

DEVELOPMENT OF ISLAMIC RELIGIOUS EDUCATION LEARNING MATERIALS BASED ON HIGHER ORDER THINKING SKILLS (HOTS) TO IMPROVE STUDENTS' CRITICAL THINKING SKILLS

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Abstract: This study focuses on the development of Higher Order Thinking Skills (HOTS)-based Islamic Education (PAI) materials at SMA Negeri 15 Garut, aimed at enhancing students' critical thinking skills. HOTS-based learning is essential in the Society 5.0 era, which requires analytical, evaluative, and creative skills, as well as students' ability to internalize religious values in an applied manner. The research method used is classroom action research with a qualitative approach, involving observation, interviews, and documentation to analyze students' critical thinking skills. The study results show that HOTS-based materials are able to increase students' active engagement in class and encourage them to critically analyze and evaluate religious teachings. Students also demonstrate improvements in learning independence and metacognitive awareness, which play an important role in developing their life skills. These findings contribute significantly to the development of a HOTS-based PAI curriculum, which is expected to shape a generation with character and competitiveness in the future. This study recommends the broader implementation of HOTS across various educational levels and enhancing teachers' capacity to develop HOTS-based materials.

Keywords: Higher Order Thinking Skills (HOTS), Islamic Religious Education, Development of Learning Materials.

INTRODUCTION

Higher Order Thinking Skills (HOTS)-based learning has become a crucial focus in modern education, particularly in facing the challenges of Society 5.0, which emphasizes technological mastery and critical thinking skills. In the context of Islamic Religious Education (PAI), the development of HOTS-oriented materials is expected to encourage students not only to understand religious values textually but also to analyze, evaluate, and create solutions to relevant problems in everyday life (Halimah, 2024).

The implementation of HOTS in Islamic Religious Education (PAI) aims to provide students with deeper critical thinking skills regarding Islamic teachings, enabling them to internalize religious values more effectively in their daily lives (Aufa Muis et al., 2024). Research by Murawski (2022) shows that HOTS-based teaching helps students develop higher-order thinking skills such as analyzing problems, evaluating information, and formulating logical arguments. In the context of Indonesian education, HOTS is seen as a crucial component in developing an intelligent, critical, and character-based golden generation of 2045 (Ichsan et al., 2019; Saputri et al., 2019).

However, in practice, challenges remain in integrating HOTS into Islamic Religious Education (PAI) learning. A study by Handayani et al. (2023) revealed that many Islamic Religious Education (PAI) teachers still tend to use traditional teaching methods that focus more on memorization and less on guiding students to think critically. This poses a major obstacle to developing students' critical thinking skills, particularly in the high school context, where critical thinking is crucial to prepare them for higher education.

Several studies have shown that the application of HOTS in Islamic Religious Education (PAI) learning can increase student participation in class discussions and encourage them to be actively involved in the learning process. A recent study by Halimah (2024) stated that the application of HOTS in Islamic Religious Education (PAI) learning can increase students' cognitive engagement and encourage them to think reflectively. Meanwhile, research by Nurdin (2023) showed that HOTS-based learning models in Islamic Religious Education (PAI) can improve student motivation and achievement in several high schools in Indonesia.

At SMA Negeri 15 Garut, the development of HOTS-based Islamic Religious Education (PAI) materials is expected to address the challenges of the modern era, which demands that students not only understand religious teachings but also apply them critically in real life. This approach aligns with Indonesia's national education goals, which aim to produce a generation of faithful, devout, and noble characters, as well as possess critical and creative thinking skills.

Against this backdrop, this study aims to develop HOTS-based Islamic Religious Education (PAI) learning materials that can enhance students' critical thinking skills at SMA Negeri 15 Garut. This research is expected to contribute to the development of learning models relevant to the needs of the digital era and support the achievement of comprehensive educational goals in preparing an intelligent and moral Indonesian generation.

METHOD

This research uses a qualitative approach with a classroom action research (CLRS) or case study method (Assingily, 2021). Classroom action research is highly suitable for developing learning materials because it allows researchers to directly intervene in the classroom learning process, observe, and refine approaches based on observations and student feedback.

