



Strengthening Islamic Education Learning Outcomes through The Discovery Learning Model

Sutanto^{1(✉)}, Jazilurrahman²

^{1,2} Universitas Nurul Jadi Probolinggo, East Java, Indonesia

ABSTRACT

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^(✉)Corresponding Author:
asyarisutanto@gmail.com

This study aims to explore the application of the Discovery Learning model to enhance learning outcomes in Islamic Education. The research adopts a qualitative case study approach. Data collection methods include participant observation, in-depth interviews, and documentation, analyzed using Miles and Huberman's interactive model (data reduction, data display, and conclusion drawing). The findings demonstrate that the implementation of the Discovery Learning model positively influences multiple aspects of learning. These include the redesign of the Islamic Religious Education curriculum, intensive teacher training, structured lesson planning, and application of Higher Order Thinking Skills (HOTS)-based assessments. Notably, student participation transformed from passive to active, with marked improvements in critical thinking, learning motivation, understanding of religious concepts, and assessment outcomes. Around 80% of students showed enhanced motivation and engagement, and assessment results improved by approximately 20% compared to traditional methods. The implications of this study emphasize that Discovery Learning fosters not only cognitive mastery but also independent exploration and contextual application of Islamic teachings. This student-centered model bridges theoretical knowledge with real-world practice, making Islamic Education more relevant and impactful. However, its success is contingent on teacher readiness and continuous professional development. The research suggests that broader implementation across various educational institutions could contribute significantly to modernizing religious education practices in Indonesia.

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INTRODUCTION

The achievement of learning outcomes plays a critical role in the success of the educational process. Learning outcomes represent the level of student mastery over subject matter following structured learning activities, typically measured through formal assessments (Zhang, Lucas, Bem-haja, & Pedro, 2024). However, despite the adoption of progressive educational frameworks such as the 2013 Curriculum and the Merdeka Curriculum, Islamic Religious Education (PAI) learning at SMP Nahdlatul Ulama' 07 Wringin Bondowoso continues to rely predominantly on conventional, teacher-centered methods. This reliance has resulted in low student engagement, poor exploration skills, and a failure to meet the Minimum Completion Criteria, with only 35.18% of students achieving the expected standards. This situation highlights a significant discrepancy between curriculum goals and actual classroom practice.

The observed gap reflects a broader theoretical and practical issue in the learning process. While modern educational theories emphasize student-centered approaches, real-world implementation often remains rooted in outdated teacher-centered models. This discrepancy leads to students becoming passive recipients of information rather than active constructors of knowledge. Consequently, students struggle to think critically, solve problems independently, or apply religious concepts in real-world contexts. This educational reality, particularly in Islamic Religious Education, necessitates a transformation toward more dynamic and interactive learning strategies, such as Discovery Learning, which emphasizes active participation and independent exploration.

Previous research has established the effectiveness of the Discovery Learning model in improving student learning outcomes. Studies by Zakiyah, (2023); Mulyadi, (2023); Muzani, (2023) demonstrated that Discovery Learning enhances student engagement, learning activities, and academic performance across various subjects. However, these studies primarily focused on general academic achievements and did not specifically explore the development of religious understanding through Discovery Learning. Thus, the novelty of this research lies in its unique focus on the Exploration of Religious Understanding through the implementation of Discovery Learning in Islamic Religious Education, aiming to not only improve cognitive outcomes but also deepen students' internalization of Islamic teachings and values.

In light of this gap, the objectives of this study are formulated clearly. First, the study aims to explore how the Discovery Learning model enhances students' religious understanding in the context of Islamic Religious Education. Second, it seeks to analyze the extent to which Discovery Learning affects the learning outcomes of students at SMP Nahdlatul Ulama' 07 Wringin Bondowoso. By addressing these objectives, the research aspires to offer new insights into the role of student-centered learning models in Islamic education and contribute to the

ongoing efforts to reform and modernize educational practices in Indonesia.

The argument underpinning this research is based on constructivist learning theory, which posits that students learn best when they are actively involved in constructing their own knowledge (Zhang et al., 2024). Accordingly, this study hypothesizes that the implementation of the Discovery Learning model significantly improves both religious understanding and learning outcomes in Islamic Religious Education among students at SMP Nahdlatul Ulama' 07 Wringin Bondowoso. This hypothesis rests on the assumption that allowing students to discover concepts independently leads to deeper comprehension, better retention, and the ability to apply knowledge in real-life situations.

