# NUMBER HEAD TOGETHER NHT TECHNIQUE IN IMPROVING STUDENTS' READING SKILL ON HORTATORY EXPOSITION TEXT COOPERATIVE LEARNING METHOD 

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#### Abstract

Number Head Together NHT Technique In Improving Students’ Reading Skill On Hortatory Exposition Text: Cooperative Learning Method. This research is aimed to find out whether or not the implementation of Number Head Together (NHT) technique improve the students' reading skill on hortatory exposition text. During the researcher's observation, it was found that students' ability in reading was still low. The implementation of this research is starting by doing an observation and pre-test. Researcher then gave the treatment by teaching how to read and understand hortatory exposition text by using Number Head Together (NHT) Technique. Number Head Together (NHT) technique consists of four steps: numbering each student, asking questions, head together, and answering questions. The method of this research was quasi-experimental study. There were two group namely experimental group and control group. This research was conducted for six meeting. The last step of this research is doing a post-test and analyze the data taken from the test of hortatory exposition text.


Keywords: Reading Skill, Number Head Together (NHT), Hortatory Exposition Text.


#### Abstract

Abstrak: Penerapan Metode Number Head Together dalam Meningkatkan Kemampuan Membaca Teks Eksposisi Hortatory Penelitian ini bertujuan untuk mengetahui apakah penerapan teknik Number Head Together (NHT) dapat meningkatkan keterampilan membaca mahasiswa pada teks eksposisi hortatory. Proses penelitian ini dimulai dengan melakukan observasi dan pre-test. Peneliti kemudian memberikan perlakuan dengan mengajarkan cara membaca dan memahami teks eksposisi hortatory dengan menggunakan Teknik Number Head Together (NHT). Teknik ini terdiri dari beberapa langkah yaitu penomoran setiap siswa, mengajukan pertanyaan, bekerja dan berfikir bersama-sama, kemudian menjawab pertanyaan. Metode penelitian ini adalah quasi-experimental. Penelitian ini menggunakan dua kelas sebagai sampel yaitu kelas eksperimen dan kelas kontrol. Penelitian ini dilakukan selama enam kali pertemuan. Langkah terakhir dari penelitian ini adalah melakukan posttest dan menganalisis data yang diambil dari tes teks eksposisi hortatory. Kata kunci: Membaca, Number Head Together (NHT), Teks Ekspository.


## INTRODUCTION

As one of the four skills in English, reading plays an important role in enhancing students' English ability. More importantly, reading has a function as a tool to access information worldwide. During the researchers' observation, it was found that students' ability in reading was still low. The students faced many difficulties in reading some English text included hortatory exposition texts. They often failed in reading because of lack of vocabularies and
technique in reading. The problem also comes from the lecturer's technique and strategy in teaching. They found that the lecturer still applied a traditional method, the lecturer asked the students to read the texts by heart and opened dictionary anytime they stuck on using words that they didn't know and after that the students answered the question related to the text. It caused the students bored and did not have a concentration in learning. Therefore, they could not gain the purpose of reading.

To overcome this problem, the lecturer should change her/his strategy in the teaching process and should consider the most effective and creative language teaching strategy in teaching reading skill. It is necessary for the lecturer of English to have a good method in presenting the materials in the classroom. The lecturer should make learning reading more effective and efficient. It is not enough for the lecturer of English to give the students passage to read and answer the questions. $\mathrm{He} /$ she has to use other alternative way to improve students' reading skill. To solve this problem, of course, the creativity of teacher in choosing method is needed.

The purpose of NHT technique is to create an effective classroom environment in which students are actively involved in the teaching process and are consistently receiving encouragement for successful
performance. The NHT structure encourages competition and cooperation in a way that promotes peer group rewards for academic achievement. Number Head Together is one of the team learning strategies designed by Kagan to review and mastery learning of material. Students' participation in NHT helps them review what they have just learned at the end of the unit. This activity will be fun for students in helping them prepare for a future test. Furthermore, students are able to demonstrate good sportsmanship within NHT.

