Engaging Students in Cooperative Learning Model of Reading Course through Numbered Head Together

1Hanik Mahmudah, 2Fathor Rosyid
1 Institut Agama Islam Negeri Kediri
2 Institut Agama Islam Negeri Kediri

Email of corresponding author: mahmudahhanik98@gmail.com

Abstract. The importance of a reading course in increasing students' ability to comprehend English text is critical. However, many students dislike and are uninterested in class reading activities. As a result, this study used the Numbered Head Together cooperative learning strategy to engage students in a reading course. Since this study focuses on teaching and learning activities in the classroom, it was designed as Classroom Action Research. The research was carried out in four steps. They were planning, performing, observing, and reflecting on their actions. This research was conducted in class B of the eighth grade of MTsN 1 Kediri, consisting of 39 students. The result showed that using the Numbered Head Together (NHT) strategy could help students enhance their reading comprehension skills. Furthermore, group discussions may impact students' attention and encourage them to participate in learning activities. Students were able to participate in the teaching-learning process using the Numbered Head Together (NHT) technique. They became more receptive to the teacher's explanations and collaborated with their peers in groups. They were also more engaged, enthusiastic, and confident in class activities, resulting in a livelier and more interesting classroom environment.

Keywords: NHT, Cooperative Learning Model, Reading Course

INTRODUCTION

Reading is the key of knowledge. Reading will open up the world's horizons. "Reading is an attempt to reach the meaning of the effort to understand the universe. That's why books are called windows to the world, which stimulate the mind to keep it open.” Mata Najwa. Reading is a human effort to eradicate ignorance. By reading someone will have skills and is one of the dominant factors in creating a prosperous life with the advancement of existing knowledge and technology. According to Branger and Lewis (2001) reading is a complicated and directed sociocultural, cognitive, and linguistic activity. The readers use their understanding of spoken and written language, and their knowledge of the text's subject and culture, to generate meaning from the text.

As one of the language skills, reading helps to ensure that language learning is successful when combined with other abilities. Reading encourages students to gather knowledge from various sources, including books, newspapers, magazines, advertising, pamphlets, and other
printed materials. Reading also puts pressure on students to understand how English is utilized in written and printed forms. Reading is beneficial not just for profession, research, and pleasure, but also for language acquisition, according to Harmer. He further states reading also provides possibilities to learn languages, such as vocabulary, grammar, punctuation, and how we form phrases, paragraphs, and texts.

To achieve good writing skills, good reading skills are needed. Still, unfortunately, the world of education is currently faced with a passive condition, namely a lack of passion for reading in children. However, the love of reading in children is essential because reading can improve a child's academic achievement from an educational point of view. President Joko Widodo in a Limited Meeting via Video Conference on the Strategy to Improve Indonesia's Ranking in the Program for International Student Assessment (PISA), April 3, 2020, at the Merdeka Palace, DKI Jakarta Province, said that the report received the average PISA score in 2018 decreased in the three competency areas with the most significant decline in reading. The reading ability of Indonesian students with a score of 371 is in position 74, mathematics ability with a score of 379 is in position 73, and science ability with a score of 396 is in position 71.

Reading needs more attention, but in reality, many things need to be prepared by the teacher. Although reading is often taught in English lessons, the students' reading test results are still unsatisfactory. It is due to the following problems based on initial observations at MTsN 1 Kediri. First, the teacher's technique is essentially teacher-centered, with the teacher dominating classroom learning. The teacher spends so much time explaining, discussing, and talking that it inhibits student engagement in the learning process. Teachers' approaches are typically traditional, such as the Grammar Translation Method. Teachers that use this method frequently just look at learning in textbooks, having one or two students read the material or the teacher himself read the text, translating word by word or phrase by sentence before asking students to answer questions in the text. Second, the actions of teaching and learning are not living. Teachers decided that while reading comprehension is extremely successful, it cannot be the primary focus of the teaching and learning process (Anita & Susanto, 2017). There is no evident diversity in teaching and learning activities since teachers only see lessons printed in textbooks. Students rarely participate in a variety of engaging activities. Students rarely cooperate because they are frequently involved in competitive and independent tasks, encouraging them to quit when presented with challenging assignments. Third, the reading materials are all derived from textbooks. Teachers seldom bring materials from newspapers, periodicals, or other sources for class lessons. As a result, students regard reading to be a tedious task. The vocabulary of students is limited. This weakness makes it difficult for kids to comprehend English reading text. Furthermore, when asked about their reading habits, the majority of students replied that they do not yet make reading a habit (Nur Affini et al., 2019).

