

# Teaching Reading Skills to Non-English Native Speaker Students: The Numbered Head Together (NHT) Technique and Students' Reading Ability in Bengkulu

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**How to cite this paper:** Gultom, Y. A. (2018). Teaching Reading Skills to Non-English Native Speaker Students: The Numbered Head Together (NHT) Technique and Students' Reading Ability in Bengkulu. *International Journal of Language Teaching and Education*. 4(2), 25-31

**Accepted:** 28 March, 2018  
**Published:** 31 March, 2018

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## Abstract

The purpose of this quantitative study with a quasi-experimental approach was to examine the significant increase and difference of students' achievement in reading after being taught through the Numbered Head Together (NHT) technique with recount texts for the second grade students at one Junior High School in Bengkulu, Indonesia. The sample of this study was 72 second-grade students divided into two classes: experimental class and control class. The experimental class was taught through the Numbered Head Together (NHT) technique while the control class was taught using conventional method. To collect the data, pre-test and post-test techniques were used. The result of paired sample t-test showed that there was a significant positive effect of Numbered Head Together (NHT) technique toward the students' reading ability. Implications of findings and suggestions are discussed.

## Subject Areas

Language Teaching

## Keywords

NHT technique, Reading ability, Junior high school

## INTRODUCTION

Cooperative learning helps students to solve their problems on learning process. In this kind of learning method, students work together in group and are expected to share equal portion of thinking. When they learned cooperatively, they can find and discuss their difficulties with their friends. Different people have different idea, different point of view, and different

knowledge. Therefore, when students work and collaborate together, they will complete each other. For two heads are better than one (O'Keefe, 2010).

On the other hand, students tend to work individually especially when it comes to reading activity. Cooperative learning is not always be the first alternative technique to gain an effective reading activity in the classroom. Reading is an activity which is done to gain information or verify existing knowledge in order to

enhance knowledge of the language being read.

Cooperative learning accommodates various teaching techniques to create a virtuous teaching and learning atmosphere. Numbered Head Together (NHT) Technique is one of the cooperative learning techniques in which the students sit in groups and solve some problems given. In implementing this activity, the classroom teacher is about to divide the students into several groups then give a number for each member of the group. Some questions or problems are delivered to the students based on the reading texts that have been given beforehand. NHT technique is considered appropriate to be implemented for Junior high School students since the technique presents a fun and enjoyable learning. Besides, NHT technique is possible to build students' interest in reading for it provokes the students to be active and activate their critical thinking. This technique trains the students to be a cooperative person, rather than an individual person.

Several researchers have implemented Numbered Head Together technique on students' reading skill and gained positive result on it. The examples are research done by Indah (2010) and Japar (2008). Indah (2010) found that NHT technique was effective to improve students' reading achievement especially their understanding on narrative texts. At the same way, Japar (2008) found that Numbered Head Together (NHT) technique was successful in improving students' reading comprehension. Besides, the finding also showed that NHT technique was effective in enhancing the students' participation, especially in raising their hands competitively to answer the questions during the answer-checking session.

This research was conducted to see whether Numbered Head Together (NHT) Technique would give positive effect to students' reading ability for the second grade students of one of junior high schools in Bengkulu Indonesia. The guided research question was: "Is there any positive effect of Numbered Head Together (NHT) technique toward students' reading ability at the second grade students of one of junior high schools in Bengkulu Indonesia?".

## LITERATURE REVIEW

According to Pang (2003) reading is a complex activity in understanding written text that involves both perception and thought. Pang (2003) further said that in reading activity there were two related processes, they are word recognition and comprehension. Word recognition refers to the process of realizing how a text or written symbols correspond to one's spoken language. Comprehension is the process of making sense of words, sentences, and connected texts. It indicates that reading plays a crucial part in education. It cannot be separated with the educational goal. Through reading, the readers will get more information and broaden their knowledge. For children and adults, the ability to read will open up new world and opportunities. It enables the reader to gain new knowledge and learn many things on it. Reading is not only about reading to gain information or to broaden knowledge, but reading can also be used for getting self-pleasure and enjoyableness.

For many learners, beginning to read the foreign language involves learning the entire new set of written symbols. It is preferable to begin reading only after the learners have some basic knowledge of the spoken language. Byrnes (1989) stated, "Traditionally, the purpose of learning to read in a language is to have access to the literature written in that language". Students learn to read a language by studying its vocabulary, grammar, and sentence structure, not by actually reading it. Besides, reading is also an understanding. According to Ur (1996) when someone reads, but they do not understand about what they have read, means they are not reading in this sense. In reading, the readers should use their background knowledge; means the reader bring their knowledge, emotion, experience, and culture to what they read. Ur (1996) continued that when learners begin to read a text, or where there is a little or no helpful context, we rely on decoding letters to understand words; but as soon as there is a meaningful context we tend to bring our own interpretation to the words.

