



The Effect of the Numbered Heads Together Cooperative Model on Students' Speaking Skills in Indonesian Language Learning

Umi Rohimah^{1*}, Eddy Noviana², Dede Permana³

¹²³Program Studi Pendidikan Guru Sekolah Dasar, Universitas Riau, Riau, Indonesia

*E-mail : umi.rohimah0950@student.unri.ac.id

ABSTRACT

The Numbered Heads Together (NHT) cooperative learning model is a type of cooperative learning designed to influence student interaction patterns and as an alternative to traditional classroom structures that provide opportunities for students to share ideas and consider the right answers and also encourage students to increase their spirit of cooperation. This study aims to describe the results of the pre-test and post-test of speaking skills and the effect of the NHT model on speaking skills in Indonesian language learning. This study was conducted in grade IV of SD Mit Fathrizk Laman Wak Atan, Pekanbaru which took place in the 2025/2026 academic year. This study used a quantitative approach with a pre-experimental method through a one-shot case study design. The research subjects were 25 students. Pre-test and post-test data for speaking skills were collected using an oral test in the form of a retelling task of learning materials assessed based on six indicators of speaking skills, namely pronunciation, fluency, vocabulary, grammar, content coherence, and self-confidence. Data were analyzed using descriptive statistics. The results of the study showed that the pre-test speaking skills were in the moderate category, while the students' speaking skills after implementing the NHT learning model were in the high category. The NHT model had a positive effect on speaking skills in Indonesian language learning in fourth grade.

Keywords : numbered heads together, cooperative model, speaking skills, Indonesian language learning

Pengaruh Model Kooperatif Numbered Head Together terhadap Keterampilan Berbicara Siswa pada Pembelajaran Bahasa Indonesia

ABSTRAK

Model pembelajaran kooperatif tipe Numbered Heads Together (NHT) adalah jenis pembelajaran kooperatif yang dirancang untuk mempengaruhi pola interaksi siswa dan sebagai alternatif terhadap struktur kelas tradisional yang memberikan kesempatan kepada siswa untuk saling membagikan gagasan dan mempertimbangkan jawaban yang tepat dan juga mendorong siswa untuk meningkatkan semangat kerja sama mereka. Penelitian ini bertujuan untuk mendeskripsikan hasil pretes dan postes keterampilan berbicara serta pengaruh model NHT terhadap keterampilan berbicara dalam pembelajaran Bahasa Indonesia. Penelitian ini dilaksanakan di kelas IV SD Mit Fathrizk Laman Wak Atan, Pekanbaru yang berlangsung pada tahun pelajaran 2025/2026. Penelitian ini menggunakan pendekatan kuantitatif dengan metode pra-eksperimen melalui desain one shot case study. Subjek penelitian berjumlah 25 siswa. Data pretes dan postes keterampilan berbicara dikumpulkan menggunakan tes lisan berbentuk tugas menceritakan kembali materi pembelajaran yang dinilai berdasarkan enam indikator keterampilan berbicara, yaitu pengucapan, kelancaran berbicara, kosakata, tata bahasa, keruntutan isi, dan sikap percaya diri. Data dianalisis menggunakan statistik deskriptif. Hasil penelitian menunjukkan bahwa keterampilan berbicara hasil pretes berkategori sedang dan keterampilan berbicara siswa setelah penerapan model pembelajaran NHT berada pada kategori tinggi. Model NHT berpengaruh positif terhadap keterampilan berbicara dalam pembelajaran Bahasa Indonesia di kelas IV.

Kata kunci : model kooperatif, numbered head together, keterampilan berbicara, pembelajaran Bahasa Indonesia

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INTRODUCTION

Speaking skills are crucial language skills to develop from elementary school on. This ability not only serves as a means of communication but also as a means of verbally conveying ideas, opinions, and feelings clearly, coherently, and confidently. In Indonesian language learning, speaking skills are an aspect that requires special attention, as through these skills, students can practice expressing their ideas and actively interacting in the learning process.

However, in reality, elementary school students' speaking skills are still relatively low. Students tend to be passive, lack confidence, and have difficulty expressing their opinions verbally. This is due to the limited opportunities provided for students to speak and the use of learning models that do not fully encourage student activeness. Therefore, a learning model is needed that can increase student participation and provide equal opportunities for each student to speak.

One learning model that can be used is the Numbered Heads Together (NHT) cooperative learning model. This model emphasizes group work and individual responsibility, where each student has an equal opportunity to participate in discussions and present their findings. Through the NHT model, students are trained to actively discuss, think collaboratively, and confidently express their opinions in groups and in class.