In the context of Islamic Religious Education, the Discovery Learning model is expected to shift the classroom dynamics from passive reception to active exploration, enabling students to engage more meaningfully with religious teachings (Baharun, 2023; Hasanah, 2024b). Students will have greater opportunities to connect theoretical concepts with practical applications, thereby fostering critical thinking, creativity, and deeper religious insight (Juhaidi, Fitria, Hidayati, & Saputri, 2025). The research thus addresses a critical need for innovative learning models that align educational practices with contemporary pedagogical principles while preserving the core values and objectives of Islamic education.

RESEARCH METHOD

The research method is a process of activities carried out in a structured, systematic and planned manner with the aim of getting a solution to a problem or getting an answer to the research being studied. The researcher in this study used a qualitative approach and a case study type, because this study attempted to explore, collect and analyze data on one case, namely the Exploration of Religious Understanding; implementation of the Discovery Learning learning model in improving PAI learning outcomes at SMP Nahdlatul Ulama' 07 Wringin Bondowoso.

This research is located at SMP Nahdlatul Ulama' 07 Wringin Bondowoso. The time of this research was carried out from February to April 2024. In searching for data from subjects and informants using a snowball sampling pattern, which is rotating from one informant to another and will end if the field data has been obtained in detail, valid and complete, so that it is stated that the data is saturated. The subjects and informants of the research who will be used as sources of data collection by researchers are the principal, vice principal, Islamic Religious Education teachers, and students at SMP Nahdlatul Ulama' 07 Wringin Bondowoso.

In the process of collecting research data, the researcher used three research techniques, namely in-depth interviews, participant observation, and documentation studies. The researcher used the participant observation method.

This participant observation is used to dig up data from data sources in the form of events, places, objects, as well as recordings and images from research subjects and informants, the researcher involved himself or interacted directly in the activities carried out by the research subjects, both from the principal, vice principal, PAI teachers, and students at SMP Nahdlatul Ulama' 07 Wringin Bondowoso.

The researcher used interview techniques to obtain research data in the form of dialogue and discussion to answer the focus of the research problem. In the interview, the researcher interviewed the principal, vice principal, Islamic Religious Education teacher, and students at SMP Nahdlatul Ulama' 07 Wringin Bondowoso.

Furthermore, the documentation method is used by researchers to examine and obtain data from several archives and important documents of madrasas regarding religious moderation. Documents that will be examined and studied include school profiles, school curriculum, activity documents, learning device documents, meeting documents, management documents, activity photos and so on.

In this study, the researcher used descriptive qualitative analysis of Miles and Huberman type. Through this analysis, it is expected to obtain a clear picture of the focus of the research above. Data analysis techniques in case study research include structured and specific analysis methods developed by Miles and Huberman, namely: data reduction, data presentation and drawing conclusions (Pérez Dávila, 2020).

RESULT AND DISCUSSION

Result

In this chapter, the results of the research findings and discussions obtained through participant observation, interviews and document studies will be outlined. Exploring Religious Understanding; the Implementation of Discovery Learning Model in Enhancing Islamic Education Learning Outcomes in SMP Nahdlatul Ulama' 07 Wringin Bondowoso, Then, the findings will be analyzed and discussed with relevant theories. The research findings and discussion results are as follows:

Curriculum development

Curriculum development at Nahdlatul Ulama' 07 Middle School, Wringin, was initiated through the formation of a curriculum development team comprising Islamic Religious Education (PAI) teachers and curriculum development staff. The purpose of this initiative was to redesign the PAI curriculum using a more innovative and student-centered approach aligned with the Discovery Learning model (KS.10/02/24).

Curriculum is understood as a systematically planned and implemented program designed to achieve educational objectives within the school setting. Its main components include objectives, learning content, methods or strategies,

and evaluation tools. The redesigned curriculum aimed to foster active learning, critical thinking, and a deeper understanding of Islamic teachings among students.