In English language teaching, there are some methods that can be effectively used to improve students' understanding and motivation in reading. Reading

activity can be conducted cooperatively in a group instead of individually. Kagan (1994) mentioned that Cooperative Learning was a teaching arrangement that refers to small, heterogeneous groups of students working together to achieve a common goal. Students work together to learn and are responsible for their teammates' learning as well as their own. They discuss together and share about a problem they found to get one solution. In addition, Kagan (1994) also mentioned 4 basic elements of cooperative learning as follows: (1) positive interdependence which occurs when individuals or teams are positively correlated, (2) individual accountability which occurs when all students in a group are held accountably for doing a share of the work and for mastery of the material to be learned, (3) equal participation which occurs when each member of the group is afforded equal shares of responsibility and input, (4) simultaneous interaction which occurs when class time is designed to allow many student interactions during the period.

Implementing cooperative learning in the classroom is usually enjoyable and fun. Cooperative Learning consists of many interesting activities. One of them is Numbered Head Together (NHT) technique. Olsen and Kagan (as cited in Japar, 2008) said that NHT technique can be utilized repeatedly with a variety of curriculum materials and can be applied to almost all subjects' areas, to every grade level, and to any places in a lesson. It means NHT is not only applicable in reading activity, but it also can be applied in other activities like in speaking or writing.

This technique also ensures that each member knows the answer to problems or questions asked by the teacher. Because no one knows which number will be called, all of the team members must be prepared. The students should be responsible with the questions addressed to them. They should have reason on their answer. The other students have to respond their friend's answer, whether they agree or not. If they do not agree, they should explain the reason. Actually, this technique teaches the students to think critically and has several steps as the following: first, teacher will divide the

students into groups of four and give each student a number from one to four. Second, teacher will come up with a question or a problem to the class. Third, teacher have students gather to think about the question and to make sure everyone in their group understands and can give an answer. Fourth, teacher asks the question and call out a number randomly. And the last, the student with that called number is about to rise hands, and when called on, the student answers for his or her team.

## METHODOLOGY

In order to know whether there was a positive effect using NHT technique towards students' reading ability, this research was relied on quantitative method using a quasi experimental approach. Two classes are chosen as the samples. One class acted as an experimental group and the other class was the control group. Experimental group was the group that had been taught by using NHT technique in teaching reading. On the other hand, the control group was taught without using NHT technique. The successfulness of the treatment was determined by using pre-test and post-test, to see the students' improvement. The population employed in this research was 264 students; 134 male students and 130 female students. They were the eighth grade students of one junior high school in Bengkulu. From the population, the samples were chosen by using simple cluster sampling method in which the qualification of the students is equal. The students have been taught by the same teacher and they learned from the same text book. The teacher utilized recount text as the reading genre.

In using the technique, students are placed in groups, and one group consists of four to five students. Each member of the group is given a number (from one to the maximum number in each group). The given number is intended to help students concentrate on doing their task since they will be called upon by the teacher to give the answer based on the number they have. Next, students were given questions based on the text that they had read. The teacher will process a question and students "put their heads together" to find the answer of the questions. Teacher will call a number randomly to

answer the question.

This research administered pre-test and post-test as the instruments of data collection. The pre-test and post-test were designed in multiple choice items. The students were asked to answer the questions by choosing the appropriate answer on their answer sheets. The items were different for both pre and post-test in order to get a stronger result. The items were created according to the standard competence and indicator of the syllabus. Both of the tests were designed in the same difficulty level.

The items had been tried out first to the students who did not belong to either control or experimental class but they had similar qualification and academic backgrounds with the sample of this research. It was done to get the information of the validity and the reliability of the items. The tryout of the tests was about 60 items; 30 items for pre-test, 30 items for post-test. The items which were valid and reliable were used to get data in pre- and the post-test. The formula used to find out the validity of the tests was Facility Value by Heaton (1998) meanwhile the formula to measure the reliability of the tests was Kuder Richardson 21 (KR21) by Gay (1990).

Before coming to the class to start the teaching reading process, the researcher carried out pre-test for the students to measure the students' reading comprehension before doing the treatment. The pre-test was done to both experimental and control group. After knowing the pre-test score, the researcher applied NHT technique to experimental class meanwhile the control class was taught conventionally without using NHT technique.

