiment class and control class showed that the data has normal distribution. After that, the researchers count the hypothesis, the result shows that accepted H_a . In this case, $t_{count} = 3,81$ higher than $t_{daf} = 2,02$ ($\alpha = 5\%$) and $2,70$ ($\alpha = 1\%$), the null hypothesis (H_o) is rejected and alternative hypothesis (H_a) is

accepted. It showed that there is influence of using Number Head Together Technique toward students' reading comprehension.

CONCLUSION

The conclusions as follows:

(1) There was significance influence of using Number Head Together Technique towards students' reading comprehension at the tenth grade of SMA N 1 Batanghari Academic Year 2014/2015. It can be proved from the changes of students' activity during the learning process. The students become more active and more excited in learning; especially in reading. (2) The students' score of reading comprehension by using Number Head Together technique is higher than the students' score of reading comprehension without using Number Head Together technique. The researcher found that in experiment class the highest score is 85. Whereas in control class the high score of post test was 80. (3) The influence of using Number Head Together Technique toward students reading comprehension is high. It

can be seen from the result of the hypothesis test. It shows that t_{count} is 3,81 and t_{daf} is 2,70 at the significant level 0,01 and t_{daf} 2,02 at the significant level 0,05. It means that t_{count} obtained is higher than t_{daf} .

Based on the data above, the researcher concluded that Number Head Together Technique in reading comprehension had contributed for student. It shows that hypothesis of H_a is accepted and H_o is rejected. It supported by the result of the analysis research hypothesis. It means that, there is significant influence of using Number Head Together Technique toward students reading comprehension.

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