Given the above facts, there is an urgent need to apply strategies or techniques that can help solve this problem. One thing that can be done is to use a cooperative learning model. Cooperative learning is a learning model by giving assignments to more competent students in a small group whose results will be presented to other groups in the class. The group results
are then explored and responded to in an active and dynamic learning process. Kagan (1992), said that cooperative learning is a type of learning in which students cooperate in small groups to complete a task. Education specialists have created several cooperative learning models. Numbered Heads Together (NHT) technique is one of them.

This technique is one of the collaborative techniques designed by Kagan (1986) to involve more students in studying the material covered in the lesson and to check their understanding of the lesson content. Technique NHT cooperative learning also aims to help teachers improve students' competence in reading comprehension. This process consists of four fundamental phases that may be repeated with multiple curriculum materials and used to practically any topic area, grade level, or location in the lesson. (Olsen & Kagan in Yeh, 2004). NHT technique involves dividing the class into small groups and creating heterogeneous study groups with varying students. Students are given numbers to assist them in concentrating on their assignments since the teacher will ask them to provide answers based on the number they have. First, the teacher generally asks questions about the students' text. Then, in response to each of the teacher's text-based questions, students talk together to identify the best solution and ensure that everyone in the group understands it. Next, the teacher dials one of the students' numbers, and the person on the other end of the line reports the outcome of their teamwork. The teacher then asks for responses from other students. The teacher then pointed to a different number. Students, particularly those less intelligent, will know the correct answer since they are given time to discuss answers before replying. Furthermore, because no one knows who will be asked to respond, groups are more likely to ensure that all students are aware of the response.

The NHT technique has several benefits. For starters, it can help students improve their academic performance and can be used in almost any subject. Cooperative learning strategies, such as the Numbered Heads Together methodology, are beneficial in strengthening the four language skills, mastering grammar and vocabulary, and enhancing English competency, according to Lai (in Yeh, 2004). Second, it can enhance student involvement. As a cooperative learning technique, individual accountability is required to engage students with the lesson. Student involvement will increase if individual accountability is present in the learning task. Third, the NHT technique balances student engagement by reducing the dominance of brilliant students. Because students are required to respond to questions, all students, including those who are shy or weak, must participate in delivering responses. Fourth, encourage students to study. The NHT technique can encourage pupils since it creates a competitive environment and is enjoyable for them. Furthermore, students will be motivated due to their teammates' assistance. Students will actively participate in the lesson if they are motivated. Fifth, encourage bright students who know the answers to tutor other team members who don't. Peer tutoring allows for a much more dynamic flow of information than memorizing and completing individual assignments from textbooks (Backwell, 2006).

Research on the use of NHT techniques in learning at the high school level has been proven to improve students' reading skills and motivate them in learning activities resulting from group discussions (Selong, 2019). Students can participate in the teaching and learning
process using the Numbered Head Together (NHT) technique. They pay attention to the teacher's explanations and collaborate with their classmates in each group. (Fauzi et al., 2020). Mirawati et al. (2017) found a substantial effect of NHT technique on tenth graders' reading comprehension in their study. Paramita et al. (2017) found that using the NHT technique, students' reading ability improved and were more enthusiastic about studying. Caturheny et al. (2019) conducted a similar study. They found a significant difference in reading comprehension between students who were taught using the NHT approach and students who were taught using Predictive Reading strategies.

In addition to the high school level, this NHT technique is also effectively applied in junior high schools. The use of NHT techniques improves students' ability in reading comprehension (Nelly, 2018). The same study was conducted by Puspa et al. (2017), NHT techniques can improve students' understanding of descriptive texts. NHT techniques also can improve students' ability to understand narrative texts (Rayanto, 2017). In addition, Herawati (2019) showed that by using the NHT technique students' ability to understand reading texts can increase and the classroom atmosphere becomes more fun and livelier. Liana (2018) conducted a similar study, intending to determine whether there was a significant difference in students' reading achievement between those who were taught using the NHT technique and those who were not. The results revealed that there was a significant difference in students' reading achievement between those who were taught using the NHT technique and those who were not.

