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The Implementation of Cooperative Learning with Numbered Heads Together (NHT) Technique to Improve Students' Educational Interaction in Islamic Education Subjects

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Article History:

Received: August 06, 2024; Revised: August 25, 2024; Accepted: November 23, 2024; Published: December 23 2024

Abstract: The Implementation of Cooperative Learning with Numbered Heads Together Technique to Improve Students' Educational Interaction in Islamic Education Subjects

Objective: This study aims to implement the Numbered Heads Together (NHT) type cooperative learning model in improving students' educational interaction in Islamic Religious Education subjects. This research was conducted at SMPN 34 Mukomuko. **Method:** The research design used Classroom Action Research. Data collection is done through observation, documentation, and interviews. Data analysis using data reduction. **Results:** Using Numbered Heads Together (NHT) technique in cooperative learning-based learning significantly improves students' educational interaction in the classroom. **Conclusion:** The NHT technique encourages students to actively participate, discuss, and share knowledge within the group, thus creating an inclusive and collaborative learning environment. **Contribution:** This research guides teachers and managers of Madrasah Aliyah in designing Islamic education learning strategies by prioritizing Islamic values.

Keyword: Cooperative Learning; Numbered Heads Together (NHT) Technique; Students; Educational Interaction; Islamic Education Subjects

Abstrak: Implementasi Pembelajaran Kooperatif dengan Teknik Numbered Heads Together (NHT) untuk Meningkatkan Interaksi Edukatif Siswa pada Mata Pelajaran Pendidikan Agama Islam

Tujuan: Penelitian ini bertujuan untuk mengimplementasikan model pembelajaran kooperatif tipe Numbered Heads Together (NHT) dalam meningkatkan interaksi edukatif siswa pada mata pelajaran Pendidikan Agama Islam. Penelitian ini dilaksanakan di SMPN 34 Mukomuko. **Metode:** Desain penelitian menggunakan Classroom Action Research. Pengumpulan data melalui pengamatan, dokumentasi dan wawancara. Analisis data menggunakan reduksi data. **Hasil:** Penggunaan teknik Numbered Heads Together (NHT) dalam pembelajaran berbasis pembelajaran kooperatif secara signifikan meningkatkan interaksi edukatif siswa di dalam kelas. **Kesimpulan:** Teknik NHT mendorong siswa untuk berpartisipasi aktif, berdiskusi, dan berbagi pengetahuan di dalam kelompok, sehingga menciptakan lingkungan belajar yang inklusif dan kolaboratif. **Kontribusi:** Penelitian ini memberikan panduan bagi guru dan pengelola Madrasah Aliyah dalam merancang strategi pembelajaran pendidikan Islam dengan mengedepankan nilai-nilai Islam.

Kata Kunci: Pembelajaran Kooperatif; Teknik Numbered Heads Together (NHT); Siswa; Interaksi Edukatif; Mata Pelajaran Pendidikan Agama Islam

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To cite this article:

Sewoko, W. A., & Vivekanantharasa, R. (2024). The Implementation of Cooperative Learning with Numbered Heads Together (NHT) Technique to Improve Students' Educational Interaction in Islamic Education Subjects. *At-Ta'lim: Media Informasi Pendidikan Islam,* 23(2), 291-303. http://dx.doi.org/10.29300/attalim.v23i2.6439

A. INTRODUCTION

Learning is an interaction process between students and their environment, leading to positive changes in behavior. In learning, the most important task of a teacher is to adjust the environment to support changes in students' behavior (Van Braak et al., 2021). The main principle of the learning process is to integrate all or most of the students' potential (both physical and non-physical) and emphasize the importance of life skills for their present and future lives (Nurhusni & Nugraha, 2023).

