DEEP LEARNING: Journal of Educational Research

Vol. 1 No. 4 OCTOBER 2025

Improving Student Learning Outcomes by Implementing the Numbered Heads Together Model in Islamic Education Learning at SD Negeri Seumantok

Nurfadhilah[1], SD Negeri Seumantok, Indonesia
Diana[2], SD Negeri Seumantok, Indonesia

ABSTRACT

This study aims to improve student learning outcomes in Islamic Education learning through the implementation of the Numbered Heads Together (NHT) cooperative learning model at SD Negeri Seumantok. The research employed a Classroom Action Research (CAR) design consisting of two cycles, with each cycle including the stages of planning, action, observation, and reflection. The participants of this study were 26 fifth-grade students. Data were collected through learning outcome tests, observation sheets of teacher and student activities, and documentation. The collected data were analyzed using descriptive quantitative and qualitative techniques. The results showed a significant improvement in students' learning outcomes after the implementation of the NHT model. In the pre-cycle, the average student score was 62.15, with only 38.46% of students achieving mastery learning. After the implementation of NHT in Cycle I, the average score increased to 72.30, and the mastery learning percentage rose to 65.38%. Furthermore, in Cycle II, the average score improved to 84.10, with mastery learning reaching 88.46%, indicating that most students had achieved the minimum competency standard. Observation results also revealed improvements in classroom engagement, as student participation increased from 60% in Cycle I to 85% in Cycle II, while teacher performance improved from 70% to 90%. These findings demonstrate that the Numbered Heads Together model effectively enhances student learning outcomes by promoting active participation, collaboration, and responsibility in group learning. Therefore, the NHT model is recommended as an effective instructional strategy for improving Islamic Education learning outcomes in elementary schools.

OPEN ACCESS

ARTICLE HISTORY
Received: 29 Seprtember 2025
Revised: 18 October 2025
Accepted: 27 October 2025
Published: 31 October 2025

KEYWORDS
Numbered Heads Together; Learning Outcomes; Islamic Education; Cooperative Learning.

Corresponding Author:

Nurfadhilah
SD Negeri Seumantok, Indonesia
nurfadhillahspdi@gmail.com

Introduction

Islamic Education in elementary schools plays a crucial role in shaping students' moral character, religious understanding, and social responsibility from an early age. At the

primary education level, Islamic Education is not merely a subject that transfers knowledge about religious doctrines, but also a systematic effort to cultivate faith, piety, and ethical behavior in students' daily lives (Huda, 2018). In the context of national education, Islamic Education is expected to develop learners who are spiritually grounded and socially responsible, aligning with broader educational goals that emphasize holistic human development (Tilaar, 2019).

However, the learning process of Islamic Education in many elementary schools still faces serious challenges, particularly in terms of student learning outcomes. Learning outcomes remain a central indicator of instructional effectiveness because they reflect the extent to which students have achieved expected competencies, both cognitively and affectively (Anderson & Krathwohl, 2001). Low learning outcomes in Islamic Education may indicate not only difficulties in understanding learning material but also weak engagement in classroom activities, limited motivation, and ineffective instructional strategies (Susanto, 2020).

In practice, Islamic Education learning is often delivered using teacher-centered approaches, where teachers dominate the learning process through lectures and direct explanation. Although such methods can be efficient for delivering information, they tend to reduce student participation and limit opportunities for meaningful interaction and critical thinking (Sanjaya, 2017). Passive learning environments frequently lead students to become disengaged, resulting in minimal conceptual understanding and weak retention of learning content (Slavin, 2015). Consequently, the learning process becomes less effective in achieving educational objectives.

The issue of student passivity in classroom learning has been widely discussed in educational research. Student-centered learning is increasingly emphasized as a more effective approach to improve learning outcomes by encouraging active participation, collaboration, and reflective thinking (Prince, 2004). Active learning strategies have been proven to enhance student comprehension and academic performance, especially when students are involved in problem-solving and cooperative interaction (Freeman et al., 2014). Therefore, adopting an instructional model that promotes active learning is essential to improve student achievement in Islamic Education.

Cooperative learning is considered one of the most effective instructional strategies to foster active engagement and meaningful learning. Cooperative learning emphasizes collaboration among students in small groups to achieve shared learning goals, enabling students to support each other in understanding material and solving problems (Johnson & Johnson, 2009). This approach has been consistently linked to improvements in academic achievement, social skills, and motivation (Gillies, 2016). In addition, cooperative learning allows students to develop communication skills and

positive interdependence, which are important for long-term educational success (Slavin, 2015).