From the description of several studies above, it can be concluded that NHT is a recommended technique. However, further empirical studies are still needed, namely NHT in learning recount texts, because few studies use recount texts. Based on the benefits of cooperative learning using the NHT technique above and previous research studies, the researchers conducted a study on how to involve students in cooperative learning models in reading skills through Numbered Head Together (NHT) in eighth-grade students of MTsN 1 Kediri. This study aims to describe how student involvement through cooperative learning model Numbered Heads Together (NHT) technique in learning to read class VIII MTsN 1 Kediri.

**METHOD**

Classroom Action Research was used to conduct this study. The Kemmis cycle method is used in this study's classroom action research design, which consists of four steps: planning, action, observation, and reflection. These stages are also organized into a cycle that is carried out in cycles I and II. One meeting is held at the end of each cycle. Each cycle consists of one meeting. This classroom action research was conducted at MTsN 1 Kediri. The research subjects were 39 students from class VIII B, 23 of whom were female and 16 of whom were male. The researcher chose this class for the following reasons: First, the students' ability to comprehend reading texts remained low, and second, the student's lack of enthusiasm to learn to read remained low due to the monotony of the training. To overcome classroom problems in teaching reading, the researcher uses cooperative learning strategies. The cooperative
learning technique used in this research is the Numbered Heads Together technique. Meanwhile, in conducting research, researchers collaborate with colleagues who are involved from beginning to end in research activities. The researcher acts as a teacher who teaches reading to students, while peers act as observers who observe the implementation of actions in class.

In conducting the research, the researcher took steps which included; a preliminary study conducted to obtain data on students' problems in reading comprehension, planning consisting of preparation of teaching strategies, design of lesson plans, preparation of materials and media, and determination of success criteria. The next step is implementation, observation and the last is reflection.

Research data collection was carried out utilizing observation and quizzes. Observations were made to obtain data on the implementation of the learning process and student activity during the group answer checking session. The quiz is used to collect information on student learning results. The information was then examined both qualitatively and quantitatively. Each cycle's learning process is subjected to qualitative study. WL et al., (2019) identifies that in qualitative research, theory would serve as the foundation for gaining a comprehensive and in-depth understanding of the social context while student learning outcomes are subjected to quantitative analysis.

The researcher determined two success criteria. First, the average quiz score increased by at least 25%. Second, students participate actively during the learning process. Students are considered active if 50% of students are active in discussion activities, 50% raise their hands competitively to answer questions, and 80% have positive responses to NHT techniques applied to the learning process.

The scores for the questions on the quiz are made different, between literal and inferential questions as suggested by Djiwandono (2007). For literal questions, a score of 2 is given to one correct or complete answer, a score of 1 for a correct answer and 0 for a wrong answer. For inferential questions, a score of 3 is given to an answer with a correct or complete idea, a score of 2 for an answer with a partially complete idea, a score of 1 is given to an answer with a few ideas, and a score of 0 is given if the answer is incorrect, an idea that is not right or no answer at all. The action is considered successful if the student's average score is at least 25% higher than the student's initial average score.

The researcher used observation sheets supported by field notes to collect data related to the second criterion. Observations focused on students' competition in raising their hands during the question-and-answer session. Observation sheets are given to peers who observe and mark students who raise their hands, while field notes are used to write things that are not fully covered in the observation sheet.
FINDINGS AND DISCUSSION

Findings in cycle 1
Based on the results of the field notes in cycle 1, the learning management carried out by the teacher has been running according to the learning scenario. In the pre-reading activity, the teacher activates the students' prior knowledge by asking questions. The teacher was also very good at showing pictures related to the topics discussed. In addition, the teacher was good at asking things related to pictures. In the whilst-reading phase, the teacher assigned each group to discuss answering questions based on the recount text using the NHT technique. Finally, in the post reading activity, the teacher checked the group's answers by taking the numbered card provided and showing the card to all groups. Then, the teacher checked the students' answers.