By looking at the background above, the researcher conducted a research under the title NHT Technique in Improving Students' Reading Skill on Hortatory Exposition Text: Cooperative Learning Method.

## METHOD

In this research, the researcher applied quasi experimental method using two groups' pretest-posttest design. The experiment involved two groups, an experimental group and a control group. The experimental group will be taught by

| EG | O1 | X1 | O2 |
| :--- | :--- | :--- | :--- |
| CG | O1 | X2 | O2 |

(Gay et al., 2006: 255)
EG : Experimental Group
CG : Control Group
O1 : Pretest
O2 : Posttest
X1 : Treatment for experimental group by using NHT technique
X2 : Treatment for control group by using non NHT technique

There were two kinds of variables in this research. They were dependent and independent variables. Dependent variable
was students' reading skill and independent variable was NHT technique. The population of this research was the second
semester students of English education of Universitas Islam Makassar in academic year 2016/2017 The number of the students' population was 34 students. All of the population was used as a sample. All students had a same chance to be sample in this research. The researcher used simple random sampling and divided the sample into two groups. One group was as an experimental group and other as a control group. Therefore, experimental group was 17 students and control group was 17 students. The instrument used in this research was reading test. The test was an objective test which was multiple-choice
type. The reason was the multiple-choice type can be scored objectively and can measure learning outcome directly. There are 40 questions of multiple choice are tested in Universitas Islam Makassar to know the validity of the test. The instruments were analyzed by using the formula of item analysis in test to see the validity of this instrument. The validity could be seen from the result of calculation in index of difficulty (ID) and discriminating power (DP) of each answer of question. The criteria of index of difficulty can be seen in table 3.1 and discriminating power in table 3.2.

Table 3.1. Index of Difficulty

| VE | Very Easy | $>80$ |
| :---: | :---: | :---: |
| ME | Moderately Easy | $0.71-0.80$ |
| MeDi | Medium Difficult | $0.51-0.71$ |
| MoDi | Moderately Difficult | $0.31-0.50$ |
| VeDi | Very Difficult | $0.00-0.30$ |

Table 3.2 Discriminating Power

| E | Excellent | $1.0-0.40$ |
| :---: | :---: | :---: |
| G | Good | $0.30-0.39$ |
| M | Mediocre | $0.20-0.29$ |
| P | Poor | $0.00-0.19$ |
| W | Worst | $<-0.01$ |

The data was collected through three steps. Those steps are pretest, treatment, and posttest. The data obtained from the reading
test in pretest and posttest was analyzed by using the procedures as follows:
a. Scoring the students correct answer on objective questions at pretest and posttest by using this formula:

$$
\text { Score }=\frac{\text { Student's Correct Answer Score }}{\text { The total number of items }} \times 100
$$

b. Classifying the students score into seven classification:

| Score: $91-100$ | $=$ very |
| :--- | :--- |
| good |  |
| Score: $75-90$ | $=$ good |
| Score: $61-74$ | $=$ fair |
| Score: $51-60$ | $=$ poor |

Score:less than $50=$ very poor
(Depdiknas 2004)
Calculating rate percentage of the students' value of the test (test of significance) score, mean score, standard deviation in through SPSS (Statistical Product and pretest and posttest and finding the Service Solution) version 17.0. differences between pre-test and post-test
c. To find out whether the differences between pre-test and post-test value of the test using the following formula:

$$
t=\frac{\bar{x} 1-\bar{x} 2}{\sqrt{\left(\frac{\text { SS } 1+\text { SS } 2}{\mathrm{n} 1+\mathrm{n} 2-2}\right)\left(\frac{1}{\mathrm{n} 1}+\frac{1}{\mathrm{n} 2}\right)}}
$$