On the other hand, various issues persist regarding implementing Islamic education in schools today, along with criticisms of its continued implementation. For example, when assessing the failure of Islamic education through educational practices, we consider the purely cognitive aspect of raising awareness of religious values and the emotional and active/motor aspects, such as the willingness and determination to practice those values. The practice of determination is often neglected as one of the values in religious teachings (Selman et al., 2014). As a result, there is a gap between knowledge and the experience of religious values in life. In achieving the objectives of Islamic Education, the teacher's task is to guide, teach, and train students so they can dedicate their talents and interests to pursuing and developing religious teachings (Muslim et al., 2023). Islamic teachings guide achieving happiness, which can be used for personal benefit by maximizing existing potential. They facilitate a holistic understanding of Islamic knowledge in worldly and eternal contexts, depending on students' receptiveness and time constraints (Aziz & Nulhakim, 2023).

Several aspects must be considered in learning. First, learning should emphasize practice in laboratory settings, the social environment, and the world of work (business). Therefore, teachers must be able to select and apply strategies and methods that allow students to practice what they have learned. Second, learning must establish connections between schools and the community. Hence, every teacher must possess the capability and broad insight to identify various possibilities within society that can serve as learning resources and bridges between schools and their surroundings. Third, there is a need to foster a democratic and open learning climate through integrated and participatory learning. Fourth, learning should emphasize real-life issues directly related to societal contexts. Fifth, a learning model should be developed for each field of study, with classrooms functioning as laboratories. Each classroom should thus be equipped with various facilities and resources necessary for learning so students can study effectively (Susanti et al., 2020).

The selection of teaching methods and techniques, especially in enhancing student interaction, requires careful consideration and deep understanding from educators. Every student has a unique learning style, interests, and level of comprehension (Siregar et al., 2022). A method that works effectively for one student may not necessarily be effective for another. There is no perfect method; what matters most is that educators can select and adapt methods that best suit students' needs and the learning context (Magdalena et al., 2020).

To address these challenges, alternative Islamic Education (PAI) methods should be introduced that promote a recreational atmosphere, enabling students to develop their potential actively. Activities can be created through trust, open communication, autonomy, and moderate supervision. Learning activities can be enhanced by providing a creative environment and adopting an informative approach.

Thus, teachers must possess appropriate teaching methods to convey the material effectively. One approach utilized is through educational interaction. Educational interaction is key to creating active, enjoyable, and meaningful PAI learning. Students will learn about religion by applying educational interaction and developing social skills and positive attitudes (Novariana, 2021).

Effective educational interaction fosters dynamic and positive relationships between teachers and students (Chong et al., 2018). However, concerns about potential negative

impacts, such as arrogance or a lack of respect for teachers, must be anticipated. These concerns can be mitigated through careful planning, consistent rule enforcement, and building a mutually respectful relationship between teachers and students. When appropriately executed, educational interaction brings numerous benefits to the learning process for both students and teachers (Ester et al., 2024).

Educators who hold narrow views and fail to acknowledge this perspective risk diminishing their role in education. A teacher's responsibility is to cultivate students into individuals of noble character and moral integrity (Mulyono et al., 2023). Cooperative learning leverages the phenomenon of teamwork and collaboration in learning, emphasizing the formation of relationships among students, fostering democratic attitudes and behaviors, and enhancing the productivity of students' learning activities (Mora et al., 2020). The cooperative learning model is an instructional approach that divides students into groups during the learning process. The goal is for students to exchange ideas within their assigned groups, as they are often more comfortable expressing their thoughts or opinions to peers than to their teacher (Lajoie et al., 2015). However, the teacher's role remains crucial in this model, as they monitor group activities, guide discussions, and facilitate the presentation of students' discussion outcomes in class (Shamdani, 2020).

At school, interpersonal attraction plays a key role in explaining student behavior. Moreover, the varying composition of student groups and teacher interactions in each class create different environmental influences. Educational interactions occur in the school environment (Kumpulainen & Rajala, 2017). Consequently, education is a psychosocial phenomenon, a study of how the social environment influences individual interactions and behaviors. In learning activities, interpersonal and individual interactions can shape subsequent behaviors (Nurfirdaus & Sutisna, 2021).