The research process applied on experimental group explained by the following steps. First, a pre-test was carried out to the students, in order to measure their ability in reading. Second, the treatment (NHT technique) was conducted to this group with the following procedures: (1) Students were divided into some groups; one group consisted of 5-6 students. (2) Each member of the group was given number from 1 until the total amount of the group. (3) Students read the text individually. (4)

The teacher addressed some questions based on the text. (5) The teacher called students' number randomly to answer the questions. (6) The teacher together with students discussed the answer. Third, Post-test was administered to the students after five meetings of the treatment. Fourth, Teacher evaluated the students' work.

On the other hand, the following procedures are conducted to the control class: **First**, a pre-test was carried out to the students. **Second**, there was no special treatment carried out for this group. The teaching reading activity was done as follows: (1) the teacher handed out a text to the students. (2) the teacher asked the students whether there were any unfamiliar vocabulary found in the reading text. (4) Students were given some time to answer the question given based on the text. **Third**, after five meetings, the researcher administrated post-test to the students. **Fourth**, the teacher valuated the students' work. **Finally**, all data from experiment and control class were analyzed by using T-test technique by Sirkin (1999). It was done to know whether the NHT technique affected the students' reading ability or not.

## FINDING AND DISCUSSION

Since the main instruments of this study were pre-test and post-test, the instrument should be tried out first to get the validity and reliability of the test. The try out instrument was conducted in another class which has the same qualification and academic background with the sample of this research.

After the try out, the items were analyzed by using the criteria of facility value (F. V) and discrimination index (D. I). The accepted items were those with  $FV \geq 0.3$  -  $0.7$  and  $DI \geq 0.3$ . The reading items were focused on Recount Text which consists of 30 multiple-choice items. In pre-test, the total amounts of the valid items were about 20 items. Meanwhile, the total amounts of the valid items in post-test were 22 items. The valid items were then used in the pre-test and post-test for both experimental and control class.

On the other hand, In order to know the consistency of the instrument, it is important to know the reliability of the instrument itself. In this case, the researcher used

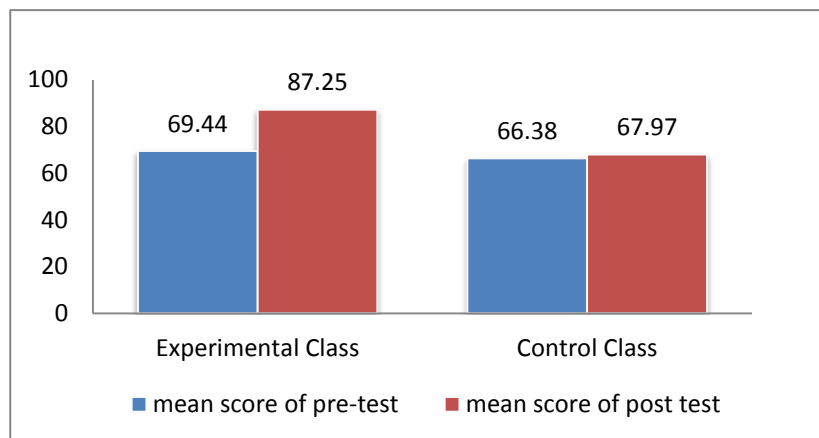
different items for both pre-test and post test. To keep the instrument reliable, the researcher made test qualifications to both tests, where both of the tests have the same difficulties. To measure the reliability, the researcher employed KR 21 formula by Gay (1990). The result of the analysis showed that the reliability index for pre-test and post-test is equal, they are 8.2. Thus, the instrument was acceptable to be used in pre-test and post-test.

After getting the valid and reliable items of the test, the pre-test was conducted to both control and experimental class. It was administrated before the treatment. It was done to prove that the control and experimental class were in the same qualification. The result of the pre-test was calculated by a special formula to indicate the t-count of the test. The t-count was compared with the t-table. In the analysis of pre-test result, it was showed that the t-count was 1.42. It means that the t-count was smaller than the t-table ( $1.42 < 2.00$ ). As a result,  $H_0$  was accepted and  $H_1$  was rejected. It means there was no significant difference in pre-test

score average between experimental and the control class. In the other words, those samples were accepted for the experiment.

