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Optimization of Higher-Order Thinking Skills (HOTS) in Islamic Education towards the Era of Society 5.0

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Abstract

This article aims to explore the importance of optimizing higher-order thinking Skills (HOTS) in Islamic education towards the Society 5.0 era. One of the things behind this needs to be studied because several Islamic educational institutions still apply conservative learning methods which tend to only focus on memorization and repetition of concepts, not encouraging students to think critically and creatively. The method used in preparing this article is Library Research. The results of this research show that the Society 5.0 Era is characterized by a rapid and complex technological revolution, where humans play a major role in facing global challenges and opportunities. Therefore, Islamic education must adapt and improve human quality through the application of HOTS. HOTS is a high-level thinking ability that includes analysis, evaluation, and creation. This ability is needed in facing complex problems and religious challenges in the modern era. Several HOTS-oriented Islamic education learning models have been proposed, such as Problem-Based Learning (PBL), Inquiry-Based Learning (IBL), Project-Based Learning (PjBL), and Flipped Classroom. These models require students to be active in solving problems and applying knowledge in real-life situations so that they can develop HOTS effectively.

Keywords: HOTS, Islamic Education, Society 5.0

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INTRODUCTION

Islamic education is considered an ideal model because it is based on the Al-Quran, Hadith, and inspiring thoughts from philosophers, intellectuals, and ulama. However, in practice, Islamic education still faces various problems. The existence of this problem significantly affects the quality of Muslims born through Islamic educational institutions (Amirudin, 2019). Many Islamic educational institutions still apply conservative learning methods, such as lectures and didactic approaches, which tend to focus more on memorization and repetition of concepts without encouraging students to think critically and creatively. On the other hand, this problem also leads to the marginalization of Muslims in global regulations and competition. The problems faced by Islamic education are partial and not single, but are interrelated and influence each other. (Yasmansyah & Zakir, 2022).

In the 21st century, humans are faced with complex innovations, almost all areas of life are now digital-based in the era of disruption 4.0. Not long ago, Indonesian society was busy with the era of disruption 4.0, while in other countries, for example, Japan, human civilization has moved to a new era known as the Society 5.0 era. In this era, technological progress and rapid economic progress are seen as aimed at meeting the needs of society (Idris, 2022). Humans will be expected to take a more prominent role by utilizing big data to produce wisdom. This transformation increases human abilities to open the way for other individuals to achieve a more focused and meaningful life (Dinna Ririn Agustina, 2019). Thus, improving human quality through Islamic education has urgency in the present era, because in facing the era of society 5.0, the role of humans in the use of technology is more valued or prioritized.

Thaha (2023) stated that the revolution towards the era of society 5.0 requires qualified, competent, and creative human resources. If all technological changes in this era are faced with the old paradigm, it will most likely produce output that is not of sufficient quality to be able to compete in the future. In the education sector, especially Islamic education, the Muslim generation must be equipped with various abilities which include: problem-solving, critical thinking, and creativity (Idris, 2022). HOTS (Higher Order Thinking Skills) is one of the priorities in the Society 5.0 era so that society can adapt in the future (Rostikawati, 2021; Teknowijoyo & Marpelina, 2022).

Pratiwi and Maharani (2020) states that HOTS includes the capacity to creatively and critically utilize existing knowledge and experience, enabling individuals to design, manipulate, and process information, thereby effectively addressing new challenges and making the right decisions in all situations. However, current educational practices mostly focus on Lower to Medium Order Thinking Skills (Nawarul Uyun et al., 2021; Teknowijoyo & Marpelina, 2022). According to Batubara & Sudrajat (2019) dan Hendriawan, (2019), Lower Order Thinking Skills (LOTS) refer to the ability to respond to factual questions with a single, direct answer. These skills usually involve taking information directly from books or relying on memorized facts. On the other hand, it seems that conservative Islamic education learning methods still exist, such as lectures and didactic approaches, because they are considered easier to implement even though they trigger a lack of students' skills to think critically and creatively (Awwaliyah & Baharun, 2018).

Based on a brief literature review and the problems previously described, continuous change and evaluation are needed to ensure the achievement of the goals of Islamic Education in adapting to the Society 5.0 era. One promising approach to achieving this is by optimizing students' critical thinking abilities through higher-order thinking Skills (HOTS). Therefore, the research question of this research is how is Islamic education in the Era of Society 5.0? What is

the Urgency of HOTS (Higher Thinking Order Skills) in Islamic Education in the Era of Society 5.0? And, what Islamic Education Learning Models are HOTS-oriented?

METHODS

The method used in preparing this article is to collect data by searching for related references, both manually by reading books and by digital exploration of scientific articles available online. Thus, this paper is classified as library research, where the main object of study uses library data consisting of books as a source of relevant data (Santoso et al., 2023). After the data is collected, the next step is to display, reduce, and construct the data to produce new concepts that are relevant and up-to-date in this field of research.