Note: $\mathrm{t}=$ Test of significance
$\bar{x}_{1} \quad=\quad$ Mean score of experimental group
$\bar{x}_{2} \quad=\quad$ Mean score of control group
$\mathrm{SS}_{1}=$ Sum square of experimental group
$\mathrm{SS}_{2}=$ Sum square of control group
$\mathrm{n}_{1} \quad=$ Number of students of experimental group
$\mathrm{n}_{2} \quad=\quad$ Number of students of control group
Where:

$$
\begin{aligned}
& S S 1=\sum X 1^{2}-\frac{\left(\sum X 1\right)^{2}}{n 1} \\
& S S 2=\sum X 2^{2}-\frac{\left(\sum X 2\right)^{2}}{n 2}
\end{aligned}
$$

(Gay 1981:327)

## FINDINGS AND DISCUSSION

The findings of this research were derived from reading test. Based on the statistical data, the implementation of cooperative learning "Number Head Together"
improved students' reading achievement as indicated by the result of mean score of pretest and posttest that can be seen as follows:

Table 4.1 Mean score and standard deviation at pretest and posttest

| No | Group |  | Mean Score |  | Standard Deviation |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Pretest | Posttest | Pretest | Posttest |  |
| 1 | Experimental | 5.27 | 8.02 | 1.18 | 1.45 |  |
| 2 | Control | 4.84 | 5.80 | 1.02 | 1.16 |  |

Table 1 shows that, for experimental group, the mean score at pretest was 5.27 with standard deviation was 1.18 while the mean score at posttest improved to be 8.02 with standard deviation was 1.45 . It indicates that the students' reading achievement improved significantly after giving treatment by using team game tournament. In other side, the mean score of
control group at pretest was 4.84 with standard deviation was 1.02. Control group also made a progress but it was not as significantly as experimental group. The mean score of control group at posttest was 5.80 with standard deviation was 1.16 . The mean scores for both experimental and control group were obtained from the students' classification score as follows:

Table 4.1 Students' classification score at pretest and posttest

| Classification | Score | Experimental Group |  |  |  | Control Group |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Pretest |  | Posttest |  | Pretest |  | Posttest |  |
|  |  | F | P(\%) | F | $\mathbf{P ( \% )}$ | F | P(\%) | F | P(\%) |
| Excellent | $9.6-10$ | - | - | 4 | 11.42 | - | - | - | - |
| Very Good | $8.6-9.5$ | - | - | 10 | 28.58 | - | - | - | - |
| Good | $7.6-8.5$ | - | - | 7 | 20 | - | - | 2 | 5.72 |
| Fairly Good | $6.6-7.5$ | 4 | 11.42 | 8 | 22.86 | 1 | 2.86 | 7 | 20 |
| Fair | $5.6-6.6$ | 15 | 42.86 | 4 | 11.42 | 8 | 22.86 | 11 | 31.42 |
| Poor | $3.6-5.5$ | 12 | 34.29 | 1 | 2.85 | 21 | 60.00 | 14 | 40.00 |
| Very Poor | $0-3.5$ | 3 | 8.57 | - | - | 4 | 11.42 | - | - |
| Total |  | 34 | $100 \%$ | 34 | $100 \%$ | 34 | $100 \%$ | 34 | $100 \%$ |

Table 4.1 shows the students' classification score for both experimental and control group at pretest and posttest. In experimental group, students' reading achievement at pretest was very low. The data shows that there were not students who got excellent, very good and good score. It shows that there were $3(8.57 \%)$ out of 34 students got fairly good score, 15 students (42.86\%) got fair score, 12 students (34.29\%) got poor score, and 4 students (11.42\%) got very poor score. In posttest,
there was an improvement of students' score. There were 4 out of 34 students (11.42\%) got excellent score, 10 students (28.58\%) got very good score, 7 students ( $20 \%$ ) got good score, 8 students ( $22.86 \%$ ) got fairly good score, 4 students ( $11.42 \%$ ) got fair score, 1 student ( $2.85 \%$ ) got poor score, and no one got very poor score.