This study aims to determine the characteristics of students' speaking skills after implementing the NHT cooperative learning model in Indonesian language learning in fourth grade. This study used a quantitative approach with a pre-experimental method through a One-Shot Case Study design. Data were collected through a post-test, assessing students' speaking skills based on several indicators: pronunciation, fluency, vocabulary, grammar, coherence, and self-confidence.

The results showed that students' speaking skills after implementing the NHT learning model were in the good category, with an average post-test score of 81.17. This indicates that the NHT

model is able to create an active learning environment and encourage students to be more confident in speaking. Therefore, this study is expected to contribute to the development of Indonesian language learning, particularly in improving students' speaking skills in elementary schools.

Does the NHT cooperative learning model influence students' speaking skills in fourth grade Indonesian language learning? That is the formulation of the research problem.

The objective of this research, derived from the problem formulation above, is to describe the effect of the NHT cooperative learning model on students' speaking skills in fourth-grade Indonesian language learning in elementary schools.

The results of this research are expected to provide both theoretical and practical benefits. namely: First, the results of this research are expected to provide additional references for educators regarding the effect of the NHT model on speaking skills, particularly in fourth-grade Indonesian language learning in elementary schools. Second, the results of this research are expected to contribute as a reference or reference material for further research related to the effect of the NHT cooperative model on students' speaking skills.

METHOD

This research employed a quantitative approach with a pre-experimental design (Afifuddin & Saebani, 2002; Razak, 2017; Balaka, 2021). This quantitative approach was chosen because the study aimed to obtain a picture of students' speaking skills after the implementation of a treatment, measured numerically. The research design used was a One-Shot Case Study, a research design that administers treatment to the subjects, followed by measuring the results through a posttest without a comparison group or pretest. This design was used to determine the final state of students' speaking skills after the implementation of a specific learning model.



This research was conducted in the fourth grade of MIT Fathrizk Elementary School, with 25 students. The sampling technique used was purposive sampling, where the entire population was used as the sample. This was done due to the relatively small number of subjects and to obtain a comprehensive picture of students' speaking skills in the class.

The research procedure consisted of several stages: preparation, implementation, and final stages. During the preparation stage, the researcher developed learning materials, such as a Lesson Implementation Plan, assessment instruments, and observation sheets. During the implementation phase, Indonesian language learning activities were conducted using the NHT cooperative learning model over three meetings.

In this implementation, students were divided into small groups, and each group member was assigned a number. The teacher presented the material and gave students questions or assignments. Students then discussed within their groups to find the best answers. The teacher then called out a number at random, and the student with that number represented the group and presented the results of the discussion to the class. This activity aimed to foster students' activeness, responsibility, and speaking skills.

The speaking skills test instrument in this study was systematically developed through several stages. First, the researcher reviewed the basic competencies and indicators of fourth-grade Indonesian language learning related to speaking skills. Next, the researcher determined the aspects to be measured based on speaking skills theory, including pronunciation, fluency, vocabulary, grammar, coherence, and self-confidence.

The next stage was the development of an instrument outline as a reference for developing test items. This outline included indicators, assessed aspects, and the assessment format used. After the outline was developed, the researcher developed a test instrument in the form of an oral task, requiring students to retell the material they had learned. The developed instrument was then

validated theoretically, referring to expert opinions, and tailored to the research objectives. With a clear outline and indicators, the instrument was expected to accurately measure students' speaking skills.

In the final stage, a posttest was administered to measure students' speaking skills after participating in the NHT learning model. The posttest took the form of an oral test, in which students were asked to express their opinions or retell the material they had learned. Assessment was conducted directly by the researcher using a previously developed instrument.

Data collection techniques in this study included tests and observations. Tests were used to obtain data on students' speaking skills through posttest results, while observations were used to observe students' activities during the learning process, particularly their activeness and participation in group discussions.

The research instrument used was a speaking skills assessment sheet compiled based on several indicators: pronunciation, fluency, vocabulary, grammar, coherence, and self-confidence. Each indicator has specific assessment criteria used to assess students' speaking performance. Students' scores were then converted into grades using a predetermined assessment formula.

The data obtained from the research were analyzed using descriptive statistical analysis techniques. This analysis was conducted to describe students' speaking skills after implementing the NHT learning model. The data were analyzed by calculating the average, maximum, and minimum scores, as well as the frequency distribution. The results were then categorized according to specific criteria to determine students' speaking skill levels. These results were then used as a basis for drawing conclusions regarding the effectiveness of the NHT cooperative learning model on students' speaking skills.