Based on observations conducted by the researcher on 10 November 2024, Islamic Education (PAI) lessons at SMPN 34 Mukomuko still employ conventional teaching methods, which have not effectively enhanced interaction during learning. This was evident during a pre-test, where students appeared bored and unengaged while the researcher explained the material. Some students distracted themselves by playing or chatting with their seatmates during the lesson.

Several previous studies have demonstrated the effectiveness of the Numbered Heads Together (NHT) technique in enhancing concept comprehension, critical thinking skills, and student collaboration across various subjects, including science, mathematics, and social studies (Siswasusila, 2017; Pendy & Mbagho, 2021; Ikhwandari et al., 2019; Nuraisyah & Pratomo, 2023). Additionally, this method has been widely used to improve learning motivation and academic performance (Yusnarti, 2020; Wiratman, 2023; Muna & Afriansyah, 2016). However, studies on applying the NHT technique in Islamic education, particularly enhancing students' educational interaction in understanding religious values, remain limited.

From a gap analysis perspective, although there has been extensive research on cooperative learning across various disciplines, few studies have examined how the NHT technique can be applied in Islamic education. Most previous research has focused more on cognitive aspects, such as improving students' understanding of religious concepts, while the educational interaction aspect, which involves active student engagement in discussions, knowledge sharing, and collective understanding building, has been explored less comprehensively. Furthermore, there is a lack of research on how this method can be effectively implemented in Islamic values-based learning, which requires a holistic approach encompassing cognitive, affective, and social aspects.

This study offers a new perspective by exploring the role of the NHT technique as a strategy to enhance concept comprehension and as a tool to strengthen educational interaction in Islamic education. It highlights how NHT can foster a more inclusive, participatory, and

collaborative learning environment, allowing students to grasp religious material theoretically and internalize Islamic values through discussion and group cooperation. Thus, this research contributes to developing a more interaction-based learning model in religious education and provides practical recommendations for teachers in implementing innovative teaching strategies in the classroom.

B. METHOD

This study uses a Classroom Action Research (CAR) design with a participatory collaborative type. Classroom Action Research is a form of self-reflection educators conduct in educational settings to improve rationality and fairness (Utomo et al., 2024). The collaborative research type involves all individuals responsible for improving education, expanding the collaborative group from those directly involved to as many others as possible impacted by the actions. The main goal of Classroom Action Research is to improve and enhance the professional services of teachers in handling the learning process, achieved by performing reflection to diagnose the situation.

The research was conducted at SMPN 34 Mukomuko, Desa Mekar Jaya, Kecamatan Air Rami, Kabupaten Mukomuko, Bengkulu. The researcher chose SMPN 34 Mukomuko as the research location because it is the researcher's workplace and close to the researcher's residence, making it easier to carry out the study. The research will be conducted according to the PAI class schedule used as the research subject.

Data analysis in this study involves reflection in the Classroom Action Research cycle. The research will ensure authenticity through reflection, which helps interpret the data. Data analysis uses three interrelated components: data reduction, display, and conclusion drawing. Data reduction involves selecting, focusing, simplifying, summarizing, and transforming raw field data into ready-to-present data. Data display refers to presenting the processed data in an organized format. Conclusion drawing allows the researcher to identify patterns and interpret the data.

The researcher uses triangulation to ensure data validity in this Classroom Action Research. This technique involves using external data to check or compare against the research data. The triangulation method used in this study is source triangulation, which compares and cross-checks the credibility of information obtained from different sources. This includes comparing data obtained through documentation with other sources, methods, or theories.