The data used in this study focused on qualitative data, including observations of student behavior and responses during the learning process, interviews with Islamic Religious Education (PAI) teachers and students regarding the effectiveness of HOTS-based materials, and documentation in the form of student work or reflective notes demonstrating their critical thinking skills. Observations were conducted to assess student responses and engagement during HOTS-based Islamic Religious Education (PAI) learning. These observations could be conducted directly in class and documented through field notes. Interviews were conducted with teachers and students to gain an in-depth understanding of the impact of HOTS-based materials on their learning process. Interviews can help identify challenges and successes in the development and implementation of these materials. Documentation included collecting student assignments, reflective notes, and recordings of the learning process to assess the extent to which students had developed their critical thinking skills.

The collected data were analyzed using thematic analysis techniques, where data from observations, interviews, and documentation were grouped based on relevant themes, such as students' analysis, evaluation, and synthesis skills. Each theme was analyzed in depth to determine the effectiveness of HOTS materials in improving critical thinking skills. This procedure also involved data triangulation to ensure the validity of the research results, namely by comparing data from various sources and methods (observation, interviews, documentation). The qualitative approach in this study allowed researchers to gain a deeper understanding of the process of developing HOTS-based Islamic Religious Education materials and their impact on improving students' critical thinking skills at SMA Negeri 15 Garut.

RESULTS AND DISCUSSION

Result

This study reveals several key findings related to the development of HOTS-based Islamic Religious Education (PAI) learning materials and their impact on students' critical thinking skills at SMA Negeri 15 Garut. Based on classroom observations, interviews, and documentation, it was found that the implementation of HOTS in Islamic Religious Education materials had a significant impact on improving students' critical thinking skills.

1. Student Involvement and Active Participation

Classroom observations show that students who learn using HOTS-based Islamic Religious Education materials tend to be more active in the learning process. HOTS-based learning encourages them to engage more in class discussions, ask questions, and present arguments in a more logical and structured manner. This is a significant achievement, especially in the context of religious studies, which is often perceived as a subject of memorization and passive understanding.

For example, when given material that requires students to explore the meaning of Quranic verses in the context of modern life, students become more motivated to speak and discuss. They show a greater interest in asking questions about things they don't understand and are more willing to put forward their own views, supported by logical arguments. This not only improves their understanding of the material but also builds their confidence to communicate effectively in an academic setting.

This active participation aligns with research findings (Indriyani et al., 2024), which show that implementing HOTS in learning can increase students' cognitive engagement. This increased cognitive engagement is not only crucial for religious learning but also for preparing students to face the challenges of an increasingly complex and dynamic world. Through HOTS, they become more active in processing information, analyzing arguments, and boldly expressing opinions based on in-depth thinking.

2. Improved Analysis and Evaluation Skills

The second finding of this study indicates that students experienced significant improvement in their analytical and evaluation skills regarding Islamic Religious Education (PAI) material. One of the analytical assignments given to students involved examining and evaluating various sources of religious teachings in the context of everyday life. Students were asked to identify various interpretations of religious teachings and develop critical arguments regarding the relevance of these teachings to their lives.

Through this assignment, most students were able to recognize differences of opinion in various religious interpretations and develop logical and in-depth arguments. They also demonstrated the ability to distinguish between fact and opinion, and evaluate the relevance and validity of the sources they used. This demonstrates that HOTS material can develop students' higher-order thinking skills, in accordance with Bloom's Taxonomy theory, which emphasizes the importance of analytical and evaluation skills as the basis for HOTS development (Taufikurohman & Maemonah, 2024).

The implementation of HOTS in Islamic Religious Education (PAI) materials allows students to understand religion not merely as an abstract concept, but as teachings that have a real impact on their daily lives. For example, when discussing the concept of honesty, students are encouraged to analyze how this value is applied in their social lives and how they can critique challenges that may arise when practicing these teachings. This kind of critical thinking equips students to take a more conscious and reflective stance based on religious values.