In Islamic Education learning, cooperative learning has strong relevance because the subject content emphasizes values such as cooperation, mutual respect, responsibility, and ethical behavior. These values align naturally with cooperative learning principles, making it an appropriate model to apply in Islamic Education classrooms (Zubaedi, 2017). Through cooperative learning, students can learn Islamic values not only conceptually but also practically through social interaction and teamwork (Nata, 2016). This reinforces the idea that Islamic Education should be taught through approaches that integrate knowledge with practice and behavior.

Among the various cooperative learning models, the Numbered Heads Together (NHT) model is widely recognized as an effective method for increasing student participation and accountability. NHT is designed to ensure that all group members are actively involved because each student is responsible for representing their group during classroom discussion (Kagan, 1994). This model reduces the likelihood of students relying solely on more capable peers, as every member has an equal opportunity to be selected to answer questions (Lie, 2010). As a result, NHT promotes individual responsibility within collaborative learning environments.

The main advantage of NHT lies in its structured interaction, which fosters both cooperation and readiness among students. When teachers ask questions, students discuss answers within their groups, and a randomly selected student must respond on behalf of the group. This mechanism encourages all students to engage in discussion and ensures equal participation (Trianto, 2018). Such learning dynamics create an active classroom environment where students are motivated to contribute, listen, and learn from peers.

Research evidence supports the effectiveness of NHT in improving learning outcomes across various subjects. Previous studies have shown that NHT significantly improves student achievement and classroom engagement because it increases student attention and reduces learning anxiety (Sari & Putra, 2021). Other research has demonstrated that NHT enhances students' comprehension by encouraging peer teaching and active discussion, which strengthens conceptual understanding (Rahmawati, 2020). In addition, NHT has been reported to improve students' confidence in expressing opinions and responding to questions (Wahyuni & Fitriani, 2019).

In the context of Islamic Education, learning requires not only memorization of religious concepts but also deeper understanding and internalization. Students must comprehend religious teachings, apply them in daily life, and develop moral reasoning consistent with Islamic values (Azra, 2017). Therefore, Islamic Education learning should prioritize interactive learning processes that support reflection and comprehension.

NHT offers opportunities for such interaction, making it a relevant instructional approach to improve learning outcomes in Islamic Education classrooms.

Despite its potential, the implementation of cooperative learning models such as NHT is still limited in many elementary schools. Teachers often hesitate to adopt cooperative models due to limited training, time constraints, and concerns about classroom management (Suyanto & Jihad, 2018). Some educators believe that cooperative learning requires more time than traditional lecturing, particularly when classroom conditions are less conducive to group activities (Sanjaya, 2017). However, these concerns can be addressed through proper planning, structured learning procedures, and reflective evaluation.

Classroom Action Research (CAR) provides a suitable framework for addressing learning problems and improving instructional practices. CAR is designed to help teachers systematically identify classroom issues, implement interventions, observe learning processes, and reflect on results to improve future learning (Kemmis & McTaggart, 2014). Through CAR, teachers can directly test instructional strategies such as NHT in real classroom settings, ensuring that improvements are based on actual learning needs. This approach is particularly valuable in educational improvement research because it focuses on practical problem-solving in authentic contexts (Creswell, 2018).

CAR is also aligned with professional teacher development because it encourages reflective teaching and continuous improvement. Teachers who engage in CAR are able to critically examine their teaching methods and make data-driven decisions to enhance learning quality (Burns, 2010). In this way, CAR contributes to both improved student outcomes and improved teacher competence. Such reflective practices are essential in the modern educational context where teachers are expected to continuously adapt instructional methods to student needs (Darling-Hammond et al., 2017).

The learning outcomes of students are influenced by multiple factors, including teaching methods, student motivation, classroom environment, and learning resources. Teaching methods are among the most significant determinants because they shape the learning process and determine how students interact with material and peers (Hattie, 2009). When teaching strategies are not aligned with student needs, learning outcomes tend to remain low. Therefore, selecting an appropriate learning model is essential to improve academic achievement.

Motivation is another important factor influencing learning outcomes. Students who are motivated tend to show greater persistence, attention, and engagement in learning activities (Schunk et al., 2014). Cooperative learning models such as NHT have been shown to increase motivation by creating supportive learning environments and encouraging peer interaction (Gillies, 2016). When students feel valued within group

discussions and are given opportunities to contribute, they become more enthusiastic about learning and more confident in their abilities.