However, some activities were still not carried out by the teacher. In the pre-reading activity, the teacher did not explain the learning objectives to the students. In the whilst-reading activity, the teacher did not discuss the meaning of difficult words. The teacher also did not provide an explanation of the NHT technique to students. In addition, teachers were less than optimal in using the blackboard. The teacher did not ask students to conclude the text's topic during post-reading activities. In addition, the teacher did not award prizes to the group with the highest score.

Management of Reading Learning with NHT Techniques
Based on the recapitulation of observations on the management of reading learning, all aspects observed in pre-reading activities have reached a value above 75%. The average value of all aspects reached 85.42%. In whilst reading activities, one aspect, namely discussing difficult words, got a very low score of 43.75%. It happens because the teacher was less than optimal in discussing difficult words. The average value in this phase reaches 85%.

Three of the six aspects observed received low scores in the post reading activity. The three aspects were asking students to conclude the content of the text which gets a score of 31.25%. The second was closing the meeting which gained 43.75%. The third was to collect the completeness of the discussion which gets 62.50%. Therefore, post reading activities obtained a low average score of 60.42%.

Time management also got a value that is not optimal, namely 62.50%. For teacher enthusiasm, the score obtained is 75%. However, the enthusiasm of the students got a score of 81.25%. The average value of the overall learning management aspect reached 80.68%. It showed that the management of learning had been going well although some aspects need to be improved.

Quiz Result of Cycle 1
According to the quiz results, the average student score increased from the original data to the first quiz. The average value of the initial data was 52.37 and the average value of the first quiz was 54.08. That means an increase of 1.1% from the average value. Despite the improvement, the average score was still below the success criteria, which required an increase of 25% from the student's average score.
Student Motivation in Discussion Activities
Based on the data recapitulation from the observer's observations on student motivation in the first cycle of discussion activities, the following data were obtained. Of the four aspects observed, namely attention in the teaching and learning process using the Number Heads Together technique 61.70%, students asking 34.40%, student responses to questions 52.70% and cooperation with fellow group members 52.70%. So the total data recapitulation of the observer's observations on student motivation in the first cycle of discussion activities is 50.39

![Figure 1. Student Motivation in Discussion Activities](image)

Student Opinion on NHT Technique
Based on the recapitulation of the results of the student opinion questionnaire about the NHT technique in cycle 1, there were 39 students out of 39 students (100%) who stated that they were happy with the learning process using the NHT technique. Likewise, when students were asked for their opinions on whether the NHT technique could help them learn to read, there were 39 out of 39 students (100%). Meanwhile, when the researchers asked questions about whether the NHT technique could improve their reading ability, only two students answered no or 94.87% of students answered yes. Likewise, when they were asked whether learning using NHT techniques needed to be continued in reading activities, there were 37 students out of 39 students (94.87%) answered yes. As for the fifth question about whether the NHT technique burdens students in reading activities, only two students answered yes, or 37 students (94.87%) stated that they were not burdensome. Of the five questions asked to students about their responses to the NHT technique, 95% of the students had a positive opinion about the NHT technique.
Findings in Cycle 2

Based on the results of the field notes in cycle 2, the teacher's learning management went better. The teacher carries out all the results of reflection and the results of lesson plans for cycle 2.

Management of Reading Learning with NHT Techniques

Based on the recapitulation of observations on the management of reading learning. Overall showed an increase although some aspects decrease. In this case, the pre-reading activities in cycles 1 and 2 obtained the same value, namely 85.42%. For whilst-reading activities there was an increase from cycle 1 to cycle 2, from 85% to 93.75%. Post-reading activities also increased from cycle 1, which got a score of 60.42% to cycle two which got 82.29%. Likewise, with time management. In cycle 1, this aspect scored 62.50% while in cycle 2 this aspect reached a value of 87.50%. Teacher enthusiasm in cycle 1 got a score of 75% while in cycle 2, it increased by 25%. Likewise, with the enthusiasm of students. In cycle 1 it reached 81.25%. In cycle 2 it reached 100%.