After doing the treatment for five meetings to the experimental class, the post-test was given at the end of the treatment period in order to know the effect of the method. To find out the t-count of the post-test score, the t-test formula was used. The t-count was compared to the t-table (2.00). In the analysis of pre-test result, the  $S_{diff}$  was 1.98 and the t-count was 9.73. It means the t-count was bigger than the t-table ( $9.73 > 2.00$ ). As a result,  $H_1$  was accepted and  $H_0$  was rejected. It means there was significant difference in post-test score average between experimental and the control class. In the other words, there was significant difference of using Numbered Head Technique toward students' reading ability. After implementing the treatment, the result showed that there was a high improvement to the experimental class from its pre-test and post-test score. The improvement can be seen in the chart below:

**Chart 1: Comparison of Pre-test and Post-test Result**



Based on the result of the research, it can be concluded that Numbered Head Together technique is one of effective techniques that can be taught to enhance students' reading ability for Junior High School students. By learning and discussing in group, the students were able to solve the problems together and it also helped the

students to make the learning process more communicative. Besides, it also fulfilled them with social learning theories which taught them how to build social interaction with others. Therefore, Numbered Head Together Technique can be conducted as one alternative strategy in teaching and learning process. That is to

warm up the activity in the classroom, it also build students' participation to be more active.

This technique is fun to be implemented in the classroom. Through this technique, students have to work together to ensure there is one product to their meaning. They must check that everyone can understand and answer the question. Waugh (2003) stated that after direct instruction of the material, the group supports each member and provides opportunities for practice, rehearsal, and discussion of content material. In short, Numbered Head Together technique instructs students how to have a strong group and work collaboratively to build a good team work. Those explanations proved that Numbered Head Together is an effective technique to build students interest and motivation in reading ability.

In applying this technique in one of Junior High School in Bengkulu, the researcher found that the students were very active in giving their contribution. They read the text and answered the question carefully. They eagerly competed so they did not loose with the other teams. They also activated their critical thinking in giving their opinions and arguing their reasons.

Compared to the control class, the experimental class seemed to be more talkative and had a big enthusiasm in doing their tasks, answering the questions, and arguing their opinion. This kind of atmosphere appeared because they have the same chance to talk and share their thought. The technique did not obligate the students to answer or talk correctly, so they were free to share their ideas. Obviously, this technique could motivate them and build their confidence and responsibility. This situation created a more dynamic atmosphere in the classroom.

There are several advantages found by the researcher in conducting this technique. Firstly, Numbered Head Together technique helped the students to not only focus on teacher's teaching but also learn together with their friends. Through this technique, students can learn more from their friends, and share ideas one to each other. Waugh (2003) mentioned that through Numbered Head Together technique, the students who have a lower understanding can learn from

those who have a better understanding. It means, the students are supposed to be more active than the teacher. They found the problem by themselves; they also should solve it by themselves. The role of the teacher here is as the instructor and as the manager who have to control and manage the classroom. Secondly, the researcher found that the students became more active in arguing their opinion. Kagan (1994) mentioned that indirectly, this technique trains students to share some information actively and it also makes the learning process more productive. Thirdly, the researcher found that through NHT technique students are capable to learn how to build interaction to others, being a cooperative person, and not only focus on themselves. Ray (2008) argued that cooperative learning instructs students to develop their social interaction. It motivates them to make a relation to others in sharing, asking, or arguing their thought. Fourthly, the researcher found that classroom atmosphere turned to be more alive and dynamic. Actually, this technique was integrated with speaking activity, where the students will keep speaking to their friends. Olsen and Kagan (1994) said that Numbered Head Together technique can be utilized repeatedly with a variety of curriculum materials and can be applied to almost all subjects' area. The last but not least, NHT technique also gave students motivation, interest, pleasure, and enjoyableness. It also built up students' confidence, and understanding.

In addition, in conducting this technique, the researcher found that the students were so enthusiast in raising their hand when the teacher gave a chance for them to answer or to argue their opinion. Students had a big desire for the teacher to pick them. It happened because they want to show to the other teams that they were able to answer the questions and they would not be loose against the other team.

In the experimental class of this study especially, the researcher found that the technique helped the students to get back their motivation after their tired activity. It gave pleasure and relaxing feeling for them. Besides, it was also effective to improve their reading ability. The proof of the improvement can be seen from

the post-test score average of experimental and control class. The score average of the experimental group was 87,25 meanwhile the control group was 67,97. The result of t-count analysis of the post-test score was about 9,73. It means t-count is bigger than t-table ( $9,73 > 2,00$ ). In other words, there is a significant difference of using Numbered Head Together Technique toward student's reading ability.

## CONCLUSION

The purpose of this quantitative study with a quasi-experimental approach was to examine the significant increase and difference of students' achievement in reading after being taught through the Numbered Head Together (NHT) technique with recount texts for the second grade students at one Junior High School in Bengkulu, Indonesia. After doing the research, the researcher can conclude that NHT gave a positive effect to the students' reading ability to the second grade of one junior high school in Bengkulu, Indonesia. The data analysis of post-test showed that the students who were taught by using Numbered Head Together technique got a higher score than the students who were not taught by using this technique. The result also indicates that H1 was accepted and H0 was rejected. In the other words, the treatment of this research was successful.

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