USE OF NUMBERED HEADS TOGETHER TECHNIQUE TO IMPROVE READING COMPREHENSION OF JUNIOR HIGH SCHOOL STUDENTS

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Abstract

The purpose of this research was to find out whether Numbered Heads Together technique can improve students' reading comprehension at seventh grade students' of SMPN 7 Tarakan. This research was in the form of Pre-experiment. The researcher tried to find out the differences before and after teaching by numbered heads together technique. The subject of this study was students in grade 7-2 which consisted of 29 students at SMPN 7 Tarakan in academic year 2018/2019. The instruments were reading tests that included pre-test and post test. To analyze, the researcher used descriptive analysis and SPSS 22.0 for statistical analysis. The result of this study indicated that there were differences between pre-test and post test. It was proven by the results of the students mean score. The students' mean score in pre-test were 45,51 and 54,13 at the post test. It means the improvement of the students' mean score was 8,62. The score in post test was higher than the pre-test scores. It showed that there was a significant difference from students' reading score on pre-test and post test. The results of the paired sample test indicate that the t-test (2.819) was higher that the t-table (2.048). In this research, the researcher found there was significant differences from the use of NHT technique in learning. This technique was able to improve students' enthusiasm, helped students understand the text easily, and builded students critical thinking. Then it can be concluded that the NHT technique has proven to be an effective technique for increasing reading comprehension in seventh grade students' of SMPN 7 Tarakan.

Keywords: *Reading Comprehension, Numbered Heads Together Technique.*

INTRODUCTION

Reading is an interactive process between the reader and the text, resulting the comprehension. The text present letters, words, sentences, and paragraphs that encode meaning. The reader uses knowledge, skill, and strategies to determine that meaning of word from the text. According to Klinger (2007), reading is a process of constructing meaning can be achieved through dynamic instruction among the following aspects: the reader's prior knowledge, the information suggested by the text, and the context of the reading situation. It identicate that reading is defined as an activity where reader attempts to get information from a text that is conveyed by writer. It requires not only about decoding symbols, but also trying to get a messages and giving responses to the text.

According to Serravallo (2010), reading is thinking and understanding and getting at the meaning behind a text. reading is an important skill of language development since it has positive effect on students achievement of language vocabulary, grammar, spelling, punctuation, and writing which useful for language acquisition. When reading readers can improve their language ability indirectly. They do not only get information from the text but it can also help to expand their vocabulary and expose them to different sentence structures. The reading problems faced by Indonesian learners are most probably caused by inappropriate reading techniques presented in their classroom. One way that may solve the problem is by

using Numbered Heads Together Technique in learner's reading comprehension. According to Stone (2004) numbered heads together is a simple four-step structure. It means that NHT has four steps in implementing the technique. The purpose of numbered heads together is to develop the students' understanding and to review the material that has been learned.

Based on the observation and interviewed to the English teachers of SMP Negeri 7 Tarakan, it was shown that the students' ability in comprehending reading texts were at the average level. The researcher also found that the English teachers rarely varied their technique in teaching reading. Therefore, the researcher assumes that English teaching and learning at SMP Negeri 7 Tarakan should be more vary. Teachers need several new teaching technique to make improvement.

Reading Comprehension

According to Snow (2002) reading comprehension is increase successful of reading instruction and the reader who read accurately and rapidly for progressing well in comprehension. It means the students who have a good reading skill should be improved to be a good reader and comprehend. Reading comprehension is a brain process involving several components in which those components interact with one another to draw the meaning of the text. Those components are mainly from the reader, the text and the activity. Those aspects should interact well with each other. If there is an interference growing between them, there will be difficulties in reading.

Numbered Heads Together Technique

Numbered heads together developed first by Spencer Kagan (1993) to involve more student in learning material which consist in a lesson and to know their knowledge about the material given. Numbered heads together technique is a group working in which usually consist of four students, and each student has number 1 until 4, when teacher ask a question, they put their heads off together to discuss about the answer. Then teacher will calls number randomly and students with that number can raise their hands to answer the question. Numbered heads together is a cooperative learning strategy in which students work together to ensure that each member of a group knows the correct answer to problem or question asked by the teacher.