C.RESULTS AND DISCUSSION

Result

1) Pretest Results

The pretest was conducted by presenting several questions to students related to the material that had been explained either during that session or the previous week. The pretest results are displayed in the following table:

Sub-Variable	Indicator	4	3	2	1
Working collaboratively	Group members listen to and respect each other's opinions.			\checkmark	
5	Each member feels equally responsible for the group's success.			\checkmark	
	Each member understands and performs their tasks well.			\checkmark	
Courage to express ideas	Students can express ideas or opinions related to the lesson.			\checkmark	

Table 1. Pretest results

	Students can accept differences of opinion within the		\checkmark
	group. Students actively ask questions about concepts they do not understand		
Problem-solving	Uses reasoning to solve problems by gathering facts.		
Ũ	Finds the most effective solutions to problems.	\checkmark	
	Collaborates to solve problems collectively.		
Enthusiasm	Enthusiastically listens to presentations.	\checkmark	
	Takes responsibility for assigned tasks.		
	Eager to ask and answer questions.		
	Total scores	12	6
	Average	1,5	

Based on the pretest results, it was evident that students displayed a lack of enthusiasm for PAI lessons. Students tended to be passive and reluctant to ask questions, respond, or share their opinions. They preferred listening to the teacher's explanation without genuinely understanding the information. Many students also appeared bored during PAI lessons due to limited interaction between the teacher and students or among peers. This was further reflected in the average pretest score, which stood at 1,5.

2) Results of Classroom Action on Cycle 1

In this first cycle, minimal changes were observed among the students. Many students could not interact effectively within their groups or with the teacher. During this cycle, many groups lacked cohesion in responding to questions posed by the teacher. The results of Cycle 1 implementation are detailed in the following table:

Sub-Variable	Indicator	4	3	2	1
Working	Group members listen to and respect each other's		\checkmark		
collaboratively	opinions.				
	Each member feels equally responsible for the group's success.			\checkmark	
	Each member understands and performs their tasks well.		\checkmark		
Courage to express ideas	Students can express ideas or opinions related to the lesson.				\checkmark
- 1	Students can accept differences of opinion within the			\checkmark	
	Students actively ask questions about concepts they do not understand.			\checkmark	
Problem-solving	Uses reasoning to solve problems by gathering facts.				
0	Finds the most effective solutions to problems.			\checkmark	
	Collaborates to solve problems collectively.				
Enthusiasm	Enthusiastically listens to presentations.			\checkmark	
	Takes responsibility for assigned tasks.			\checkmark	
	Eager to ask and answer questions.			\checkmark	
	Total scores		6	14	3
	Average		1,9	91	

Table 2. Results of Classroom Action on Cycle 1

Based on the results of Cycle 1, the analysis revealed that minimal changes were still observed among students. Many students could not interact effectively within their groups or with the teacher. During this cycle, several groups struggled to answer the teacher's questions cohesively.

This was because many students did not fully understand the discussions within their groups, as they lacked interaction with other group members. Additionally, some students

hesitated to ask questions and were afraid to express their opinions. In the discussions during this cycle, only a few students showed responsibility and performed well within their groups. The average score for educational interaction in Cycle 1 was 1.91.

3) Results of Classroom Action on Cycle 2

In Cycle 2, students began to adapt to the teaching method applied by the researcher. They showed improvement, overcoming their hesitation to ask questions and express their opinions. The results of Cycle 2 implementation are summarised in the following table:

	Table 3. Results of Classroom Action on Cycle	2			
Sub-Variable	Indicator	4	3	2	1
Working	Group members listen to and respect each other's	V			
collaboratively	opinions.				
	Each member feels equally responsible for the group's			V	
	success.				
	Each member understands and performs their tasks well.		V		
Courage to	Students can express ideas or opinions related to the			V	
express ideas	lesson.				
	Students can accept differences of opinion within the		V		
	group.				
	Students actively ask questions about concepts they do	V			
	not understand.				
Problem-solving	Uses reasoning to solve problems by gathering facts.			V	
_	Finds the most effective solutions to problems.			V	
	Collaborates to solve problems collectively.				V
Enthusiasm	Enthusiastically listens to presentations.	V			
	Takes responsibility for assigned tasks.			V	
	Eager to ask and answer questions.		V		
	Total scores	12	9	10	1
	Average		2,6	66	

The analysis of Cycle II results indicates that the learning process was implemented as planned. This was evident from the increased interaction between students and the teacher and among students in understanding the lesson material and completing group tasks. Students had become accustomed to actively participating in discussions, such as asking and answering questions about the lesson and its relevance to everyday life.

