

Improving Elementary School Students' Conceptual Understanding in Islamic Education Learning with the Numbered Head Together Model

Saifullah ✉, Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia

✉ saifullah.maysa@ar-raniry.ac.id

Abstract: Teachers must use a variety of learning models to facilitate the achievement of learning objectives. This study aims to improve the ability to understand the concept of elementary school students in Islamic education learning. The type of research used in this study is classroom action research. The research design used is the Kemmis and McTaggart model with 4 steps, namely planning, action, observing and reflection. The subjects of this study were fifth grade elementary school students. The data collection techniques used were observation and tests. The data obtained were then analyzed using descriptive statistical techniques. The results of the study showed that there was an increase in students' ability to understand the concept of Islamic education learning using the Numbered Head Together model. This is evidenced by the average class in the pre-cycle was 60.73, cycle one 75.67 and cycle two 82.39. Furthermore, the percentage of completeness also showed an increase, namely pre-cycle 53.47%, cycle one 69.33% and cycle two 89.75%. Based on these results, the Numbered Head Together model can be used as one of the solutions to overcome the problem of students' understanding of the concept of Islamic education learning in elementary schools.

Keywords: Learning models; numbered heads together; Islamic education; primary school student.

Received March 9, 2025; **Accepted** May 13, 2025; **Published** June 30, 2025

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INTRODUCTION

Learning is an individual's effort to change the quality of his life in terms of knowledge, attitude and skills. (Santrock, 2011). The learning process can be done anywhere, anytime and with anyone. (Schunk, 2012). This means that every individual can learn from other people and the environment. Furthermore, the results obtained by individuals from this learning process are new knowledge, attitude formation and strengthening of skills. (Lubis, 2024; Wolfolk, 2016). With optimal knowledge an individual can distinguish between right and wrong, and with a well-formed attitude an individual can distinguish between good and bad, and with mature skills an individual can distinguish between beautiful and ugly. This is in accordance with the opinion of Dasopang et al. (2023) who stated that the learning process can optimize an individual's logic, ethics and aesthetics.

The learning process can be carried out formally, informally or non-formally by each individual. (Dasopang et al., 2022; Husti, 2022). Formal education is carried out in schools by implementing a curriculum that is arranged in stages starting from elementary

education to higher education. One part of the formal education curriculum is Islamic education learning. Islamic education learning is found in all curricula at every level of education starting from elementary education to higher education (Setiawan et al., 2021). Islamic education learning is fully responsible for the aspects of strengthening religious knowledge and strengthening students' character (Ainiyah, 2013; Izzah, 2018). Based on this, it can be concluded that learning Islamic education is very important for students to master.

Islamic education learning that should be mastered by students does not always go well. Based on a preliminary study conducted at elementary schools in Banda Aceh, a problem was found in the weak ability of students to understand concepts in Islamic education learning. This is evidenced by the results of the pre-cycle test which showed that the class average was still low, namely 60.73 and with a class completion percentage of only 53.47%. Based on the results of observations, this is because teachers do not use a variety of models in the learning process which has an impact on decreasing student enthusiasm and focus and ends in students having difficulty achieving learning objectives. This finding is certainly a problem that must be solved considering the importance of Islamic education learning being mastered by students.

One solution that can be used is to use a varied learning model. The model that is trying to be offered as a solution to the problem in this study is the Numbered Heads Together type cooperative model. The Numbered Heads Together model is one type of learning model that involves study groups (Slavin, 2015). The teacher divides the students into several groups, then gives each student a head number. Then the teacher chooses a number randomly and then the number that is called will answer questions or present in front of the class (Pendy & Mbagho, 2021). Furthermore, Lubis (2019) in his findings explained that the Numbered Heads Together model can provide a strong motivational impact for each student to master the material given by the teacher. This is because each student has the same opportunity to be selected to answer the teacher's questions or present their understanding in front of their classmates. High motivation certainly has an impact on increasing the potential for achieving learning objectives. (Lubis et al., 2021).