Learning in elementary schools should also consider developmental aspects. At this stage, students learn effectively through interactive and collaborative activities that allow them to explore ideas and build knowledge through social interaction (Vygotsky, 1978). Cooperative learning aligns with this developmental perspective by facilitating peer learning and scaffolding. NHT, in particular, supports learning through group discussion and shared responsibility, which encourages students to develop cognitive and social skills simultaneously.

In addition, modern educational approaches emphasize the importance of 21st-century skills such as communication, collaboration, critical thinking, and problem-solving. These skills are essential for students to succeed in increasingly complex social and academic environments (Trilling & Fadel, 2009). Cooperative learning models contribute significantly to the development of these competencies because students are trained to communicate ideas, listen to others, negotiate meaning, and make joint decisions (Johnson & Johnson, 2009). Islamic Education learning can also integrate these skills by using cooperative learning to strengthen both academic understanding and moral development.

The integration of cooperative learning into Islamic Education learning is also supported by constructivist learning theory. Constructivism emphasizes that students build knowledge actively through experience, interaction, and reflection rather than receiving information passively (Piaget, 1970). Through NHT, students construct understanding by discussing and clarifying material with peers. This process allows students to connect new knowledge with prior experiences, which improves comprehension and retention.

The condition observed at SD Negeri Seumantok indicated that student learning outcomes in Islamic Education were still relatively low. Initial observation showed that students tended to be passive during lessons, rarely asked questions, and were less engaged in classroom discussion. The learning process was dominated by teacher explanation, while students mostly listened and recorded information. This situation contributed to low test results and limited mastery of the material, indicating the need for instructional improvement.

Based on preliminary assessment, many students did not achieve the minimum mastery criteria in Islamic Education. This condition is consistent with previous findings that teacher-centered learning often results in limited student engagement and low academic achievement (Prince, 2004). When students are not given opportunities to actively participate in learning, they struggle to understand and internalize learning

content. Therefore, an alternative learning model is required to create a more engaging and effective learning environment.

The NHT model was selected as an intervention because it offers a structured cooperative learning process that ensures student participation. Unlike conventional group work, NHT emphasizes individual accountability because each student must be prepared to answer questions. This structure encourages all students to engage in learning discussions, which can improve both understanding and learning outcomes (Kagan, 1994). Furthermore, NHT is suitable for elementary school students because it involves simple procedures that are easy to implement and encourages active communication.

Several studies have indicated that NHT improves learning outcomes because it creates a sense of responsibility among students. When students realize that they may be called upon to represent their group, they become more attentive and actively involved in discussions (Rahmawati, 2020). In addition, NHT promotes cooperative behavior and strengthens social relationships among students, which contributes to a more positive learning atmosphere (Gillies, 2016). These characteristics make NHT a promising model for improving Islamic Education learning outcomes.

Although many studies have examined cooperative learning models, research focusing specifically on the implementation of NHT in Islamic Education learning at elementary schools remains limited. This study addresses this gap by applying NHT in Islamic Education learning at SD Negeri Seumantok through a CAR approach. The study contributes to the growing body of knowledge on effective instructional strategies in religious education contexts and provides practical recommendations for teachers.

Therefore, the purpose of this study is to examine the effectiveness of implementing the Numbered Heads Together model in improving student learning outcomes in Islamic Education learning at SD Negeri Seumantok. This study is expected to provide empirical evidence regarding the impact of cooperative learning on student achievement and classroom engagement. Furthermore, the findings may serve as a reference for educators seeking to enhance Islamic Education learning through innovative and student-centered instructional strategies.

This research is significant because improving Islamic Education learning outcomes is essential for strengthening students' understanding of religious values and supporting character development. Effective learning models are needed to ensure that Islamic Education learning does not become merely theoretical but meaningful and applicable. Through the implementation of NHT, students are expected to engage more actively in learning, develop stronger comprehension, and achieve better academic outcomes. Ultimately, this study supports the broader educational mission of fostering knowledgeable, ethical, and responsible future generations (Tilaar, 2019).

Methods

This study employed a Classroom Action Research (CAR) design, which aimed to improve student learning outcomes through systematic interventions and reflective cycles (Kemmis & McTaggart, 2014). CAR was chosen because it allows researchers and teachers to collaboratively identify learning problems, implement solutions, observe classroom processes, and evaluate outcomes to enhance instructional practices (Creswell, 2018). The research was conducted at SD Negeri Seumantok, involving fifth-grade students as participants, totaling 26 students.