The development process was divided into several phases: a) Preparation Phase, the team conducted a comprehensive literature review on Discovery Learning and analyzed the compatibility of its principles with Islamic Religious Education (PAI). Key findings suggested that Discovery Learning could encourage students to independently explore Islamic concepts, thus enhancing their internalization of religious values. b) Curriculum Mapping and Planning, teachers identified essential Islamic concepts suitable for Discovery Learning, such as the Five Pillars of Islam, principles of faith (iman), Islamic ethics (akhlaq), and the study of Qur'an and Hadith. Lesson plans were designed to incorporate exploratory activities, problem-solving tasks, and group discussions. c) Teacher Training Workshops, a series of workshops was organized to train PAI teachers in designing Discovery Learning activities, formulating open-ended questions, and creating assessment tools to evaluate deeper understanding rather than rote memorization. d) Implementation Phase, discovery Learning strategies were implemented in the classroom. Students worked individually and collaboratively to investigate religious concepts, utilizing Qur'an translations, Hadith collections, and secondary Islamic literature. e) Monitoring and Evaluation, students' learning progress was monitored through classroom observations, formative assessments, reflective journals, and interviews. Teacher feedback was also collected to assess the effectiveness of the new curriculum approach.

Table 1. The following table summarizes the observed differences before and after the application of the Discovery Learning model:

Aspect	Before Discovery Learning	After Discovery Learning
Student Participation	Passive, teacher-centered	Active, student-centered
Critical Thinking	Low	Significantly improved
Learning Motivation	Moderate	High
Understanding of Concepts	Surface-level, memorization-based	Deep, analytical, and reflective
Assessment Results	Average	Above average, with more consistent gains
Teacher's Role	Knowledge transmitter	Facilitator and guide

The evaluation showed that students became more engaged during lessons. They asked more questions, demonstrated independent problem-solving skills, and participated more confidently in class discussions. A notable increase in students' ability to relate Islamic teachings to contemporary life issues was also observed. Moreover, post-implementation assessment scores revealed a significant improvement compared to previous periods, indicating that the Discovery Learning model had a positive impact on student learning outcomes in Islamic Religious Education (GPAI, 15/02/24).

Seminar and training on learning models Incovery Learning

The seminars and training activities on the Discovery Learning Model for Islamic Religious Education (PAI) teachers at SMP Nahdlatul Ulama' 07 Wringin have shown significant positive impacts. After attending the training, 92% of the participating teachers reported increased confidence in implementing active learning models in their classrooms. They felt more capable of designing lesson plans that encouraged student exploration and discovery.

Furthermore, 85% of teachers stated that the Discovery Learning Model helped students connect Islamic religious concepts with their everyday experiences more effectively. Teachers observed that students were not only memorizing religious texts but were also understanding how to apply Islamic values in real life, which aligned with the broader goals of PAI.

Another important outcome is that 78% of teachers reported improvement in their ability to handle sensitive and complex religious topics. With the strategies gained through seminars and training, teachers became more adept at facilitating open discussions while maintaining respect and sensitivity towards the subject matter.

Moreover, student engagement levels also increased notably. Approximately 80% of teachers indicated that, following the implementation of Discovery Learning strategies, their students were more active and participative during PAI lessons. Students displayed higher levels of curiosity, asked more questions, and took more initiative in learning activities.

These improvements were documented through post-training surveys and feedback forms completed by the teachers. The data reflect not only an enhancement in the teachers' pedagogical skills but also a noticeable positive shift in student learning behaviors, suggesting that the training program effectively met its objectives.

Preparation of Learning Plans with the Discovery Learning learning model

The preparation of the Islamic Religious Education (PAI) learning plan using the Discovery Learning learning model at SMP Nahdlatul Ulama' 07 Wringin began with a structured and detailed process. Initially, the curriculum development team identified clear learning objectives to be achieved in each Islamic Religious Education material. This identification phase is crucial because it directs all subsequent activities toward achieving the intended learning outcomes. After determining the objectives, the team carefully designed learning activities that provided opportunities for students to explore and discover Islamic religious concepts independently.

In the design of these activities, the role of the teacher was emphasized as a facilitator rather than a primary source of information. Students were encouraged to engage in observation, discussion, experimentation, and critical reflection to construct their understanding of the material. This aligns with the

basic principles of Discovery Learning, which emphasizes student initiative and active learning. Furthermore, the development team prepared a variety of relevant learning resources, including texts, visual media, and interactive activities that supported the discovery process.

The learning plan also integrated problem-solving elements, where students were faced with real or simulated problems related to Islamic teachings. Through these problems, students practiced interpreting religious values within contemporary contexts. This method was designed not only to deepen students' understanding but also to make learning more meaningful and applicable to real life.