3. Learning Independence and Metacognitive Development

The third important finding is the increase in students' learning independence and metacognitive awareness as a result of the implementation of HOTS-based learning (Sidiq et al., 2021; Kumanda^o-Öztürk et al., 2025). The development of materials that require critical thinking has been shown to improve students' ability to regulate their own learning process (Muhibbuddin et al., 2023). In interviews, many students expressed that they felt more motivated to understand Islamic Religious Education material in depth due to the challenges presented in HOTS-based learning. They acknowledged that this approach made them feel more responsible for their own understanding, which encouraged them to put more effort into solving problems independently.

Metacognitive awareness, the ability to be aware of one's own thinking processes (Wardana et al., 2020), is crucial in education. When students possess this awareness, they are able to plan, monitor, and reflect on their learning process, making learning a more personalized and purposeful experience. This finding aligns with research (Nurdin, 2023) which emphasizes that HOTS can develop independent thinking skills in students. Students with strong metacognitive awareness are able to identify their weaknesses, seek solutions to improve their understanding, and devise more effective learning strategies in the future. For example, students who recognize they are struggling to analyze a topic tend to seek ways to improve

their analytical skills. Several students, in interviews, stated that they began seeking additional resources outside of the course material to deepen their understanding. These actions demonstrate that they have developed critical thinking skills not only in academic contexts but also in the context of their lives in general.

From the three main findings above, it is clear that the implementation of HOTS in Islamic Religious Education (PAI) learning has a significant positive impact on students. HOTS-based learning materials not only help students better understand religious material but also encourage the development of critical thinking skills essential for facing life's challenges. Furthermore, this approach enhances students' independence and self-awareness, essential competencies in 21st-century education.

However, to optimize these results, teachers need to consider several aspects. First, they must continuously develop and update learning materials to suit the context of students' modern lives. The application of HOTS will be more effective if the materials used are relevant to students' daily experiences, so they can see the connection between religious learning and real life. Furthermore, teachers need ongoing training in HOTS-based teaching strategies, as this approach requires specialized skills in facilitating discussions and providing effective guidance to students.

Overall, this study demonstrates that developing HOTS-based Islamic Religious Education (PAI) materials has significant potential to improve critical thinking skills, learning independence, and metacognitive awareness in students at SMA Negeri 15 Garut. With the right approach, HOTS can be used to transform religious education from mere rote-based instruction to a more active, reflective, and life-relevant learning process. The results of this study provide an important contribution to the development of Islamic Religious Education (PAI) curriculum in senior high schools, which can serve as a reference for improving the quality of religious education more broadly in Indonesia.

Discussion

Islamic Religious Education (PAI) in Indonesia plays a strategic role in shaping students' character and morality. In the context of the Society 5.0 era, which demands critical, analytical, and creative thinking skills (Santoso et al., 2023), Islamic Religious Education (PAI) learning needs to be adapted to meet these demands. One approach that can be implemented to improve the quality of Islamic Religious Education (PAI) learning is by using Higher Order Thinking Skills (HOTS). HOTS encourages students to not only

understand the material fundamentally but also to analyze, evaluate, and create creatively from the information they receive.

1. Benefits of Developing HOTS-Based Islamic Education Materials

The development of HOTS-based Islamic Religious Education (PAI) materials offers significant benefits for improving students' critical thinking skills. HOTS focuses on higher-order cognitive skills, encouraging students to be more active in the learning process (Tasrif, 2022). Research conducted at SMA Negeri 15 Garut shows that the application of HOTS in Islamic Religious Education (PAI) learning encourages students to go beyond a basic understanding of religious teachings. Students are not only provided with textual and literal knowledge of Islamic teachings but are also encouraged to examine the meaning of these teachings in various social, cultural, and ethical contexts.

For example, in topics like social justice in Islam, students are not only taught theories of justice but are also presented with real-life cases relevant to their daily lives. This allows them to examine how Islamic principles of justice can be applied to real-life situations they face, whether within their families, communities, or in their future professional lives. This creates a more applicable and relevant understanding (Alpindo et al., 2024; Surjanti et al., 2022).