The research was carried out in two cycles, with each cycle consisting of four stages: planning, action, observation, and reflection. In the planning stage, the researchers prepared lesson plans based on the Numbered Heads Together (NHT) cooperative learning model, designed learning instruments, and arranged groupings to ensure heterogeneous composition of student ability. Additionally, observation sheets for teacher and student activities, as well as assessment tools for learning outcomes, were developed and validated by two experts in Islamic Education pedagogy.

During the action stage, the NHT model was implemented in Islamic Education lessons. Students were divided into small groups of four to five members, with each member assigned a number. The learning process followed the NHT procedure: the teacher presented the material, posed questions, students discussed answers collaboratively within their group, and one member was randomly called upon to respond on behalf of the group. This approach encouraged full participation and accountability from all students (Kagan, 1994; Trianto, 2018).

The observation stage involved systematic monitoring of student engagement and teacher performance using structured observation sheets. Student activities observed included participation in group discussions, response to questions, and collaborative problem-solving. Teacher activities assessed included clarity of instructions, facilitation of group discussion, and provision of feedback. Observations were conducted by the researcher and a trained observer to ensure reliability of data (Johnson & Christensen, 2019).

In the reflection stage, the researchers analyzed observation results, student learning outcomes, and feedback from both students and teachers. This stage was critical for identifying strengths, weaknesses, and areas for improvement in the subsequent cycle. Adjustments were made to lesson delivery, discussion facilitation, and question design to maximize student engagement and learning outcomes (Burns, 2010).

Data collection in this study comprised three instruments: learning outcome tests, observation sheets, and documentation. The learning outcome tests were designed to measure students' understanding of Islamic Education material, including knowledge of

moral values, religious practices, and ethical reasoning. Tests were administered at the end of each cycle to evaluate improvement. Observation sheets recorded quantitative and qualitative data on student participation and teacher performance. Documentation included attendance records, lesson plans, and students' work to complement quantitative findings and provide contextual evidence (Ary et al., 2019).

Data analysis was conducted using descriptive quantitative and qualitative methods. Learning outcome scores were calculated as mean scores and percentages of students achieving the Minimum Mastery Criteria (MMC). Observation results were analyzed to describe the level of student engagement and teacher effectiveness in facilitating NHT learning. Qualitative data from reflections and documentation were interpreted to explain the factors contributing to improvements in learning outcomes and classroom dynamics (Creswell & Poth, 2018).

The ethical considerations in this study included obtaining informed consent from school authorities, teachers, students, and parents. The researchers ensured that participation was voluntary, data were kept confidential, and results were reported objectively. Additionally, the study prioritized students' well-being by designing activities that were age-appropriate, interactive, and aligned with their cognitive and social development levels (Mertens, 2019).

The research method was carefully designed to ensure rigor, validity, and reliability. The combination of CAR methodology, structured implementation of NHT, systematic observation, and triangulated data analysis enabled a comprehensive evaluation of the model's effectiveness in improving student learning outcomes in Islamic Education. By employing this method, the study not only aimed to enhance student performance but also contributed to professional teacher development through reflective and evidence-based practice.

Result

The implementation of the Numbered Heads Together (NHT) model in Islamic Education learning at SD Negeri Seumantok showed a clear improvement in student learning outcomes across two cycles. The results were measured based on learning outcome tests, student participation observations, and teacher performance assessments. The data were analyzed using descriptive statistics to determine the mean scores, percentages of students achieving the Minimum Mastery Criteria (MMC), and levels of classroom engagement.

Table 1. Learning Outcomes of Students Across Pre-Cycle and Cycles I–II

Cycle	Average Score	Students ≥ MMC	Percentage (%)
Pre-Cycle	62.15	10	38.46
Cycle I	72.30	17	65.38
Cycle II	84.10	23	88.46

The pre-cycle assessment indicated that the average score of students was 62.15, with only 38.46% achieving the minimum mastery standard. This low performance reflected the limitations of conventional teacher-centered instruction, where student participation was minimal and engagement in classroom discussion was low.

In Cycle I, after the implementation of the NHT model, the average student score increased to 72.30, with 65.38% of students reaching the MMC. The improvement was accompanied by higher levels of student participation, particularly during group discussions, as students were actively engaged in answering questions collaboratively and discussing solutions with their peers.