Data from the implementation showed that about 78% of teachers felt more confident in facilitating exploratory learning sessions after following the learning plan structure. Meanwhile, 82% of students reported higher interest and motivation in Islamic Religious Education lessons when allowed to find answers themselves rather than listening passively. Based on classroom observations, the level of student participation increased significantly, with around 75% of students actively involved in discussions, group work, and presentations.

Another important finding was that students' understanding, as measured by formative and summative assessments, improved by 20% compared to traditional teaching methods used previously. The Discovery Learning model also fostered critical thinking and creativity, with teachers observing more diverse and original answers from students during learning activities.

In terms of planning challenges, the preparation phase required more time and effort from teachers, especially in designing discovery-based learning scenarios and preparing adequate learning media. However, the results achieved were considered worth the extra investment of time and energy. Teacher feedback suggested that with more training and experience, the preparation of Discovery Learning-based learning plans would become more efficient.

Overall, the preparation and implementation of PAI learning plans using the Discovery Learning model at SMP Nahdlatul Ulama 07 Wringin were successfully realized with a high level of teacher and student involvement. The structured planning process, active student engagement, and measurable improvements in learning outcomes indicate that this model is an effective approach for Islamic Religious Education learning in this context.

Implementation of PAI learning based on the Discovery Learning learning model

The implementation of Islamic Religious Education (PAI) learning based on the Discovery Learning model at SMP Nahdlatul Ulama' 07 Wringin successfully shifted the learning approach from teacher-centered to student-centered. This shift created a learning environment where students became active participants in their own educational process. Learning activities were

deliberately designed to provide opportunities for students to explore, discover, and build their understanding of Islamic religious concepts independently.

In practice, learning began with structured planning that incorporated Discovery Learning principles. Teachers identified specific learning objectives, examined the characteristics of students, selected relevant learning materials, and arranged topics from simple to complex. Learning activities such as group discussions, experiments, and problem-based projects were implemented to encourage student engagement. During these activities, students worked collaboratively and engaged in critical thinking, while teachers acted as facilitators, guiding students without directly providing answers.

Formative and summative evaluations were conducted to measure the effectiveness of this model. Observations showed that student participation increased significantly, with more students expressing their opinions, asking questions, and actively collaborating during learning sessions. Data indicated that approximately 80% of students showed increased motivation and enthusiasm during Islamic Religious Education lessons. In addition, assessments of students' understanding of religious concepts demonstrated improvement, with many students able to explain Islamic teachings more clearly and apply them contextually.

Feedback collected from students also supported these findings. Most students stated that they felt more interested and involved when they were given the freedom to explore religious issues independently. Moreover, teachers reported that students' critical thinking skills and creativity developed noticeably after the implementation of the Discovery Learning model. Overall, the application of this learning model produced positive impacts on student engagement, motivation, understanding, and the overall learning atmosphere in PAI classes.

HOTS-based PAI learning session

The implementation of HOTS (Higher Order Thinking Skills)-based learning in Islamic Religious Education (PAI) at SMP Nahdlatul Ulama' 07 Wringin shows a significant shift toward encouraging students' high-level cognitive abilities. Through the use of varied evaluation instruments, students are trained to think critically, analytically, synthetically, and creatively.

HOTS emphasizes students' ability to engage in more complex and critical thinking processes. Students are not only tasked with memorizing or understanding material but are directed toward analyzing information, evaluating arguments, and synthesizing knowledge to apply in real-world contexts. In PAI learning, this approach has enabled students to better understand Islamic teachings and their relevance to everyday life.

The school integrates HOTS through various forms of open-ended questions and project-based assignments. For example, students are asked to analyze Qur'anic verses or hadiths and conclude their meanings or are assigned

projects that require designing solutions to social problems using Islamic principles. Such activities train students to move beyond rote learning and into deeper critical reflection.

Formative evaluations at SMP Nahdlatul Ulama' 07 Wringin show an improvement in students' engagement levels and the depth of their understanding. Students are increasingly able to apply Islamic concepts creatively in different contexts. According to the cognitive domain based on Bloom's Taxonomy, the focus is on the three higher levels: analyzing, evaluating, and creating, which form the foundation of HOTS.

The results highlight that HOTS-based assessments not only measure students' knowledge but also foster their skills and attitudes necessary to face modern societal challenges while remaining rooted in Islamic values.

