THE COMPARISON OF USING NUMBERED HEAD TOGETHER (NHT) TECHNIQUES AND COOPERATIVE INTEGRATED READING COMPOSITION (CIRC) TECHNIQUES TOWARD READING COMPREHENSION

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Abstract: Reading comprehension is a key point for basic English. The aim of this study is to find out the suitable technique between NHT and CIRC techniques in teaching reading. The design of this research was experimental design with pre-test and post-test design. The research was conducted at the Class Management. The number of population was 160 students, therefore, cluster random sampling was used as technique sampling. The students in each of experimental and control groups consisted of 32 students that classified from heterogenic students level. The result of the average score in experimental group was 63.40 and control group was 57.84. It meant that the result of reading scores in experimental group was higher than in control group. In other words, NHT technique was more effective than CIRC technique toward students reading comprehension in descriptive text.

Key words: Numbered Head Together (NHT), Cooperative Integrated Reading and Composition (CIRC),Reading Comprehension.

INTRODUCTION

Reading comprehension is the ability to read a text and process to understand its meaning. An individual's ability to comprehend text is influenced by their traits and skills, one of which is the ability to make inferences. According to Snow (2002, p.11), reading comprehension is a complex activity that involves interaction between the reader and the text. It means that to build comprehend there are two elements the readers itself and the text. Snow statement is supported by Klingner, *et al.* (2007, p.8) state that reading comprehension is a complex process that involves many interaction between readers and what they bring to the text (previous knowledge, strategy use) as well as variables related to the text itself (interest in text, understanding of text types).

Based on observation, the researcher find out that many students have low ability in English class. There

are some of the students who get low score and can not pass the examination. It shows that the students do not have a good ability in English. The lack of reading comprehension skills obviously affects a student's success in school. Academic progress depends on understanding, analyzing, and applying the information gathered through reading. Considering that reading is the basic skill in English it meant that without reading comprehension the students cannot improve their reading comprehension well, it caused the problem in students reading comprehension. The main problems that often occur in teaching learning process: 1) The students do not like reading activity due to the uninteresting strategy used by the lecturer; and 2) Material given to the students is difficult to understand that because the students feel bored with the teaching learning. The lecturer should give the interesting method to teach the students especially for teaching reading in Management Class, it needed the hard work to build the spirit of the students.

Futhermore, this study focused on reading comprehension in descriptive text. Reading comprehension in descriptive text is a

kind of reading text which describes about specific things, place or people. Descriptive text is a text which say what a person or thing is like. Its purpose that to describe a particular person, place, or thing. In meaning, descriptive text is a text that describes the characteristic of something like person, place or thing. According to Anderson (1998, p.2), text is when words are put together to communicate a meaning, a piece of text is created. Texts consist of spoken or written words that have the purpose of conveying a message. It can be said text is words that has a function to communicate which created by speaker or writer to inform amessage.

Furthermore, Dietsch (2006, p.140) states that description is a recording of concrete details that you see, hear, smell, taste or touch. In other words, description is a process of describing about something that people feel by using their five senses, it can be what people see like someone, place or thing; what people taste like food, drink or potion; what people hear like music, sound, or noise; what people smell like aroma of food or scent of rubbish; what people touch like soft, coarse, brisk, and so on.

In addition, Anderson (1998, p.26) says that a typical description has an opening paragraph introducing the subject of the description, followed by a series of paragraphs each describing one feature of the subject. There can also be a final concluding section that signals the end of the description. It could be concluded that descriptive consist of two general structures which are introduction to introduce the object and description to explain the features of the object one by one and the last is make a summary about the object.

According to Buscemi (2002, p.267), the grammatical features of descriptive text are divided into two types: (1) In describing place and things; using proper noun, using effective verbs, and including action and people in the description of a place. (2) In describing people; using physical appearance, action, behaviour and the writer also need to ask someone about the subject's personality, lifestyle, morals, disposition and so on.