Speaking skills can be measured through several indicators encompassing both linguistic and non-linguistic aspects. These indicators are used to assess the extent to which students are able

to convey ideas orally clearly, coherently, and appropriately within the communication context. The speaking skill indicators in this study were compiled based on a synthesis of the opinions of three key experts. This synthesis was conducted to obtain indicators that were comprehensive and relevant to the research context. Based on the synthesis results from these three experts, the speaking skill indicators used in this study include: 1) pronunciation (pronunciation & intonation); 2) Fluency; 3) vocabulary; 4) grammar; 5) coherence of content; 6) self-confidence.

RESULTS

1. Speaking Skills Pre-Test

Descriptive statistics of the speaking skills pre-test data involve several measures. The mean was 17.68, equivalent to a standard score of 73.67. This value falls into the middle category. The complete data is presented in Table 1.

Table 1
Speaking Skills Pre-Test

Pre-test	Frequency	Percent	Value
12	1	4,00	
13	1	4,00	
15	2	8,00	
16	3	12,00	
17	3	12,00	
18	8	32,00	
19	3	12,00	
20	1	4,00	
21	1	4,00	
23	2	8,00	
Total	25	100,0	
Mean			17,68
Percent			73,67
Category			middle
Mode			18
Std. Deviation			2,561
Range			11
Minimum			12
Maximum			23

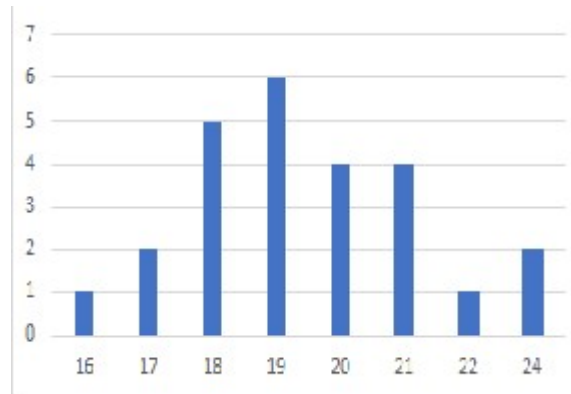


Figure 1
Bar Chart of Pre-Test Data

2. Speaking Skills Post-Test

Descriptive statistics of the speaking skills post-test data involve several measures. The mean was 19.52, equivalent to a standard score of 81.33. This value falls into the high category. The complete data is presented in Table 2.

Table 2
Speaking Skills Post-Test

Post-test	Frequency	Percent	Value
16	1	4,00	
17	2	8,00	
18	5	20,00	
19	6	24,00	
20	4	16,00	
21	4	16,00	
22	1	4,00	
24	2	8,00	
Total	25	100,0	
Mean			19,52
Percent			81,33
Category			high
Mode			19
Std. Deviation			1,982
Range			8
Minimum			16
Maximum			24

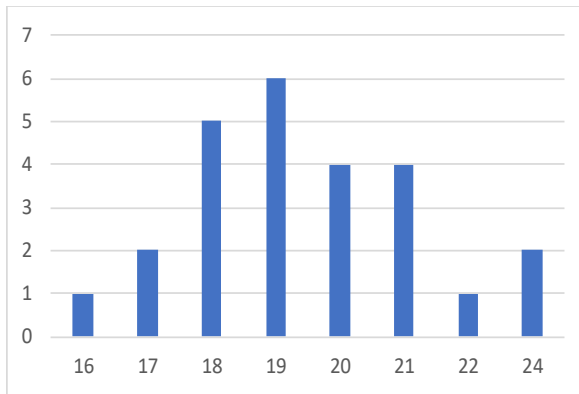


Figure 2
Bar Chart of Prost-Test Data

3. The Effect of the NHT Cooperative Learning Model on Speaking Skills

The research findings indicate that the NHT cooperative learning model has an effect on the speaking skills of fifth-grade students at Pekanbaru State Elementary School 12. This is evident in the high post-test mean, while the moderate pre-test mean.

DISCUSSION

The NHT cooperative learning model is a subset of cooperative learning that emphasizes group work and individual responsibility. According to Kagan (1992), cooperative learning is designed to enhance social interaction, active participation, and the responsibility of each group member. With the random number calling in the NHT model, each student is required to be prepared and active, allowing for continuous development of speaking skills.

Based on the indicators, all aspects of students' speaking skills were in the good to excellent category. The self-confidence indicator received the highest score, indicating that students had high confidence in expressing their opinions verbally. This aligns with Bandura's (1997) opinion, which states that self-efficacy is related to an individual's belief in their ability to perform a task. Students with high self-confidence tend to be more

courageous, less hesitant, and able to convey ideas clearly.