The learning outcomes showed that students were enthusiastic about completing their tasks within their respective groups. They even began assisting each other in completing the assignments provided by the teacher. In this cycle, students could adapt to the teaching approach applied by the researcher, overcoming their hesitation to ask questions and express opinions. The average score for educational interaction in Cycle II was 2.66.

4) Results of Classroom Action on Cycle 3

The implementation of the third cycle of classroom action research showed that the learning process had run smoothly. The results for Cycle III are detailed in the following table:

Sub-Variable	Indicator	4	3	2	1
Working	Group members listen to and respect each other's	V			
collaboratively	opinions.				
	Each member feels equally responsible for the group's		V		
	success.				
	Each member understands and performs their tasks	V			
	well.				

Table 4. Results of Classroom Action on Cycle 3

Courage to express ideas	Students can express ideas or opinions related to the lesson.		V
1	Students can accept differences of opinion within the	V	
	Students actively ask questions about concepts they do not understand.	V	
Problem-solving	Uses reasoning to solve problems by gathering facts.		V
	Finds the most effective solutions to problems.		V
	Collaborates to solve problems collectively.	V	
Enthusiasm	Enthusiastically listens to presentations.	V	
	Takes responsibility for assigned tasks.	V	
	Eager to ask and answer questions.		V
	Total scores	28	15
	Average		3,58

The analysis of Cycle 3 indicated that the learning process ran smoothly. This was evident from the enthusiasm displayed by students during the learning activities. With the implementation of cooperative learning, students became more active in the learning process. The average score for Cycle III reached 3.58, as shown in Table 4, which reflects a high level of educational interaction among the students.

This improvement was noticeable as students no longer relied solely on their peers. Each individual actively participated in their group. Students also confidently asked questions, and their peers responded accurately and appropriately without hesitation.

5) Comparison Across Cycles

The comparison of results across Cycles I, II, and III highlighted a significant improvement in students' educational interaction during Islamic Education lessons. This demonstrates that the cooperative learning strategy effectively enhanced students' interactions in Islamic Education lessons at SMPN 34 Mukomuko. The comparison of outcomes across cycles is detailed in the following table:

			Aver	ages	
Sub-Variable	Indicator	Pretest	Cycle	Cycle	Cycle
			1	2	3
Working	Group members listen to and respect each				
collaboratively	other's opinions.				
	Each member feels equally responsible for				
	the group's success.				
	Each member understands and performs				
	their tasks well.				
Courage to	Students can express ideas or opinions				
express ideas	related to the lesson.				
	Students can accept differences of opinion				
	within the group.				
	Students actively ask questions about				
	concepts they do not understand.				
Problem-solving	Uses reasoning to solve problems by				
	gathering facts.	1,5	1,91	2,66	3,58
	Finds the most effective solutions to				
	problems.				
	Collaborates to solve problems				
	collectively.				
Enthusiasm	Enthusiastically listens to presentations.				
	Takes responsibility for assigned tasks.				

Table 5. Comparison Across Cycl
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Based on the analysis, the Numbered Heads Together (NHT) technique positively impacts students' educational interaction in cooperative-based learning. This improvement can be seen from the active participation, discussion, and knowledge sharing that occurs in the group. This technique effectively encourages students' involvement in the learning process, where each group member is responsible for understanding the material and contributing to the discussion. This creates a more dynamic, inclusive, and collaborative learning environment so all students, including the less confident ones, can participate.