Various studies on the ability to understand concepts and the Numbered Heads Together model have been conducted. One of them is a study conducted by Hanafiah et al. (2021) which shows that the Numbered Heads Together model can be used as a model that can overcome the problem of low student learning motivation. High motivation will certainly have an impact on good learning achievements or achievements for students (Lubis et al., 2022). The difference with this study is in the dependent variable.

Another study is a study conducted by Alkindi et al. (2021) which states that the Numbered Heads Together model can improve student learning outcomes in sports learning. This is because students are better prepared to follow the learning process and try to understand and achieve the specified learning objectives. The difference with this study is in the subject of learning. This study focuses on Islamic education learning at the elementary school level.

Furthermore, Junaid et al. (2021) in their findings stated that students' conceptual understanding can be improved with the Problem-based Learning model. This is because through this model students will try to solve the problems they face by analyzing the problem, collecting data and facts to draw a conclusion. This process can construct students' understanding of the material being taught. The difference with this study is in the independent variables used. This study tries to use the Numbered Heads Together model as a solution to the same problem, namely the low ability of students to understand concepts.

From several relevant studies described, the position of this study is in the development of science that has good novelty. This study tries to apply the Numbered Heads Together model as a solution to the low ability of students to understand concepts in Islamic education learning. With this study, at least Islamic education teachers in

elementary schools will get one reference that can be considered as a solution to problems in Islamic education learning.

METHODS

This study aims to improve the ability to understand the concept of elementary school students in Islamic education learning. This study is a mixed method study with the type of classroom action research. The classroom action research design used is the Kemmis and McTaggart design with 4 steps, namely planning, action, observing and reflection. The four steps are carried out repeatedly in two cycles. The following is a picture of the research design used.

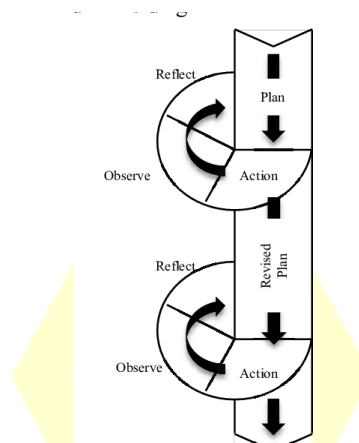


Figure 1. *Research Design*

This research was conducted in two cycles. Each cycle went through four stages, namely planning, action, observing and reflection. The planning stage was carried out to plan the implementation process of Classroom Action research, starting from preparing the learning implementation plan to the data collection procedure that will be carried out. After the planning stage was completed, the next stage was the action stage. At this stage, learning was carried out by applying the Numbered Head Together model. A concept understanding ability test was given at the end of learning to measure students' conceptual understanding of Islamic education learning. Furthermore, during the learning process, observation activities continued. The goal is to analyze learning activities or processes. After the action and observation stages were completed, the next stage in the fourth or final stage in the cycle was the reflection stage. At the reflection stage, a comprehensive evaluation of the research achievements was carried out. At this reflection stage, at least two things were obtained, first, drawing conclusions whether a further cycle was needed, and second, recommendations for improvements that must be implemented in the next cycle if a further cycle was needed.

This research was conducted in the fifth grade of SD Negeri 16 Banda Aceh City. The number of students involved was 30 students, while the number of teachers involved was one teacher. data was collected using observation and test techniques. The type of observation used is non-participant observation, while the test used is a concept understanding ability test in the form of essay questions. Observations are carried out to analyze learning activities or processes, while tests are carried out to measure students' concept understanding abilities.

The data obtained in this study were then analyzed using descriptive statistical techniques. After the data has been analyzed, a comparison of the research results with the research success indicators is carried out. After that, the conclusions of the research results are continued. If the research results show that the research success indicators have been achieved, then the research is declared successful and the research cycle is

stopped. Conversely, if the research results show that the research success indicators have not been achieved, then the research is declared unsuccessful and must be continued in the next cycle with several recommendations for improvement that are analyzed at the reflection stage. The indicator of the success of this research is that the research is declared successful if classically the results of the student concept understanding test reach an average of ≥ 80 and the percentage of student completion reaches $\geq 85\%$.