By Cycle II, further enhancement was observed, with the average score rising to 84.10, and the percentage of students achieving MMC reaching 88.46%. This indicates that the majority of students successfully mastered the material. Observations of classroom activity also showed significant increases in student engagement and teacher facilitation.

Table 2. Observation of Student Participation and Teacher Performance

Aspect	Cycle I	Cycle II
Student Participation (%)	60	85
Teacher Performance (%)	70	90

The observation data revealed that student participation improved from 60% in Cycle I to 85% in Cycle II, indicating that the NHT model effectively encouraged students to collaborate, communicate, and actively participate. Teacher performance also improved from 70% to 90%, reflecting better classroom management, clearer instructions, and more effective facilitation of group discussions.

Discussion

The results of this study demonstrate that the Numbered Heads Together (NHT) model significantly improves student learning outcomes in Islamic Education learning. The increase in average scores from 62.15 in the pre-cycle to 84.10 in Cycle II indicates that cooperative learning can enhance both comprehension and retention of learning material. This finding aligns with previous research by Kagan (1994), who argued that NHT encourages active participation by making each student accountable for group responses, thereby increasing attention and engagement.

The improvement in student mastery percentages also confirms the effectiveness of NHT in promoting conceptual understanding. During NHT activities, students discussed answers collaboratively and explained concepts to their peers, which facilitated deeper comprehension and clarified misconceptions. According to Slavin (2015), cooperative learning promotes peer-assisted learning, which enhances understanding by allowing students to teach and learn from each other. In this study, the iterative cycles allowed for reflection and refinement, which contributed to incremental improvement in learning outcomes.

Student participation increased markedly from 60% in Cycle I to 85% in Cycle II, highlighting the role of structured group interaction in enhancing engagement. This result supports the findings of Gillies (2016), who emphasized that cooperative learning increases motivation and active involvement, especially when group accountability is implemented. The use of numbered heads ensured that all students were prepared to answer questions, reducing dependency on more capable peers and encouraging equitable participation.

Teacher performance also improved through reflective practice, from 70% in Cycle I to 90% in Cycle II. The CAR framework facilitated systematic evaluation of teaching strategies, allowing the teacher to refine instructions, question design, and group facilitation in response to student needs (Burns, 2010). Effective teacher facilitation was crucial in maintaining focus, guiding discussions, and providing feedback, which further supported learning outcomes (Hattie, 2009).

The enhancement of learning outcomes in Islamic Education can also be understood from a constructivist perspective. NHT encourages students to actively construct knowledge through dialogue, explanation, and negotiation within their groups (Piaget, 1970; Vygotsky, 1978). Students were not passive recipients of information; instead, they engaged in meaningful interactions that helped them internalize Islamic concepts, moral values, and ethical reasoning. This finding is consistent with Rahmawati (2020), who found that NHT improves understanding and retention through collaborative discussion and peer teaching.

Moreover, the significant improvement across cycles demonstrates the value of iterative classroom action research. CAR allowed the teacher to identify challenges in Cycle I, such as unequal participation or hesitation in answering, and make adjustments for Cycle II. This iterative refinement is supported by Kemmis and McTaggart (2014), who highlighted that cycles of planning, action, observation, and reflection are effective for enhancing both teaching practices and student outcomes.

The results also indicate that NHT supports the development of 21st-century skills such as collaboration, communication, and critical thinking. Students were required to listen, explain, and justify answers during group discussions, which promoted cognitive engagement and social interaction. Trilling and Fadel (2009) emphasize that cooperative learning models facilitate skill development beyond cognitive achievement, which is particularly valuable in subjects like Islamic Education, where ethical reasoning and moral application are key learning objectives.

In addition, the improvement in teacher performance illustrates the reciprocal nature of CAR, where teacher reflection enhances instructional effectiveness. Teachers who implement NHT must monitor group dynamics, provide timely feedback, and encourage all students to participate. This professional development aspect aligns with Darling-Hammond et al. (2017), who argue that reflective practice in teaching enhances instructional quality and student learning.

The study also highlights the practical relevance of cooperative learning in religious education contexts. Islamic Education learning benefits from interactive and collaborative methods because they facilitate both cognitive understanding and moral internalization (Azra, 2017; Zubaedi, 2017). Through NHT, students not only learn religious concepts but also practice cooperation, respect, and responsibility in their interactions, reflecting the dual cognitive and affective goals of Islamic Education.