FINDINGS AND DISCUSSION

Islamic Education in the Era of Society 5.0

Islamic education aims to form Muslim humans holistically, develop their material and spiritual potential, and foster harmonious relationships between humans, Allah, and the universe (Zafi, 2019). Islamic education leads to a learning and teaching process that focuses on understanding, instilling values, and applying the teachings of the Islamic religion. The main aim of Islamic education is to form Muslim individuals of quality and noble character, who can develop their potential holistically and become members of society who contribute positively. Bahri (2022) states that Islamic education has been categorized into three different forms: Islamic education as an institution, Islamic education as a subject, and Islamic education as a value. As a mandatory subject, Islamic religious education is included in the curriculum of all schools, from elementary to tertiary level.

The development of Islamic education is certainly inseparable from the dynamics of the times. The existence of Islamic education must be maintained even though there are many challenges in the era of disruption and even the era of society 5.0. Rozi, Dewi, Fatah, Mahmud, & Madhekan, (2022) revealed that the challenges of Islamic education in the Society 5.0 era have a significant impact on people's lives, therefore the importance of facing these obstacles effectively is emphasized. Islamic education must focus on fostering emotional, spiritual, and skill-based competencies in society so that it is in line with the goals of Society 5.0, which aims for a smart society. Competencies in the Society 5.0 era are referred to as the 4C dimensions, which include critical thinking, collaboration, communication, and creativity.

The Society 5.0 era marks a technological revolution that breaks through the boundaries of society, fundamentally changing the social, economic, and cultural order. In this era, technological innovations such as artificial intelligence, the Internet of Things (IoT), big data, robotics, and other technologies have become an integral part of our daily lives. In this context, Islamic education is faced with new challenges and opportunities to utilize technological advances to improve the quality and impact of religious education. Santoso et al. (2023) stated that Society 5.0 emerged as an answer to the challenges posed by the Industrial Revolution 4.0 which presented disruption characterized by a world full of turmoil, uncertainty, complexity, and ambiguity. This new Society 5.0 is expected to be able to overcome various social challenges and problems by utilizing innovations originating from the Industrial Revolution era.

In this increasingly connected and global era, Islamic education must encourage students to understand and apply Islamic values in various complex and diverse life contexts.

The use of technology in Islamic education is also important to face the challenges of digital information and skills. Students must be taught to use technology wisely, filter information, and participate actively in the digital world without forgetting Islamic moral and ethical values. Apart from that, Islamic education in the Era of Society 5.0 must prepare students to become future leaders who are globally competitive. Education must encourage students to become innovators and drivers of positive change in society, with a strong moral and ethical foundation by Islamic values.

The Urgency of HOTS (Higher Thinking Order Skills) in Islamic Education in the Era of Society 5.0

Higher Order Thinking Skills refer to students' cognitive abilities that operate at a high level of thinking. These skills are developed through a variety of learning concepts and methods, including problem-solving approaches, Bloom's taxonomy, and the teaching and assessment taxonomy (Muthoharoh, 2020). Hafizon and M Amril (2022) state that Higher Order Thinking Skills (HOTS) are high-level thinking skills that are mandatory for students. This ability not only tests intellectual memory but also tests students' ability to evaluate, create, analyze, and think critically about understanding subject matter. Students are directed to focus more on critical thinking when facing problem-solving situations in a particular subject context.

Based on the definition above, it can be understood that HOTS is an activity that involves the ability to think critically and creatively, as well as skills in making complex decisions. This will help students become more adaptive, innovative, and effective individuals in facing the challenges of the modern world which is full of diverse information and complexity. Memorizing lesson material is still important as a basis for knowledge, but HOTS emphasizes how students can use this knowledge in real-life situations. The application of HOTS allows students to connect theory with practice, encouraging them to become independent and critical learners.

There are several indicators to measure higher-order thinking abilities (HOTS). This then becomes a reference for educators to design learning that emphasizes high-level thinking abilities in students. These indicators include:

Analyze

- Analyze and group data into smaller components to reveal patterns or connections.
- Distinguish and distinguish the causes and effects of complex scenarios.
- Formulate relevant questions in line with the information provided

Evaluate

- Critically evaluate solutions, ideas, and methodologies against relevant criteria or standards to determine their effectiveness or superiority.
- Formulate hypotheses, research, and experimentally test ideas or solutions.
- Accept or reject a statement based on predetermined criteria

Create (Generate new ideas)

- Formulate generalizations from various ideas or perspectives in various scientific fields.
- Design innovative solutions to overcome problems or challenges.
- Rearranging elements or components into new structures that have never been imagined before (Muthoharoh, 2020).

This HOTS indicator is key to effective learning because it encourages students to think critically, analytically, and creatively. The application of HOTS in learning will help students develop high-level thinking skills which are very necessary in facing changes and challenges in the increasingly complex and diverse modern era. If it is related to Islamic education, in the Era of Society 5.0, religious challenges are increasingly complex and diverse. It is no longer enough for students to just memorize Islamic teachings but also must be able to think critically and analytically in understanding complex issues. HOTS allows students to analyze information, recognize cause and effect factors, and formulate questions relevant to various religious situations.