Discussion

This study aims to improve student's educational interactions by applying the Cooperative Learning strategy with the Numbered Heads Together technique in the Islamic Education subject at SMPN 34 Mukomuko. The research findings show improved students' educational interactions over three cycles. Through the pretest, it was observed that students lacked interest in learning Islamic Education because it seemed boring, which caused them to become passive. Conventional teaching methods, such as lectures, made students less active and bored, as they mostly listened and worked on tasks. As a result, students became more individualistic, with less interaction with the teacher or their peers.

Cooperative learning is a concept in which students work together in groups, helping each other to ensure everyone achieves their goals (Johnson & Johnson, 2016). This approach encourages students to work collaboratively within their groups. If one member fails, the group fails, and vice versa. Therefore, every student is fully responsible for their group.

The Cooperative Learning model with the Numbered Heads Together technique is a learning model that helps students develop their understanding and attitudes in line with real-life social situations (Ibrahim et al., 2015). Working together in groups enhances students' interest in learning, productivity, and academic achievements. Cooperative learning is more effective in increasing student motivation and performance (Etin & Raharjo, 2007). This approach enables students to become more active in lessons and take responsibility for their learning activities. By applying the Cooperative Learning model, students become more confident in asking questions and expressing opinions directly.

However, despite its strengths, the Numbered Heads Together technique has some weaknesses. The Cooperative Learning model's weaknesses stem from internal and external factors. Internal factors include: (1) Teachers must prepare lessons thoroughly, requiring more effort, thought, and time; (2) To ensure smooth learning, adequate facilities, tools, and financial resources are needed; (3) During group discussions, the topic often expands beyond what is scheduled, causing a delay in completing the discussions; (4) In classroom discussions, sometimes one person dominates, leading other students to become passive.

Applying the Cooperative Learning model with the Numbered Heads Together technique can optimize learning and foster positive student relationships. Generally, the application of the Numbered Heads Together technique follows these steps: (1) Phase 1: Numbering; (2) Phase 2: Asking questions; (3) Phase 3: Thinking together; (4) Phase 4: Answering. This was reflected in the average scores obtained after conducting Cycles I, II, and III, where students appeared more enthusiastic and active in learning. As a result, interactions between the teacher and students and between students within their groups occurred more effectively. This is also supported by Rahmawati (2020), whose study aimed to determine whether there was an improvement in students' learning activities using the Numbered Heads Together model at SD Negeri 1 Jatimulyo, Lampung Selatan. Based on the study conducted at SD Negeri 1 Jatimulyo, Jati Agung District, Lampung Selatan, students' learning activities gradually improved with each cycle. In Cycle I, the first meeting showed 38% participation, and the second meeting increased to 51%. In Cycle II, the first meeting reached 88%, with 31 students.

To improve students' educational interactions, a conducive learning environment is necessary where students actively participate in learning and interact with the teacher and their peers. One way to create such an environment is by applying the Cooperative Learning strategy (Chen & Kuo, 2019). Cooperative and conventional learning are very different (Tadesse et al., 2020). One key difference is that Cooperative Learning involves group-based learning, which allows students to interact more with their group members and value each other's opinions. Additionally, curiosity makes students more active in asking questions.

In contrast, conventional learning focuses mainly on the teacher's explanation, making the learning process passive. Cooperative Learning also teaches students responsibility for their learning (Yusof et al., 2012). Therefore, learning with the Cooperative Learning strategy makes students more active in constructing knowledge and taking responsibility for their progress.

Numbered Heads Together (NHT) is a type of cooperative learning designed to influence students' interaction patterns and as an alternative to traditional classroom structures (Asmoro et al., 2023). Spencer Kagan first developed numbered Heads Together to engage more students in reviewing the material covered in a lesson and assessing their understanding of the content. This technique allows students to share ideas and consider the most accurate answers. It also encourages students to enhance their cooperation. The technique can be used in all subjects and for all age groups.