Quiz Result of Cycle 2

The better improvement of the average score of the first quiz on the second quiz was visible in the second cycle. The average score for the first quiz was 54.08 and the average score for the second quiz was 79.60. It meant an increase of 25.52% from the average value. However, some students whose grades remained the same in the first cycle. There were no students whose scores are worse than the second average score but overall, the average score of the students in the second cycle was better than the average value of the first cycle. Therefore, the results of the second cycle had met the desired success criteria.
Student Motivation in Discussion Activities

Based on the recapitulation of data from the observer's observations on student motivation in cycle 2 discussion activities, the following data were obtained. Of the 4 aspects observed, namely attention in the teaching and learning process using the NHT technique 62.50%, students ask 44.90%, student responses to questions 53.50% and cooperation with fellow group members 50.80%. So the total data recapitulation of the observer's observations on student motivation in the first cycle of discussion activities was 52.93%. It indicated that the criteria had been met.

![Figure 3. Student Motivation in Discussion Activities](image)

Student Opinion on NHT Technique

Based on the recapitulation of the results of the student opinion questionnaire about the NHT technique in cycle 2, there were 39 students out of 39 students (100%) who stated that they were happy with the learning process using the NHT technique. Likewise, when students were asked for their opinions on whether the NHT technique could help them learn to read, there were 39 out of 39 students (100%). Meanwhile, when the researcher asked whether the NHT technique could improve their reading ability, all students or 100% of students answered yes. Meanwhile, when they were asked whether learning using NHT techniques should be continued in reading activities, there were 37 students out of 39 students (94.87%) answered yes or only 2 students (5.12%) answered no. As for the fifth question about whether the NHT technique burdens students in reading activities, only 2 students (5.12%) answered yes or the remaining 37 students (94.87%) stated that they were not burdensome. Of the five questions posed to students about their response to the NHT technique in cycle 2, there was an increase of 2.50% or 97.50% of students had a positive opinion about the NHT technique.
Discussion

The NHT technique plays an essential role in most topics in language, physics, mathematics, history, and social science as one of Kagan's structures and a cooperative learning strategy. This is because of its distinctiveness, adaptability, and free content, which allows it to be used in various subjects. It is fun and game-like procedure stimulates the active participation of students in lessons. Besides, the principles he brings are beneficial in building social relations, making students in groups positively dependent on each other, one benefit for all members and all benefits for one group, each individual is responsible for his work, then cooperate and interact at the same time.

All students can enjoy the learning process and class activities without feeling bored when NHT approaches are used. Before and after the activity, the classroom atmosphere and student attitudes are also different. The results of pre-treatment observations revealed that most students struggled to understand the reading text because the teacher conveyed the content without using any techniques. In other words, the teacher merely delivers the information depending on the reading text's instructions. As a result, students are unable to concentrate on their studies. Some grow drowsy, bored, lack confidence, and become passive at times. However, after being treated by the researcher, the students significantly improved their learning abilities.

When the researcher presented the learning rules using the NHT technique, some students were still confused, based on the results of learning activities in cycle 1. But that was only natural because the kids had never been taught with that manner by the teacher before. As a result, to attain a goal in the learning process, the researcher clarified the rules and provided examples to the students. As a result, most of the students were paying greater attention to the researcher's explanation at the time, and they were able to follow the lesson well. However, the researcher was still not satisfied because some students enjoy making jokes in groups. Other students may become less focused on their studies due to this. Meanwhile, the average score of students increased somewhat from the initial data to the first assessment.

Figure 4. Student opinion questionnaire about NHT
according to the quiz findings. However, the average number was still below the criteria for success. As a result, the researcher chose to continue with cycle 2.

Students got more engaged in the learning process as the actions in cycle 2 were implemented. According to the reading material, they gained confidence in asking and answering questions from the researcher. They could also participate actively in group conversations. Students in each group shared their opinions with their peers before writing down the information they learned from the reading material. So that students could interpret the reading text literally and draw inferences based on what they had learned. This study also suggested that employing NHT benefits the majority of students with moderate and poor skills. This finding supported the claim (Harper & Maheady, 2007) that adopting peer-mediated strategies like NHT, students with learning difficulties gained as much as their peers and enhanced their academic performance.