RESULTS

This Classroom Action Research was conducted in two cycles, each cycle consisting of four stages, namely planning, action, observing and reflection. The results of the study showed that there was an increase in students' conceptual understanding of Islamic education learning in elementary schools by implementing the Numbered Head Together model. This can be seen from the results of the conceptual understanding ability test which showed an increase in the average and percentage in each cycle. The following is a table of conceptual understanding ability achievements in each cycle.

Table 1. *Test results of each cycle*

Cycle	Mean	% Completion
Pre-cycle	60.73	53.47
First cycle	75.67	69.33
Second cycle	87.39	89.75

Table 1 shows that there is an increase in the class average in the students' conceptual understanding ability test. In the pre-cycle, the class average was 60.73 and in the first cycle it increased to 75.67 (an increase of 24.60%). Furthermore, in the second cycle, the average achievement of students' conceptual understanding ability test results increased again from the previous 75.67 to 82.39 (an increase of 8.88%). Based on these results, it can be concluded that the Numbered Heads Together model can increase the average achievement of elementary school students' conceptual understanding ability test results in Islamic education learning.

The data in Table 1 also shows that there is an increase in the percentage of student completion in Islamic education learning. This is shown in the pre-cycle, the percentage of completion only reached 53.47% and in the first cycle it became 69.33% (an increase of 15.86%). Furthermore, in the second cycle, the percentage of student completion increased again from 69.33% to 89.75% (an increase of 20.42%).

This research was stopped in the second cycle after the research success indicators had been achieved. Analysis of the achievement of research success indicators was carried out at the reflection stage in each cycle. The achievement in the first cycle had not reached the set target, so it was continued in the second cycle. Details of the research process in each cycle are presented in the following description.

FIRST CYCLE

The first stage carried out in this first cycle is to carry out the planning process. At this stage, the researcher together with the research collaborator team analyzes the problem and discusses the proposed solutions to solve the problem. The solution is certainly obtained after conducting an in-depth literature review. The solution obtained after conducting a literature review and discussion with the research collaborator team is the application of the Numbered Head Together model. Furthermore, the learning planning design process is carried out using the Numbered Head Together model syntax. In this first stage, the test and observation instruments used to collect research data are also prepared. The instruments that have been prepared are then tested for validity using the construct validity technique. The results of the validity test show that the instruments

prepared are declared valid. After that, a briefing was held with the observer team regarding the procedures or technical implementation of observation data collection. After all is complete, the second stage is carried out, namely the action and observing stages.

The action and observing stages are carried out at the same moment, namely when the learning process is carried out. At this action stage, the researcher applies all the plans that have been prepared at the planning stage. The researcher applies the Numbered Head Together model to the Islamic education learning process. The application of Numbered Head Together continues with measuring students' conceptual understanding abilities in Islamic education learning. At this stage, the researcher also carries out the process of observing teacher and student activities. Teacher activities are observed by other class teachers who are the research collaborator team. While student activities are observed by other collaborator teams. The results of the student conceptual understanding ability test in this first cycle are a percentage of completion reaching 69.33% with an average classical score of 75.67. Furthermore, the results of observations of teacher and student activities are in the "Good" category.

After the action and observing stages are carried out, the next step is the reflection stage. At this stage, all processes and results obtained in the first cycle are analyzed and their achievements are evaluated. This process is carried out to determine the attitude taken after the first cycle is completed, whether to continue to the second cycle or just the first cycle. This certainly refers to the achievement of the research success indicators determined in this study. Based on the results of the first cycle reflection, a further cycle is still needed because the research success indicators have not been achieved. The results of the first cycle reflection also show that there are several recommendations for improvement in the next cycle. Some of the recommendations are 1) teachers must explain the objectives and learning indicators so that students can be more focused in following the learning process; 2) teachers must be more intense in assisting and facilitating student study groups so that learning objectives can be achieved easily; 3) opportunities to ask questions must be given in the next cycle; 4) conclusions are presented sequentially according to the learning objective points; and 5) evaluation questions are made based on high-level thinking skills.