METHOD

The design of this research was experimental research design. According to Sugiyono (2006), experimental research is a research which has the purpose to find the cause-effect relationship among variables in a controlled conditions. In this research, the researcher used Pre-experimental design with one group pre-test and post-test design. A variable is a concept that stands for variation within a class of objects. Variables can be classified in several ways. The most important classification, when they are classified as independent variables or dependent variables (Ary et al, 2006). Independent variable is variable which influence other variable. In this research the independent variable is numbered head together. Dependent variable is the response or the criterion variable that is presumed to be influenced by the independent treatment conditions and any other. In this research the dependent variable is students' reading comprehension

Population and Sample

This research conducted in SMP NEGRI 7 Tarakan which located in Jl. Diponegoro, Tarakan, North Kalimantan. Population is a whole number of subject that is able in research place. A researcher needs to define the population carefully before collecting the sample, including the description of the member to be included. Population is all members include class of people, events, or objects (Ary, 2006). The population of this research was all seventh grade students of SMPN 7 Tarakan.

Table 1. Population of Seventh Grade Students

Classes	Number of Students
VII-1	30
VII-2	29
VII-3	32
VII-4	31
VII-5	30
VII-6	28
VII-7	31
VII-8	31
TOTAL	242

(Source of SMPN 7 Tarakan)

Sample

All of the population used as a sample. All students have same chance to be sample in this research. In this research, the researcher did not take all of the class as the sample. Sample of this research was the students of class VII-2 that consists of 29 students. So, this research used purposive sampling technique because the researcher found that the average of minimum criteria of mastery learning (KKM) of class VII-2 got low achievement than the other class. Based on the data, the researcher chose class VII-2 as the treatment class for this research. This research used reading test, it consist of multiple choice and essay tests. The multiple choice and essay test consist of descriptive text materials. The test is divided into two parts they are pre test and post test. The pre test gave to students in order to know their condition before getting the treatment meanwhile the post test gave to know whether or not there is any affect of the intervention or significant result after treatment to the students.

The technique of collecting data in this research was using test technique. It is used because it was a quantitative research. There were two tests, pre and post test, they were done in collecting the students data of reading of descriptive text. They were used in this research to test the effectiveness of an intervention. In analyzing the data, the researcher used descriptive and inferential analysis to describing the data.

Descriptive analysis use to analyze the data before the t-test calculation. In this research, this analysis use to find out the score by scoring the students test, classifying the score in the classification criteria and calculating the mean score and standard deviation.

Inferential Analysis. After collecting the data , the preliminary analysis was consist of two test, which were the normality and homogenity that used in SPSS 22.0 with the significance level of 0,05. The data can be said normality distribute and homogeneous if the Sig. Display is higher than 0,05. A normality test is to determine whether the data from population spread normally or not. The purpose of the normality test is to ensure the distribution data take from the population have normal distribution or not. Test of normality that used is Kolmogorov Smirnov formula. Kolmogorov-Smirnov test are describe as follows:

Ha : Data is normally distributed if the level of significant is higher that probability value.

H0 : Data is not normally distributed if the level of significant is lower than probability value.

If the level of significance is lower than 0.05 (probability value <0.05), then H0 will accept and Ha will reject. It means the scores in pre-test and post-test is normally distributed. In other hand, if the level of significance is higher than 0.05 (probability value > 0.05), then H_a accepted and H_0 rejected. It means the scores between pre-test and post-test is not normally distributed. Homogenity test is to know whether the variance in population of the research is homogeneous or not. Homogenity test is use to measure the data of population whether it is

homogeneous or not. Interpretation of the result of the homogenity test is by looking at the value of Sig. (2-tailed).

In this research, the researcher T-test formula as a technique of data analysis. T-test is use to know the effectiveness of using Numbered Heads Together. The reading scores on pre-test and post-test of treatment group as the quantitative data analyzed by using t-test application in SPSS version 22.0 (Statistical Packages for Scientific Studies). Significant differences analyze between the pre-test and post-test. If the data normal and homogenous, the researcher analyzed the data by using parametric statistic with paired sample t-test. The students' scores on pre-test and post-test as the quantitative data analyzed by using t-test application in SPSS version 22.0 (Statistical Packages for Scientific Studies). Significant differences will analyze between pre-test and post-test. After the significance both of the test already processed by using SPSS version 22.0 complete, in this case, T-test apply to determine the significant differences in the students reading skill. If the score T-test is lower than the score of T-table (Tt), the null hypothesis (Ho) is accepted (Ho=T-test <Tt) and it means that NHT cannot give contributions to the students' Reading Skill. On other hand, if the score of T-test is higher than T-table (Tt), the alternative hypothesis (Ha) is accepted (Ho=T-test>Tt) and it means that NHT can give any contributions to the students' reading skill.