For control group, there were not students who got excellent, very good and good score at pretest. The data shows that there was only 1 ( $2.86 \%$ ) out of 34 students
got fairly good score, 8 students ( $22.86 \%$ ) got fair score, 21 students ( $60 \%$ ) got poor score and 4 students ( $11.42 \%$ ) got very poor score. While in posttest, the improvement was not really significant. the data shows that there were not still students who got excellent and very good score. It shows that there were 2 out of 35 students ( $5.72 \%$ ) got good score, 7 students ( $20 \%$ ) got fairly good score, 11 students ( $31.44 \%$ ) got fair score, 14 students ( $40.00 \%$ ) got poor score, and no one got very poor score.

From the data above, researcher concludes that the students' rate percentage in posttest was greater than the rate
percentage in pretest. Experimental group score was also greater than control group score. It means there was an improvement of students' reading achievement after giving treatment.

After finding the mean score and standard deviation, also students' classification score, the researcher calculated whether or not both groups are in statistically significant difference at level of significance $(p)=.05$ with degree of freedom (df) $=68$. The result of those calculation are presented in the following table:

Table 4.3 T-test and t-table value at pretest and posttest

| No | Variable | T-test | T-table |
| :---: | :---: | :---: | :---: |
| 1 | Pretest | 1.65 | 2.000 |
| 2 | Posttest | 7.07 | 2.000 |

Table 4. 3 shows that t -test value at pretest was 1.65 and $t$-table value was 2.000 . In this case, -test value was smaller than $t$ table value ( $1.65<2.000$ ). It indicates that there was no significant difference between those mean scores. Therefore, null hypothesis ( H 0 ) was accepted and alternative hypothesis (H1) was rejected.

It is different from the result found in posttest. The t -test value was 7.07 and t table value was 2.000 . In this case, t-test value was greater than $t$-table value ( $7.07>$ 2.000). It indicates that the difference between those mean scores were statistically significant. Therefeore, null hypothesis (H0) was rejected and alternative hypothesis (H1) was accepted at posttest. Based on this hypothesis testing, it can be concluded that there was a significant difference between the students who were taught by using
number head together and number head together (verbal explanation).

In the previous chapter, the mean score of pretest of two groups were almost statisticaly the same. It means both experimental and control group have an equal reading achievement before giving treatment. The two groups were taught reading under different technique. Experimental group was taught by using number head together while control group was taught without number head together (verbal explanation). After giving treatment, the students' reading achievement at experimental group improved significantly from 5.27 up to 8.02. This improvement was affected by many factors, such as; the role of peer tutors who help the studets in mastering the materials. Both peer tutor and other students have the same level of language,
therefore, it was easy for them to catch and to understand the material. Besides that, the students enjoy collaborative, competitive, and reward in head together. In contrary, the students’ reading achievement at control group did not improved significantly, from 4.84 up to 5.80. It was happened because the students did not actively involved in teaching and learning process. They just listen to their teacher's explanation and finish the task monotonously. Therefore, their reading achievement did not improve signnificantly. The students also did not apply concepts through fun activities like what experimental group did.

For experimental group, the treatment was conducted for six times. When the researcher divided students into groups, there were some students refused and protest to unite with students who were in a low academic status. They also did not want to join with male students and who were not their close friends. Therefore, they could not cooperate each other.

In the first treatment, especially when finishing the worksheet, they just relied on their friend who was capable with because they did not concern about the lesson material that was presented by their teacher before. There were so many activites they did, namely; joking, talking out of materials, finishing their homework, even moving back and forth from one group to another group. If the teacher asked a question, there was a little bit response from the students. Most of them just talked without cooperating each other especially for the groups that were dominated by male students. Therefore, there were only few students who could gain some points in tournament. This is because the students had not understood the main function and their postion in team study. The students actually
felt enthusiastically in tournament but the process run less effectively because they did not understand the regulation. When the student, who was in turn, did not know the answer; the other students directly answered the question without knowing whether it was their turn or not, of course, the overlap could not be avoided.