SECOND CYCLE

The first stage carried out in this second cycle is to carry out the planning process. At this stage, the researcher together with the research collaborator team analyzed the recommendations obtained at the reflection stage of the previous cycle. The results of the analysis became one of the bases for making decisions on the preparation of the implementation plan for this second cycle. Furthermore, a literature review is also needed to perfect the planning of this second cycle, so that the potential for errors will be smaller and the potential for achieving research success indicators will be greater. Furthermore, the learning planning design process was carried out using the Numbered Head Together model syntax. In this second cycle, test and observation instruments were also prepared which were used to collect research data. The instruments that had been prepared were then tested for validity using the construct validity technique. The results of the validity test showed that the prepared instrument was declared valid. After that, a briefing was held with the observer team regarding the procedures or technical implementation of observation data collection. After all was completed, the second stage was carried out, namely the action and observing stages.

The action and observing stages are carried out at the same moment, namely when the learning process is carried out. At this action stage, the researcher applies all the plans that have been prepared at the planning stage. The researcher applies the Numbered Head Together model to the Islamic education learning process. The application of Numbered Head Together continues with measuring students' conceptual understanding abilities in Islamic education learning. At this stage, the researcher also carries out the process of

observing teacher and student activities. Teacher activities are observed by other class teachers who are the research collaborator team. While student activities are observed by other collaborator teams. The results of the student conceptual understanding ability test in this first cycle are the percentage of completion reaching 89.75% with an average classical score reaching 87.39. Furthermore, the results of observations of teacher and student activities are in the "Very Good" category.

After the action and observing stages are carried out, the next step is the reflection stage. At this stage, all processes and results obtained in the second cycle are analyzed and their achievements are evaluated. This process is carried out to determine the attitude taken after the second cycle is completed, whether to continue to the third cycle or just the second cycle. This certainly refers to the achievement of the research success indicators determined in this study. Based on the results of the second cycle reflection, the indicators of research success have been achieved. Furthermore, the recommendation from the analysis of the results of the second cycle of research is that the research stage is stopped or does not need to continue to the next cycle.

The results of the study indicate that the cooperative model of the numbered heads together type can improve students' conceptual understanding of Islamic education learning in elementary schools. There are several things that help achieve this improvement. One of them is the syntax in the numbered heads together model that can activate students in the learning process, namely giving each student a head number. Student activity in learning is one of the most important things in efforts to achieve learning objectives (Fatwa et al., 2024; Lubis, 2024; Ningsih et al., 2023). This syntax helps teachers to activate students in learning because each student will prepare themselves to answer questions from the teacher. The only way for students to prepare themselves is to understand the concepts taught. Therefore, learning objectives become easier to achieve and student learning outcomes improve.

The cooperative learning model of the Numbered Heads Together type is an effective strategy in improving the learning activities of elementary school students, especially in Islamic Education learning. This method involves working together in small groups, where each student has a certain number and is responsible for understanding the material given. With this approach, students not only learn individually, but also help each other and share understanding, so that the learning atmosphere becomes more interactive and enjoyable. One of the main advantages of the Numbered Heads Together model is to increase students' active involvement in learning. In Islamic Education learning, conceptual and applicable materials, such as morals, worship, and Islamic history, require in-depth understanding. Through group discussions in the Numbered Heads Together model, students are more motivated to find answers together and understand the material better. This prevents them from being passive and makes them more enthusiastic in participating in the learning process.

The Numbered Heads Together model also trains students' social and cooperation skills. In group learning, each member has an important role, so they must practice listening, expressing opinions, and appreciating the ideas of others. In the context of Islamic Education learning, these values of cooperation and togetherness are in line with Islamic teachings which emphasize the importance of Islamic brotherhood and mutual cooperation. Thus, students not only gain academic understanding, but also internalize moral and ethical values in everyday life. The success of the Numbered Heads Together learning model in improving student learning activities is also supported by the role of the teacher as a facilitator. The teacher acts as a guide who directs the discussion and ensures that each group understands the material well. With this approach, teachers can identify the difficulties faced by students and provide appropriate guidance. In addition, evaluation through a question and answer mechanism between groups makes students more prepared and confident in expressing their opinions.