Furthermore, from the results of the quizzes in the second cycle, the average score of students had a very clear increase. The average value obtained was already above the desired success criteria. The results were consistent with those of prior investigations. On social science competency tests, Maheady, Malette, Harper, and Sacca (in Kames and Collins, 1997) compared the impact of NHT on a whole-group questioning method with a group of third-graders who reported greater results using NHT. Then Kagan and Julie (2002) observed that fourth graders' reading scores rose and grew once the Kagan framework was introduced. Response Cards and NHT were compared to All-Group Q&A by Maheady, Michielli-pendl, Malette, and Harper (in Harper and Maheady, 2007). (WGQ&A). The results demonstrated that students' quiz scores were consistently higher using the answer card technique or NHT. Mele (in Kagan, 2007) also performed studies in high schools to teach chemistry using the Kagan structure. The findings of his research showed that applying the NHT technique improved the average grade of the class.

The results of research that researchers and previous research studies had carried out show that students' reading comprehension can be increased by using the NHT technique. So the researcher recommends that the NHT technique be very appropriate to improve students' reading abilities. Students may readily understand the reading text and help each other solve issues while employing the NHT technique. Furthermore, they can participate in actively and collaborate during the teaching and learning process. So that class activities run smoothly and the classroom environment becomes more active and enjoyable.

There are some limitations to this study. Although the NHT technique was demonstrated to improve the ability of class VIII students to learn to read based on the study results, these results do not ensure that they will have the same results when implemented at different levels. In addition, this NHT technique is effective and able to involve students in cooperative learning models in reading skills when learning is carried out offline, students and teachers interact directly. The results will be different if done online, because students and teachers cannot interact directly. Furthermore, the success of using the NHT technique cannot be separated from the research conducted in the first session of learning, namely in the morning. Children at this time, can concentrate fully, physically still fit, minds are still fresh. It is
different if this research is conducted in the second session during the day. Children are no longer able to concentrate fully, physically tired, their motivation has also decreased, this will affect their learning outcomes that cannot be maximized.

CONCLUSION

After the NHT technique was implemented and developed through two cycles, it can be concluded that the NHT model has been proven to improve students' ability to understand reading texts. Furthermore, the NHT technique has been shown to promote cooperative learning and involve all students in the learning process. First and foremost, students' academic performance must be improved. Second, improve your desire to study. Finally, it encourages more favorable social conduct. Fourth, it denotes amusement and competition, particularly during the question-and-answer period. As a result, students will be more encouraged to learn and their learning outcomes will be better if they are happy to learn.

Based on the research findings and discussion, there are some suggestions for both English teachers and researchers. This accomplishment will not be realized if teachers do not have the desire to improve their teaching skills. English teachers should be able to transform their teaching mindset. Instructing entails showing up to class and teaching and preparing all the necessary tactics, media, and materials to instruct their students. When you have a desire to teach and are experiencing trouble with teaching preparation, even a simple approach like NHT can be beneficial. Teachers should, however, concentrate on the following aspects: how to create lesson plans, how to choose reading materials, how to group diverse students, how to pick students to answer questions in the answer check session, how to provide aids, and how to give students more time particularly for students with low academic achievement. Furthermore, to attain the desired results, teachers must consider the principles of NHT.

For other researchers, especially those interested in using the NHT technique in their research, it is suggested that they conduct classroom action research using this strategy in teaching reading in higher grades. It is also recommended that they conduct classroom action research on other language skills, such as listening and writing. Students can work together to answer questions based on recorded conversations and report responses utilizing NHT procedures in listening skills, for example. Next, students discuss how to construct simple sentences that are grammatically correct in writing skills. The students were then asked to report the phrases they had created using the NHT technique. It is also suggested that NHT techniques be combined with cooperative learning tactics in other courses such as mathematics, history, and science, which will be investigated further.

ACKNOWLEDGEMENT

I am grateful to the headmaster of MTsN 1 Kediri, Drs. H. Moh. Maksun, M.Pd.I for the opportunity to conduct this research and all the English teachers for their support.
REFERENCES


Hanik Mahmudah, Fathor Rosyid; Engaging Students in Cooperative Learning Model of Reading Course through Numbered Head Together

...performance of a diverse group of sixth graders. *Journal of behavioral education, 15*(1), 24-38.


Nasrul Miftahur Riza .(2020). Improving Students Reading Comprehension by Using Numbered Head Together for Eight B Grade At MTS Al Ma’Arif Singosari Malang. *Jurnal Penelitian, Pendidikan, dan Pembelajaran; 15*(21)