Considering the information above, finally the researcher was interested in conducting a research based on the data survey of the research. The research would find out how far the result of comparison by using

Numbered Head Together and Cooperative Integrated Reading composition techniques toward students' reading comprehension in descriptive text. Numbered Heads Together (NHT) is a simple four-step structure. Numbered Head Together (NHT) technique is a type of cooperative learning which consists of four stages that are used to review the fact and basic information that serves to regulate students' interactions (Kagan, 1992, p.1). Its main strengths are in building mastery and in reviewing previously learned information (Stone, 2000, p.74). Moreover, the other statements say that numbered heads together is basically a variant of group discussion; the twist is having only one student represent the group but not informing the group in advance whom its representative will be (Slavin, 1995, p.132)

In addition, Integrated Reading and Composition (CIRC), including one learning cooperative technique which was originally a unified cooperative teaching reading and writing. It is a comprehensive program or a spacious and fully equipped for the teaching of reading and writing classes high school. CIRC is a school-based program that

targets reading, writing, and language arts. Cooperative Integrated Reading Composition (CIRC) Technique is a teaching technique which is used by the lecturer in teaching reading comprehension. This technique set to explain how to comprehend the reading text together with composing the students understanding by writing their own comprehension in a work sheet. The students writing should be appropriate with the content of the text (Slavin, 1995, p.78).

METHODOLOGY

Research design in this research was quasi experimental design. In quantitative research, the aim is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) in a population. Quantitative research designs are either descriptive (subject usually measured once) or experimental (subject measured before and after a treatment). According to Creswell (2008, p.34), one type of non-experimental quantitative research is causal-comparative research in which the investigator compares two or more groups in term of a cause (or

independent variable) that has already happened.

This research was quantitative research. The research design of this research was quasi experimental design. The kind of design was control group pre-test and post-test design. The experimental design deals with two classes, one class as the experimental class and another class as the control class. Both classes received pre-test, treatment, and post-test in order to find out the progress of students' reading comprehension. Randomized and the comparison of both a control and experimental group were utilized in this type of study. In this research, two classes were taken as experiment. One of them was experimental class and the other was control class. Furthermore, the experiment class got treatment through Number Head Together technique and the control class got treatment through CIRC Technique. Because of that, this research was designed by using pre-test, treatment, and post-test to know the progress of students' reading comprehension in descriptive text. The result of pre-test and post-test were to know the differences or to find out the effectiveness of using Number Head

Together and CIRC technique toward students' reading comprehension in descriptive text.

The researcher conducted the research in Management Class Universitas Muhammadiyah Metro, therefore, all of the students in this study program were taken as the population. In conducting the research, some of the students were taken as the samples. According to Arikunto (2006, p.131), sample is partially or representative population which want to research. A good sample is one that is representative of the population from which selected. In this research, two classes of Class Management were taken by cluster random sampling. The first class used Numbered Head Together technique and the second class used CIRC technique to know the differences learning process of reading comprehension in descriptive text.

Numbered Head Together (NHT) is a type of cooperative learning which consists of four stages that are used to review the fact and basic information that serves to regulate students' interactions. Lie (2010, p.60) explains that the steps of cooperative learning NHT (Numbered Head Together) are presented as follows:

1) Step 1 - The numbering (Numbering)

The teacher divides the students into groups or teams of 3 to 5 people and gives numbers so that every student on the team has a different number.

2) Step 2-Asking Questions (Questioning)

The teacher gives the task and each group has to do the task. Assignment is given to each student based on the number. For example, students who get no.1 read about the text properly and collect the data that may be related to problem solving. Students who get no.2 have to find the problem solving of the task. Students who get no.3 record and report the results of group work.

3) Step 3-Think together (Head Together)

The group decides the most correct answers and make sure each member of the group knows the answer.

4) Step 4-Providing Answers (Answering)

Teachers call one number and the students from each group with the same number of hand-picked and prepare answers for the entire class.