Educational interaction refers to reciprocal relationships between individuals, individuals with groups, or groups with groups (Zhang et al., 2017). In this context, interaction occurs during the learning process. Interaction involves communication between students and students and between students and the teacher, as they understand, discuss, ask questions, demonstrate, and practice the lesson material in class (Napitupulu, 2019).

Interaction occurs in the classroom through communication, inseparable from the lesson content. The interaction is specific and relates directly to the material being taught. In a classroom, students have varied abilities—some are creative, while others are static, so interaction among students is essential. Interaction typically involves four key elements: the communicator, the recipient, the message, and the medium. Therefore, interaction is communication, a term derived from communicare, meaning "to participate," "to inform," and "to make something common." Communication occurs when there is a mutual understanding of what is being discussed, with a common language used in the conversation (Fitriyah, 2020).

D. RESEARCH IMPLICATIONS AND CONTRIBUTIONS

1. Research Implications

This research has implications for schools and curriculum development. Schools can make the NHT technique one of the recommended learning models in Islamic Education, especially to increase the effectiveness of discussion-based learning and collaboration. In addition, the results of this study can be the basis for teacher training so that they better understand how to implement cooperative learning strategies effectively in the classroom.

2. Research Contribution

This research provides practical guidance for PAI teachers to improve students' educational interaction. By using the NHT technique, teachers can build a more fun, interactive, and meaningful learning atmosphere, improving student learning outcomes. In addition, this research can be a reference for curriculum developers in designing more dynamic and collaboration-based learning strategies.

This research also contributes to developing education research, especially exploring innovative learning methods for religious subjects. The results of this study encourage further research that examines the effectiveness of other cooperative learning techniques, such as Think-Pair-Share or Jigsaw, in improving students' understanding of religious materials. In addition, further studies can be conducted to see the impact of this technique in improving students' social and psychological aspects, such as their self-confidence, empathy, and communication skills in discussing Islamic values.

E. RECOMMENDATIONS FOR FUTURE RESEARCH DIRECTIONS

Future researchers can expand the scope of the study, such as applying the Numbered Heads Together (NHT) technique in subjects other than Islamic Education or at different educational levels. Researchers could also develop a hybrid model by combining the Numbered Heads Together (NHT) technique with educational technology, for example, using digital applications to facilitate implementation.

F. CONCLUSION

The use of Numbered Heads Together (NHT) technique in cooperative learning-based learning significantly improves educational interaction in the classroom. This technique encourages students to actively participate, discuss, and share knowledge within the group, thus creating an inclusive and collaborative learning environment. Research shows that the NHT technique improves students' cognitive, social, and affective aspects, making it a holistic and relevant learning tool for Islamic Religious Education. The cooperative learning approach with NHT is aligned with Islamic Religious Education values, such as cooperation, deliberation, and shared responsibility. This makes this technique a learning method and a medium for internalizing Islamic values in students' daily lives.

Applying the Numbered Heads Together (NHT) technique in Islamic education learning has proven effective in improving educational interactions, both between students and teachers and fellow students. With the division of roles in the group and a question-andanswer system that involves all members, students are more encouraged to understand the material more deeply. In addition, this technique helps develop critical thinking skills, cooperation, and responsibility in the learning process. The Numbered Heads Together (NHT) technique can overcome the participation gap in the classroom. Students who were previously less active or less confident in expressing their opinions became more involved because each group member had an equal role in understanding and delivering the material. This makes the learning atmosphere more fun and meaningful while strengthening the values of togetherness and tolerance in religious learning.

This research confirms that cooperative learning with the NHT technique can be an effective alternative teaching method in Islamic education subjects, especially in improving students' educational interaction. Therefore, this method can be recommended for various religious learning materials to create a more dynamic learning atmosphere that fits the needs of students in the modern era.

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