DISCUSSION

The findings from the implementation of HOTS-based Islamic Religious Education (PAI) learning at SMP Nahdlatul Ulama' 07 Wringin provide significant insights into how higher-order thinking skills can be effectively cultivated within religious education contexts. Firstly, the shift from memorization-based learning to critical and creative thinking marks a fundamental transformation in students' cognitive engagement (Nisa', Mundiri, Manshur, & Munir, 2024). Students no longer simply recall information but are actively challenged to analyze, evaluate, and create, which fosters a deeper connection to Islamic concepts (Stacey, 2024).

Secondly, the structured use of open-ended questions and project-based assignments has proven effective in strengthening students' analytical abilities. By being tasked with interpreting Qur'anic verses or solving societal issues through Islamic teachings, students gain valuable experience in applying theoretical knowledge to practical situations (Baharun, Wahid, Muali, & Fajry, 2022). This bridges the gap between religious knowledge and contemporary life, making Islamic teachings more relevant and actionable (Kurata, Adekunle, & Rosemary, 2025).

Thirdly, the emphasis on the higher levels of Bloom's Taxonomy—analyzing, evaluating, and creating—ensures that learning outcomes move beyond superficial understanding. Students demonstrate the ability to dissect complex problems, assess various solutions, and innovate based on Islamic values (Berhanu & Naidoo, 2024). This approach not only improves academic performance but also instills a mindset that is adaptable to the demands of modern society (Munif, Rozi, & Yusrohlana, 2021).

Fourth, the HOTS-based assessment model encourages independent learning and self-directed inquiry among students. They are prompted to develop arguments, support them with evidence, and present reasoned conclusions. This process is crucial in preparing students for the real world, where independent, critical thinking is essential for success across various fields,

including social, political, and economic arenas (Sharma, Chakraborty, & Singh, 2024).

Fifth, the integration of HOTS principles in PAI learning has been shown to increase students' motivation and engagement. When students are given the autonomy to explore and apply religious knowledge creatively, their intrinsic motivation grows (Badiani, Willard, & McNamara, 2023). This leads to sustained engagement, better retention of knowledge, and a more positive attitude towards Islamic learning, contrasting with traditional passive learning methods (Hidayat et al., 2024).

These results collectively illustrate that HOTS-based approaches not only enhance cognitive skills but also deeply influence students' attitudes towards religious knowledge. Students come to view Islamic teachings not just as static doctrines but as dynamic principles that can be applied thoughtfully in solving real-world challenges. This recontextualization fosters a modern Islamic identity rooted in critical reflection and social responsibility.

However, successful implementation requires continuous professional development for teachers. Educators must be adept at designing complex, authentic assessments and guiding students through high-level cognitive processes (Xuan Lam et al., 2024). This demands a systemic commitment to training, curriculum adjustment, and the provision of adequate resources to maintain the quality and consistency of HOTS-based learning experiences. The findings suggest that embedding HOTS in Islamic Religious Education has profound implications for the broader educational landscape. It calls for a reorientation of religious curricula to focus more on critical and creative thinking, thereby preparing students not only to master Islamic teachings but also to become thoughtful, problem-solving contributors to society. Schools must prioritize pedagogical strategies that promote critical inquiry and ensure that Islamic education remains relevant and transformative in a rapidly changing world.

CONCLUSION

Based on the findings, this study concludes that the implementation of the Discovery Learning model at Nahdlatul Ulama Middle School 07 Wringin Bondowoso significantly enhances Islamic Education learning outcomes. The most important findings highlight that successful implementation involves several integrated components: careful curriculum preparation, structured seminars and training sessions for teachers, detailed lesson planning that applies Discovery Learning principles, effective execution of Discovery Learning strategies in the classroom, and the use of HOTS-based assessments to evaluate students' learning progress. Theoretically, this study implies that Discovery Learning not only fosters greater religious understanding among students but also promotes critical thinking, creativity, and independent learning, making it a relevant approach for Islamic Education in the modern educational context. It

supports the view that active, student-centered learning models can be effectively integrated into religious education without compromising core religious values. However, this research also faces certain limitations. The study was conducted within a single school environment, limiting the generalizability of the findings to broader contexts. Furthermore, the success of Discovery Learning implementation depended heavily on the commitment and readiness of the teaching staff, suggesting that varying teacher competencies could influence different outcomes. Future research should consider a wider range of schools and include longitudinal studies to observe the long-term impact of Discovery Learning in Islamic Education settings. Overall, this study provides valuable insights while opening new avenues for further exploration and refinement of learning models in Islamic educational institutions.

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