The implementation of CIRC technique is able to improve students' reading comprehension. This technique set to explain how to comprehend the

reading text together with composing the students understanding by writing their own comprehension in a work sheet. According to Sharon and Renanya (1999, p.1), there are some steps considered important in the implementation of the CIRC technique as presented as follow:

1) Make a group that consists of 4-5 students who are heterogenic.

2) The teacher gives the text/clipping based on the topic which learned.

3) The students cooperate in a group to read and find the mind idea of the topic and give the argument from the text/clipping in a paper.

4) The students have to present/read the result.

5) Teacher and the students make a conclusion together.

6) Closing.

RESULT AND DISCUSSION

After analyzing the data, the researcher knew the average rates and variances of those groups, next to prove the first hypothesis; there was a significant difference of using Numbered Head Togetherand CIRC technique toward students' reading comprehension in descriptive text at Management Class Universitas

Muhammadiyah Metro.The researcher tried to see the result of $t_{test.}$

1. There Testing creation 1

H_o was rejected if $t_{hit} > t_{table}$

$t_{table} = (1 - 1/2\alpha)(df)$

$df = n_1 + n_2 (df)$

$= 32 + 32 - 2$

$= 62$

By looking at G table we found the value for $\alpha = 1\%$

t_{table} $t = (1 - \frac{1}{2}.0.01)(62)$

$t = (0.995)(62)$

$t = 2.66$

Based on the data analyzing above, it was found that $t_{hit} = 2.98$ and $t_{table} = 2.66$. Therefore, Ho was rejected and H_a was accepted. It meant that there was a significant difference of using Numbered Head Together from CIRC technique toward students' reading comprehension in descriptive text for the Management Class Universitas Muhammadiyah Metro. Testing creation 2

H_o was rejected if $t_{hit} > t_{table}$

t_{table} $= (1 - 1/2\alpha)(df)$

df $= n_1 + n_2 (df)$

$= 32 + 32 - 2$

$= 62$

By looking at t_{table} we found the value for $\alpha = 5\%$

t_{table} $t = (1 - \frac{1}{2}.0,05)(62)$

t   = (0.975) (62)

t   = 2.00

The result found that t_{test} = 2.98, moreover the researcher looked at t_{table} for α = 5%, the t_{table}= 2.00. It meant t_{test}> t_{table}. Therefore, Ho was rejected and H_a was accepted. Based on the analyzing above, we knew that the students' reading comprehension using Numbered Head Together was higher than CIRC technique. It could be said that there was a significant difference of using Numbered Head Together from CIRC technique toward students' reading comprehension in descriptive text for the Management Class Universitas Muhammadiyah Metro.

To prove the second hypothesis which concluded that Numbered Head Together technique was more effective than CIRC technique toward students' reading comprehension in descriptive text at Management Class Universitas Muhammadiyah Metro, the researcher tried to see the result of $t_{test.}$

Testing creation 1

H_o was rejected if t_{hit}> t_{table}

t_{table} = (1 − 1/2α)(df)

df   = n_1 + n_2 (df)

        = 32+ 32 - 2

        = 62

By looking at G table we found the value for α = 1%

t_{table} t   = (1 − ½.0,01)(62)

        t   = (0,995)(62)

        t   = 2,66

Based on the data analyzing above, it was found that t_{hit} = 3,02 and t_{table} = 2,66. Therefore, Ho waas rejected and H_a was accepted. It meant that Numbered Head Together technique was more effective than CIRC technique toward students' reading comprehension in descriptive text at the second grade students of Management Class Universitas Muhammadiyah Metro

Testing creation 2

H_o was rejected if t_{hit}> t_{table}

t_{table} = (1 − 1/2α) (df)

df   = n_1 + n_2 (df)

        = 32 + 32 -2

        = 62

By looking at t_{table} we found the value for α = 5%

t_{table} t   = (1 − ½.0,05) (62)

        t   = (0,975) (62)

        t   = 2,00

The result found that t_{test} = 3,02, moreover the researcher looked at t_{table} for α = 5%, the t_{table}= 2.00. It meant t_{test}> t_{table}. Therefore, Ho was rejected and H_a was accepted. Based on the

analyzing above, it was found that the students' reading comprehension using Numbered Head Together was higher than CIRC technique. It also can be said that Numbered Head Together was more effective than CIRC technique. Based on the researcher observations' during the research, the researcher found 2 cases as follows:

Firstly, it was found that the students' reading comprehension in descriptive text increased after having some treatments. The reading comprehension in the experimental class was higher than in the control class. It can be seen from the result of post-test. In the experimental class, the highest score was 80, the lowest score was 50, and the average score was 63,40. While, in the control class the highest score was 70, the lowest score was 40, and the average score was 57,84. It can be inferred that there was different score between the use of NHT and CIRC technique.

Secondly, in accordance the result of hypothesis tests in pre-test and post-test. The result of hypothesis test in pre-test was 1,9 and the result of hypothesis test in post-test was 2.98. According to the criteria α 5% = 2.00 and α 1% = 2.66, it was really there was

different from the treatment by using NHT technique and CIRC technique toward students' reading comprehension in descriptive text.

On the other hand, the use of NHT technique and CIRC technique toward students' reading comprehension in descriptive text were effective. However, based on the average score, the progress score and percentage score of NHT technique was more effective to increase the students' reading comprehension in descriptive text in the learning process. It was happened because all of the score above had shown that the class which was taught by NHT technique had higher score than the class which was taught by CIRC technique. According to the previous research, the researcher found some findings from them about how to increase reading comprehension by using some techniques as follows:

The first, Asliman (2012) did the research about "The Comparative Study of Simple Past Tense Mastery in Instruction by Using Numbered Head Together (NHT) and Student Team Achievement Division (STAD) Method in the Second Semester of the Tenth Grade of SMA Muhammadiyah 1 Metro in academic year 2011/2012." The data

collecting technique were overview document and post-test. From the hypothesis testing, it was gained that at the significant level of 0.01, the t-ratio was higher than t-table ($T_{ratio} > T_{table}$), that was 3.08 for t-ratio and 2.70 for t-table. The average score in experimental group was 79.7 and control group was 71. Therefore, it could be concluded that the hypothesis of this research was approved.

After knowing the findings of the previous research, the researcher concluded that there was significant differences of using NHT and CIRC technique toward students' reading comprehension in descriptive text, but the NHT technique was more effective than the CIRC technique toward students' reading comprehension in descriptive text. It could be seen from the score in experimental class taught by using NHT technique was higher than in control class taught by using CIRC technique. To clarify the purpose of this study, the researcher used a test descriptive text (pre-test and post-test) as a research instrument and the average score of pre-test and post-test for each classes using NHT and CIRC technique compared to find out the advantages of both score. Therefore, the researcher

concluded that NHT was more effective than CIRC technique toward reading comprehension in descriptive text at Management Class Universitas Muhammadiyah Metro. From those illustrations the lecturer and the students should apply NHT technique in learning process especially in developing of reading comprehension in junior high school.

CONCLUSION

The result of reading comprehension in descriptive text using NHT technique at Management Class Universitas Muhammadiyah Metro was significant increasing. The statement was supported by result of finding that the highest score in pre-test was 60, while the higher score in post-test was 80. It proved that the students' score of reading comprehension in descriptive text had significant increasing.

The statement was supported by result of finding that post-test score was higher than pre-test score. In the pre-test, the higher score was 53 and post-test was 70. Based on the data above, it proved that the students' score of reading comprehension in descriptive text taught by NHT and CIRC had significant increasing.

The students' reading comprehension in descriptive text using NHT technique was effective. The statement is supported by result of finding that the result of average score of the students who taught by using NHT was 42 in pre-test and 63.25 in post-test with the progress of value was 21.5. While the result of average score of the students who taught CIRC method was 39.40 in pre-test and 57.84 in post-test with the progress of value was 18.44. It meant that the average score of the students who taught by using NHT is higher than CIRC technique. Therefore, it was clearly that the hypothesis H_a in this research was accepted. It meant that students' reading comprehension in descriptive text using NHT technique was effective.

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