Second treatment was different from the first one. Students' attention to the lesson presented increased. Teaching and learning process run effectively. Also the students' relationship was closer each other without concerning whether they were in a low or high academic status. They could already cooperate with other members in finishing their worksheet although they were not close friends. They tried to motivate their members to gain some points in tournament. The interaction of student-teacher had showed the intense relationship. The constraint appeared also decreased. It was only about the students' comprehension to the material presented.

Teaching and learning process in the third treatment was more effective because the students' attention just focused on their teacher's explanation. They sometimes gave opinion and ideas related to the material presented. The relationship among students was also more intense. They could cooperate very well because most of the students had already known their position and their function in team. They did not stop learning till their members really understood the lesson. Therefore, students' enthusiasm in finishing their worksheet increased. They could not reach the learning goals if and only if the other members also reach the goals. The constraint appeared in the third treatment was only about the students' noises, but it was not be a serius problem because they were noisy when they
cooperated each other and gave a correct answer in competiton. In this case, the noises appeared when they were thinking and doing something positively. For control group, the treatment was also conducted for six times, but without the implemetation of Number Head Together This group was taught by using verbal explanation. During the treatment, the researcher concluded that the students in control groupfelt bored in learning reading because they did not involve actively in teaching and learning process. They just listened to their teacher as if the teacher was only the center of attention in the classroom. There were not peer tutor roles and the application of concept through fun activities. It is believed that the differences of students' reading achievement after treatment are influenced by treatment given to them. It was proved the result of statistical data analysis found.

## CONCLUSION

There is a significant difference of reading achievement between the students who were taught by using Number Head Together and without Number Head Together (verbal explanation). It was proved by the t -test value that was greater than t table value at posttest. It is also supported by the observation checklist analysis that showed the students' progress from each treatment. Therefore, it can be concluded that the implementation of cooperative learning "Number Head Together" improves students' reading achievement. Number Head Together gives an opportunity for students to share with each other and apply concept through fun activities. Also collaborative, competitive, and reward motivated the students to learn more.

## BIBLIOGRAPHY

Arend, Richard I.1986. Learning to Teach, New York: McGraw-Hill.
Astuti, Merina Yuli. 2014. The Effectiveness of Number Head Together (NHT) Technique on Students' Reading Ability. Thesis. Syarif Hidayatullah State Islamic University Jakarta.
Byrne, K. (2004).Using Authentic literary text with advanced learners, Retrieved October 11th 2012. From: www.developingteachers.com/ariclestchtraining/aulitlp1_Kathy.htm.

Fithiawati. 2014. The Effectiveness of Number Head Together (NHT) Technique on Students' Reading Ability of Narrative Text. Thesis. Syarif Hidayatullah State Islamic University Jakarta.
Gay, L. R. 1981. Educational Research Competencies for Analysis and Application Second Edition. Columbus. Ohio: Charles E. Merrill Publishing Company.
Harmer, Jeremy. 1998. How to Teach English; An Introduction to The Practice of English Language Teaching. Edinburgh Gate: Pearson Educational Limited.
Kagan, Spencer and Miguel Kagan. 2000. Kagan Cooperative Learning. San Clemente, California: Kagan Publishing,
Nuyani, Nuri. $\qquad$ . Hortatory Exposition. https://nurinuryani.wordpress.com/kumpulan-tugas/analytical-exposition/
https://www.kaganonline.com/catalog/ENH/NumberedHeadsTogether_Users_Manual.pdf
Slavin, Robert E. 1995. Cooperative Learning: Second Edition. United Stated: Allyn \& Bacon
Widyahening, Evi Tri. 2015. The Use of Group Investigation Method to improve Students’ Reading Skill. Thesis. Slamet Riyadi University.