DISCUSSION

The Numbered Heads Together type of cooperative learning model is very effective in improving the learning activities of elementary school students in Islamic Religious Education learning. This method not only helps students understand the material more deeply, but also trains social skills, increases learning motivation, and instills Islamic values in everyday life. With proper implementation and optimal guidance from teachers, this model can be a solution to create more dynamic and meaningful learning

The formation of study groups also has a significant impact on efforts to improve student learning outcomes in Islamic education learning using the numbered heads together type of cooperative model. This is because there is a process of exchanging information between students in discussing a problem in learning. Study groups are one of the media that are considered effective in efforts to achieve learning goals (Pradana, 2016; Silvia et al., 2023). The group learning pattern used in this study is technically in one group spread students who have high, medium and low abilities. This is done to optimize the exchange of information and the process of achieving learning goals.

The Numbered Heads Together cooperative learning model not only increases students' learning activities but also has a positive impact on their learning outcomes. By implementing this method, students find it easier to understand the material because learning is done collaboratively. When working in groups, they help each other and explain concepts that are not well understood by their group mates, so that understanding becomes deeper. The discussion and question and answer process also helps students remember the material better, which ultimately improves their learning outcomes. In addition, the Numbered Heads Together model encourages students to be more active in doing assignments and finding answers. Because each group member has a responsibility to understand the material, they will be more serious in learning. This sense of responsibility increases students' intrinsic motivation to understand the material better. In Islamic Education learning, for example, understanding of worship, morals, and Islamic history will be stronger because students not only listen to the teacher's explanation, but also discuss and teach it in groups.

The success of the Numbered Heads Together model in improving learning outcomes is also due to a more effective evaluation process. In Numbered Heads Together, teachers can conduct evaluations directly by asking answers to students who are randomly selected from each group. This encourages each student to truly understand the material, because they have the potential to be called upon to answer questions. Thus, students are more focused on learning and do not only rely on group mates, so that their individual understanding also increases. In addition to improving cognitive understanding, the Numbered Heads Together model also contributes to the development of students' critical thinking skills. In group discussions, students are encouraged to discuss, rotate, and express their opinions about the material being studied. They are also accustomed to a more systematic and logical mindset, which will help them in working on exam questions or other academic assignments. With better thinking skills, students can answer questions more accurately and get higher scores in learning evaluations.

The Numbered Heads Together type of cooperative learning model is able to improve student learning outcomes by creating a more active, collaborative learning environment that supports deep understanding. With this method, students not only get better academic grades, but also develop social and critical thinking skills that are useful for their future lives. Therefore, the application of the NHT model in learning, especially in Islamic Religious Education, is an effective solution to improve the quality of student learning outcomes.

CONCLUSION

The results of the study indicate that the numbered head together model can improve students' conceptual understanding ability in Islamic education learning. This can be seen from the results of the student conceptual understanding test in the first cycle, obtaining a percentage of completion reaching 69.33% with an average classical score of 75.67 and increasing in the second cycle with a percentage of completion reaching 89.75% with an average classical score reaching 87.39. Furthermore, from the aspect of teacher and student learning activities, it also increased from the initial category of "Good" in the first cycle to "Very Good" in the second cycle. Therefore, the numbered head together model can be used as an alternative model that can overcome the problem of low students' conceptual understanding ability in Islamic education learning.