RESULTS/FINDINGS

This research was held in SMP Negeri 7 Tarakan. The researcher took one class as the treatment class that was VII-2. This research was began on 30th April 2019 until 16th May 2019. There were five meetings that the researcher took in this research for applying the treatment. Before the treatment, the researcher also gave pretest and after four meetings of treatment, the researcher gave posttest. The total number of meeting was five meetings. The treatment class was treated by using Numbered Heads Together Technique in teaching reading comprehension. In this research, the researcher described the result of pretest and posttest for the treatment class as below:

Pretest

The pretest was held on Tuesday 30th April at 10.00 – 10.20 in VII-2. On the pretest, the researcher asked the students to answer the reading comprehension question. The reading comprehension test paper consisted of student's name, class, test instructions, questions, and answer sheet. Before the students answering the question, the researcher explained about the test instructions and there were 20 questions. There was some questions in the pretest that students have a little difficulty to answer. The questions mainly asked about the main idea of the text or paragraph and the supporting details. It means that the students lacked of determined the main idea of the text and the supporting details of the test in pretest.

Posttest

The posttest was held on Thursday 16th May 2019 at 10.30-11.00 a.m. Before the students answer the question, the researcher explained the instructions in the posttest paper. There were 20 questions of posttest. There were some questions in posttest that students have a little difficulty to answer. The questions mainly asked about the supporting details. It means that there were some of the students still lacked of determined the supporting details in posttest.

The Result of Students' Score

The pretest and posttest result were assessed by the researcher. According to *Direktorat Pembinaan Sekolah Menegah Pertama* (2016), each category had score D up to A, where, D =poor, C =fair, B =good, and A =very good. Based on *Direktorat Pembinaan Sekolah Menegah Pertama* classification (2016) the classification of students score based on standart minimum criteria mastery are established by the school. In Sekolah Menengah

Pertama Negeri 7 Tarakan, the standard minimum criteria mastery for English is 61. There are four classifications of students score, very good for the students who are get score 90-100, good for the students who are get score 80-89, fair for the students who are get score 70-89, poor for the students who get score less than 70. From the findings of the research, it is clear that the use of NHT technique improve reading comprehension of seventh grade students of SMPN 7 Tarakan. It can be seen from the results of the t-test showed that there was significant difference the mean score from pretest and posttest. The result of mean score before the researcher implemented the strategy was 45,51. Meanwhile, the result of mean score after implementing the method was 54,13. It means that the result of the mean score of posttest was higher than pretest. In this research, the researcher found the significant difference in the students' reading comprehension before and after the researcher implemented the NHT technique in treatment class.

Based on the result, the students had better reading comprehension after the students were taught by using NHT technique. It was proved by the comparison of the mean score result between pretest and posttest, where the mean score in posttest was higher than the mean score in pretest. In addition, the result of computation t-test was 2.819. It means that the t-test was higher than t-table where the degree of freedom (df) was 28 and at the level of significant 5% p = 95%. So, the result of t-test 2.819> t-table 2.048. The computation between value of t-table and t-test at p = 95% α= 5% used under this research, which it indicates that t-test was higher than the value of t-table, Ha was accepted and Ho was rejected. The result implied Ha than the hypothesis of two variables indicating that there was a significant difference in the mean score to both of them. It means that after teaching using NHT technique the students was better than before using NHT technique. So, teaching by NHT technique was an effective way to improve the students' Reading comprehension in the class. In result, NHT technique was found to be helpful and effective to improve students' achievement in reading comprehension on narrative text, especially the students of SMP Negeri 7 Tarakan.

CONCLUSION
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Based on of the result of the research on the use of Numbered Heads Together technique on reading comprehension of descriptive text at the seventh grade students of SMPN 7 Tarakan in academic year 2018/2019. The researcher found that the mean score of the students' reading comprehension between pretest and posttest were different. Before giving the treatment the researcher found that the mean score from pretest was 45,51. After giving the treatment the researcher found that the mean score from posttest was 54,13. The improvement of the mean score from pretest to posttest was 8,62. The result of computation t-test was 2.819. It means that the t-test was higher than t-table which was at degree of freedom (df) was 28 and the level of significant 5% p = 95%. So, the result of t-test 4.104> t-table 2.048. It means that the NHT technique had effectiveness to improve the students' reading comprehension in descriptive text of seventh grade students at SMP Negeri 7 Tarakan.

Suggestion
The researcher would like to give some suggestions about the result of this research: The students Reading is important subject to learn. Most of the students had difficulties in reading descriptive text and understand about it. Therefore, students have to be serious and pay attention to the teacher explanation in teaching and learning process. The English teacher The English teacher should find out the appropriate media, technique or method in order to create teaching process more interactive. In this case, the researcher suggested numbered heads together as an alternative technique for teacher to improve students' skill in reading a descriptive text. The result of this research can be used as a reference for the other researchers

who are interested to use numbered heads together technique in teaching english with different skills.

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