Furthermore, the fluency indicator also showed good results. This indicates that students were able to speak fairly fluently without excessive pauses or repetition. Fluency is a crucial aspect of speaking skills, reflecting mental readiness and mastery of the material (Brown, 2004; Kurniati & Ervina, 2019; Syaifudin, 2017).

Meanwhile, indicators for pronunciation and coherence of content were also in the good category. This indicates that students are sufficiently capable of pronouncing words clearly and conveying stories coherently. This ability is developed through group discussions in the NHT model, which allows students to organize ideas before conveying them verbally.

On the other hand, vocabulary and grammar indicators scored relatively lower than the other indicators. This indicates that students still experience difficulty choosing the right words and constructing sentences according to correct language rules. According to Tarigan (2015), Baron (2020), Rodrignes & Vethamani (2015), speaking skills are greatly influenced by the ability to choose and use appropriate vocabulary. Similarly, (2004) emphasized that limited vocabulary and language structure can hinder fluency and clarity of speech because speakers struggle to express ideas accurately.

The low vocabulary indicator scores in this study can also be attributed to the characteristics of the NHT learning model, which places greater emphasis on student engagement in discussions and providing answers than on in-depth vocabulary development. During the learning process, students are more focused on conveying discussion results orally, so the vocabulary they use tends to be limited to words they have mastered previously. Therefore, the results of this study indicate that the implementation of the NHT cooperative learning model has a positive impact on students' speaking skills, particularly in increasing their confidence and fluency. However, linguistic

aspects such as vocabulary and grammar still need to be improved through more intensive and continuous practice so that students' speaking skills can develop optimally.

An analysis of scores per indicator was conducted to determine students' speaking skills based on pronunciation, fluency, vocabulary, grammar, coherence, and self-confidence after implementing the NHT learning model. Based on the posttest results, all indicators were in the good category, although there were differences in achievement levels. The fluency and self-confidence indicators received the highest scores, indicating that students were able to speak fluently and confidently in front of the class. Meanwhile, the pronunciation and coherence indicators also scored well, indicating students' ability to convey stories clearly and coherently.

On the other hand, the vocabulary and grammar indicators scored relatively lower than the other indicators, indicating that students still had difficulty choosing appropriate words and constructing sentences according to language rules. To clarify the comparison of scores for each indicator, the results are presented in graphical form.

Ibrahim & Herdian (2009) identified three goals achieved in cooperative learning using the NHT model. First, It improves student performance in academic assignments. Second, students can accept their peers from diverse backgrounds. Third, it can develop students' social skills. These skills include sharing tasks, actively asking questions, respecting opinions, and working in groups.

Based on the above opinion, the NHT cooperative learning model is expected to improve student performance in completing assignments, allow students to accept the diverse backgrounds of their peers, and develop students' social skills.

Characteristics of the NHT, among other things, the following. First, team learning. Cooperative learning is learning conducted in teams. Teams are the means by which goals are achieved. Therefore, teams must enable each

student to learn. Each team member must help each other achieve learning objectives. Second, management. The management function as planning. Implementation demonstrates that cooperative learning is carried out according to the plan and the predetermined learning steps.

The management function as organization demonstrates that cooperative learning requires careful planning for the learning process to run effectively.

The management function as control demonstrates that cooperative learning requires defined success criteria, both through tests and non-tests.

Willingness to cooperate. The success of cooperative learning is determined by group success; therefore, the principle of togetherness or cooperation is essential in cooperative learning. Without effective cooperation, cooperative learning will not achieve optimal results.

Cooperation skills: The ability to cooperate is practiced through group learning activities. Thus, students need to be encouraged to be willing and able to interact and communicate with other members in order to achieve predetermined learning objectives.

CONCLUSION

Based on the research results, it can be concluded that the implementation of the NHT cooperative learning model has positive results on students' speaking skills. This is demonstrated by the average posttest score, which is in the good category, and the distribution of scores, which is dominated by the good and very good categories. When viewed by indicator, all aspects of students' speaking skills are in the good category. The indicators for fluency and self-confidence received the highest scores, while the indicators for vocabulary and grammar were relatively lower compared to the other indicators. This indicates that the NHT model is effective in increasing students' activeness and confidence in speaking. However, efforts are still needed to improve



language aspects, particularly vocabulary mastery and grammar usage. Therefore, the NHT cooperative learning model can be used as an effective learning alternative to improve students' speaking skills in elementary schools.

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