The theory underlying the benefits of HOTS is Bloom's Cognitive Taxonomy, which suggests that to develop critical and analytical thinking, learning must encompass higher levels such as analysis, synthesis, and evaluation (Winarti & Istiyono, 2020). In the context of Islamic Religious Education (PAI), this approach teaches students not only to passively process information but to actively interact with the material, analyze it, and develop new ideas based on their understanding of religious texts.

2. Implementing HOTS to Form a Character-Based Generation

The application of HOTS in Islamic religious education aims not only to improve students' cognitive skills but also to shape their character (Lestari & Suyadi, 2021). In HOTS-based Islamic education (PAI) learning, students are encouraged to think critically and reflectively about the religious values they are learning. This process allows them to internalize religious values in a deeper and more critical way.

The importance of character in religious education is inseparable from the goal of national education, namely to produce a generation that is not only intelligent, but also has integrity, character, and strong morals (Suwartini, 2017). HOTS helps students not only learn about religious norms

and teachings in theory, but also to be able to apply these values in real life. For example, students who are trained to think critically through HOTS will be better able to evaluate complex life situations, such as differences of opinion in society, and find solutions based on the religious principles they have learned.

In the context of Society 5.0, the generation capable of adapting to technological and social changes is one with strong critical thinking skills and morality (Kaharuddin et al., 2024). HOTS supports the formation of the golden generation of 2045, who are not only skilled in technology but also possess a strong understanding of deep ethical and moral values. Therefore, HOTS is key in shaping students' character to face the challenges of an increasingly complex world.

3. Improving Critical Thinking Skills as a Provision for Students' Life

Critical thinking skills developed through HOTS-based learning provide crucial tools for students facing life outside of school. Critical thinking involves the ability to carefully analyze information, evaluate arguments, and draw logical conclusions. These skills are invaluable not only in academia but also in professional and social life (Annas et al., 2024).

Students trained in critical thinking will be better prepared to face greater challenges after completing their education. In the workplace, they will face a variety of problems that require analytical thinking and innovative solutions. Furthermore, in their daily lives, they will be better able to address social and moral issues wisely and based on the principles they learned in school.

According to (Nurdin, 2023), improving critical thinking skills is also related to improving students' metacognitive skills, namely the ability to understand and manage their own thought processes. HOTS provides space for students to evaluate their thinking, so they can continuously improve these skills.

CONCLUSION

HOTS-based learning plays a crucial role in modern education, particularly in addressing the challenges of Society 5.0, which emphasizes critical, analytical, and creative thinking skills. In the context of Islamic Religious Education (PAI), developing HOTS-based materials provides students with opportunities to not only understand religious teachings textually but also to analyze, evaluate, and solve problems relevant to everyday life. The implementation of HOTS at SMA Negeri 15 Garut has demonstrated significant

impacts in enhancing student engagement, critical thinking skills, and metacognitive awareness.

This study found that HOTS-based learning increased students' active participation in class discussions, improved analytical and evaluation skills, and encouraged independent learning. Students became more active in examining religious values, not only in theoretical contexts but also in their real-life applications. By encouraging reflective thinking, HOTS helps students internalize religious values more deeply and apply them to facing the challenges of social life.

Furthermore, the HOTS approach contributes to developing critical thinking skills, which are essential for dealing with complex life problems, both in academia and in society. Learning independence and the development of metacognitive awareness are also enhanced, meaning students become more aware of their thinking processes and better able to plan and monitor their own learning.

However, challenges in integrating HOTS into Islamic Religious Education (PAI) learning remain, particularly related to teacher preparedness and the relevance of the material presented. Therefore, ongoing training for Islamic Religious Education (PAI) teachers is needed to enable them to design more challenging and contemporary materials. The religious education curriculum needs to be adapted to support a broader HOTS approach, encompassing the development of critical thinking skills and student character.

Overall, the development of HOTS-based Islamic Religious Education (PAI) materials has significant potential to improve the quality of learning and equip students with the critical thinking skills necessary to face global challenges. This research provides an important contribution to the development of an Islamic Religious Education (PAI) curriculum that can be applied more broadly to create an intelligent and character-based generation, in line with Indonesia's national education goals in the Society 5.0 era.

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