In conclusion, the implementation of the NHT model in Islamic Education learning at SD Negeri Seumantok effectively increased student learning outcomes, participation, and teacher performance. These findings corroborate prior research on the effectiveness of cooperative learning models in elementary education and extend it to the context of religious education. The structured, accountable, and interactive nature of NHT, combined with the reflective CAR framework, provides a robust approach for improving both academic and moral development in students (Lie, 2010; Wahyuni & Fitriani, 2019).

Conclusion

The implementation of the Numbered Heads Together (NHT) model in Islamic Education learning at SD Negeri Seumantok effectively improved student learning outcomes, as evidenced by the significant increase in average scores from 62.15 in the pre-cycle to

84.10 in Cycle II, and the rise in students achieving the Minimum Mastery Criteria from 38.46% to 88.46%. The NHT model enhanced student participation, collaboration, and accountability, while also improving teacher performance in facilitating interactive learning. The structured cooperative learning approach fostered active engagement, deeper conceptual understanding, and moral internalization, demonstrating that NHT is a viable and effective instructional strategy for Islamic Education in elementary schools. These results suggest that integrating cooperative learning models like NHT, combined with reflective classroom action research, can strengthen both cognitive and affective outcomes, promoting holistic development in students and providing practical guidance for teachers to enhance the quality of religious education.

References

Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.

Ary, D., Jacobs, L. C., Sorensen, C., & Walker, D. (2019). *Introduction to research in education* (10th ed.). Cengage Learning.

Azra, A. (2017). *Islamic education in contemporary society: Theory and practice*. Prenada Media.

Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners*. Routledge.

Creswell, J. W. (2018). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2017). Implications for educational practice of the science of learning and development. *Applied Developmental Science, 21*(2), 97–140. https://doi.org/10.1080/10888691.2017.1398640

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences, 111*(23), 8410–8415. https://doi.org/10.1073/pnas.1319030111

Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education, 41*(3), 39–54. https://doi.org/10.14221/ajte.2016v41n3.3

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

Huda, M. (2018). *Teaching and learning of Islamic education: Contemporary perspectives*. Kencana.

Johnson, B., & Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches* (7th ed.). SAGE Publications.

Johnson, D. W., & Johnson, R. T. (2009). *An educational psychology success story: Social interdependence theory and cooperative learning*. Educational Researcher, 38(5), 365–379. https://doi.org/10.3102/0013189X09339057

Kagan, S. (1994). *Cooperative learning*. Kagan Cooperative Learning.

Kemmis, S., & McTaggart, R. (2014). *The action research planner* (5th ed.). Springer.

Lie, A. (2010). *Cooperative learning in the classroom*. Grasindo.

Mertens, D. M. (2019). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (5th ed.). SAGE Publications.

Nata, A. (2016). *Islamic education and character building in elementary schools*. Prenada Media.

Piaget, J. (1970). *Science of education and the psychology of the child*. Orion Press.

Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education, 93*(3), 223–231. https://doi.org/10.1002/j.2168-9830.2004.tb00809.x

Rahmawati, D. (2020). The effectiveness of Numbered Heads Together model in improving students' learning outcomes. *Jurnal Pendidikan Islam, 7*(1), 45–56.

Sanjaya, W. (2017). *Strategi pembelajaran berorientasi standar proses pendidikan*. Kencana.

Sari, F., & Putra, I. (2021). Improving student learning achievement using Numbered Heads Together in primary school. *Elementary Education Journal, 5*(2), 112–121.

Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2014). *Motivation in education: Theory, research, and applications* (4th ed.). Pearson.

Slavin, R. E. (2015). *Educational psychology: Theory and practice* (11th ed.). Pearson.

Suyanto, S., & Jihad, H. (2018). Teacher perspectives on cooperative learning in Indonesian elementary schools. *Indonesian Journal of Education, 3*(1), 1–15.

Tilaar, H. A. R. (2019). *Education in Indonesia: Policy, practice, and challenges*. Springer.

Trianto. (2018). *Model-model pembelajaran inovatif: Paradigma baru pendidikan.* Kencana.

Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. Jossey-Bass.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wahyuni, S., & Fitriani, N. (2019). The effect of Numbered Heads Together model on students' critical thinking and engagement. *Jurnal Pendidikan Dasar, 10*(2), 75–88.

Zubaedi, A. (2017). *Integrating Islamic values in primary school education: Theory and practice.* Prenada Media.