REFERENCES

- Ainiyah, N. (2013). Pembentukan Karakter melalui Pendidikan Agama Islam. *Al-Ulum*, 13(1), 25–38.
- Alkindi, M. I., Pradipta, G. D., & Zhannisa, U. H. (2021). Pengaruh Model Pembelajaran Numbered Head Together (NHT) dan Teaching Games for Understanding (TGfU) Terhadap Hasil Belajar Passing Bawah Bola Voli Pada Siswa Kelas XI di SMA N 2 slawi. *Jurnal Pendidikan Dasar Dan Menengah*, 1(1), 8–14.
- Dasopang, M. D., Lubis, A. H., & Dasopang, H. R. (2022). How do Millennial Parents Internalize Islamic Values in Their Early Childhood in the Digital Era? *AL-ISHLAH: Jurnal Pendidikan*, 14(1), 697–708.
- Dasopang, M. D., Nasution, I. F. A., & Lubis, A. H. (2023). The Role of Religious and Cultural Education as A Resolution of Radicalism Conflict in Sibolga Community. *HTS Theological Studies*, 79(1), 1–7.
- Fatwa, I., Attahara, T., Nursada, R., Simahara, A., & Fadli, M. R. (2024). Improving Student Diversity Views through the Nusantara Module Course: Independent Student Exchange Program (PMM). *Jurnal Pendidikan Teknik Mesin*, 10(2), 174–184.
- Hanafiah, M. A., Martiani, M., & Dewi, C. (2021). Pengaruh Model Pembelajaran Numbered Head Together (NHT) terhadap Motivasi Belajar pada Permainan Bola Basket Siswa SMP. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 5213–5219.
- Husti, I. (2022). Pendidikan Formal, Non Formal dan Informal dalam Desain Hadits Tarbawi. *Jurnal Penelitian Ilmu Pendidikan Indonesia*, 1(2), 485–492.
- Izzah, I. (2018). Peran Pendidikan Agama Islam dalam Membentuk Masyarakat Madani. *Pedagogik: Jurnal Pendidikan*, 5(1), 50–68.
- Junaid, M., Salahudin, S., & Anggraini, R. (2021). Pengaruh Model Pembelajaran Problem Based Learning terhadap Pemahaman Konsep IPA Siswa di SMP N 17 Tebo. *Physics and Science Education Journal (PSEJ)*, 16–21.
- Lubis, A. H. (2019). Upaya Peningkatan Hasil Belajar Siswa Sekolah Dasar melalui Model Cooperative Learning Tipe Numered Heads Together. *FORUM PAEDAGOGIK*, 11(2), 127–143.
- Lubis, A. H. (2024). Improving Elementary School Students' Reading Skills Using Picture Word Cards: How is This Possible? *Journal of Indonesian Primary School*, 1(2), 9–18.
- Lubis, A. H., Dasopang, M. D., Ramadhini, F., & Dalimunthe, E. M. (2022). Augmented Reality Pictorial Storybook: How does It Influence on Elementary School Mathematics Anxiety? *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 12(1), 41–53.

- Lubis, A. H., Yusup, F., Dasopang, M. D., & Januariyansah, S. (2021). Effectivity of Interactive Multimedia with Theocentric Approach to the Analytical Thinking Skills of Elementary School Students in Science Learning. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 11(2), 215–226.
- Ningsih, Y. S., Mulia, M., & Lubis, A. H. (2023). Development of Picture Storybooks with TheoAnthropoEco Centric Approach for Elementary School Students. *AL-ISHLAH: Jurnal Pendidikan*, 15(2), 1888–1903.
- Pendy, A., & Mbagho, H. M. (2021). Model Pembelajaran Number Head Together (NHT) pada Materi Relasi dan Fungsi. *Jurnal Basicedu*, 5(1), 165–177.
- Pradana, L. N. (2016). Efektifitas Pembelajaran Kooperatif Tipe NHT dengan Pendekatan Kontekstual pada Pembelajaran Bangun Ruang Sisi Datar. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 5(1), 103–111.
- Santrock, J. W. (2011). *Educational Psychology* (5th ed.). McGraw-hill Companies.
- Schunk, D. H. (2012). *Learning Theories: An Educational Perspective*. Pearson Education Inc.
- Setiawan, F., Hutami, A. S., Riyadi, D. S., Arista, V. A., & Al Dani, Y. H. (2021). Kebijakan Penguatan Pendidikan Karakter melalui Pendidikan Agama Islam. *Al-Mudarris (Jurnal Ilmiah Pendidikan Islam)*, 4(1), 1–22.
- Silvia, I., Oviana, W., & Lubis, A. H. (2023). Improving Learning Outcomes of Elementary School Students by Using Mind Mapping Models with Audio Visual Media: A Classroom Action Research. *Jurnal Pendidikan Profesi Guru*, 1(2), 41–53.
- Slavin, R. E. (2015). *Cooperative Learning in Elementary Schools*. Education 3-13. <https://doi.org/10.1080/03004279.2015.963370>
- Wolfolk, A. (2016). *Educational Psychology* (13th ed.). Pearson Education Inc.