The Islamic Education Learning Models is HOTS-oriented

The Islamic Education learning model oriented to higher-order thinking Skills (HOTS) is designed to develop high-level thinking skills in students. The main aim is to encourage students to think critically, analytically, creatively, and innovatively in understanding Islamic teachings and facing various religious and social challenges in the modern era. Some examples of HOTS-oriented Islamic education learning models include:

Problem-Based Learning (PBL)

Problem-based learning (PBL) is a learning model that immerses students in authentic scenarios to facilitate their capacity to independently develop understanding, higher-order thinking abilities, and investigative skills. Through this model, students gain confidence in their learning process and become more independent learners. In PBL, students are faced with authentic problems, so they need to be active in finding solutions and applying the knowledge and skills they already have to overcome these challenges (Kurniasih et al., 2020). Thus, students must identify, analyze, and solve the problem. This process involves critical and creative thinking in finding the right solution. Students are encouraged to think more deeply, investigate various aspects of a problem, and consider alternative solutions before reaching a final decision. In this process, they develop better problem-solving abilities.

Afandi & Handayani (2020)) state that in this learning model, the teacher acts as a facilitator, encouraging students to be more active and critical in the learning process. Students are presented with a problem and assigned to collaboratively solve it in groups. These discussions occur among peers and also involve interaction with the teacher. The purpose of this discussion is to stimulate active student involvement and encourage deeper mastery of the material studied. So, students need to identify facts, recognize relevant information, and understand the relationships between various concepts. This analysis process encourages the development of students' HOTS (Higher Order Thinking Skills).

Inquiry-Based Learning (IBL)

This learning model refers to a series of learning activities that emphasize the importance of critical and analytical thinking to search for and find answers to questions. In IBL, inquiry is an approach that encourages students to carry out independent exploration and experimentation to understand phenomena, find solutions, ask questions, find answers, and relate findings to each other, as well as compare the results of their findings with findings from other students(Achmad Dicky Santoso et al., 2023).

IBL is a learning model that allows students to build meaningful connections between religious teachings and their daily experiences. In this way, religious values become more relevant and practical in everyday life. Thus, the application of IBL in Islamic Religious

Education can increase students' understanding and appreciation of religious teachings, as well as help them develop a critical and analytical attitude in understanding the meaning and implications of the religious values being studied.

Project-Based Learning (PjBL)

The project-based learning model is rooted in the philosophy of constructivism, emphasizing that student knowledge is built through cognitive processes, honed by scientific skills, and shaped by individual learning experiences. The main goal of this approach is to overcome the problem of slow knowledge formation in students and improve problem-solving abilities, learning motivation, critical thinking, communication skills, and data collection abilities. Student involvement in projects can actively build knowledge and develop a deeper understanding of the subject matter(Ananda & Maemonah, 2022).

Ali Mufti (2022) states that the project-based learning model has several distinctive characteristics. First, this model gives students a problem or challenge that they must face. Second, this model aims to encourage students to experience more interesting and meaningful learning experiences. Third, students are expected to be able to produce a real product as a result of the learning process. Finally, the evaluation process is carried out on an ongoing basis to monitor student development and achievements. Project-based learning is a learning method that supports the development of student creativity and is very suitable for developing higher-order thinking skills (HOTS). In the context of PAI learning, this helps students develop a deep understanding of religious teachings and connect them to real contexts.

Flipped Classroom

In 2007, Jonathan Bergmann and Aaron Sams introduced the Flipped Classroom concept. Flipped Classroom is a learning model that uses e-learning as a learning tool. This learning model requires teachers to plan learning materials by utilizing technology as a tool (Masripah et al., 2019). When in class, students become active in activities such as case studies, lab tests, practicums, games, simulations, and experiments. These activities aim to strengthen students' understanding and skills through direct experience and interaction with the material. Tasks such as writing essays and solving problems are better carried out in class so that teachers or lecturers can provide direct guidance. Meanwhile, listening and viewing teaching materials are more effective at home via video. This whole concept is known as flipped learning, which allows students to be more actively involved in the learning process and deepen understanding through a combination of in-class and online learning. (Hadi & Hamid, 2020).

In the Flipped Learning model, the teacher or lecturer will provide Islamic Religious Education learning content in the form of videos, presentations, or other multimedia learning resources. Students can access these materials at home before class. Through this multimedia content, students will have the opportunity to process information independently, understand religious concepts, and identify questions or problems that need to be discussed further. Teachers can provide real-life cases or scenarios that challenge students to use critical and creative thinking to find solutions based on religious values.

By strengthening the HOTS-oriented learning approach, Islamic education can give birth to a generation of quality Muslims, able to adapt to changing times and contribute positively to creating a better society. Therefore, educators and Islamic educational institutions need to adopt a HOTS-oriented learning model and continue to encourage students to think critically, analytically, creatively, and innovatively in understanding religious teachings and

facing various religious and social challenges in the modern era. Thus, Islamic education can become a strong foundation for the progress and prosperity of Muslim society in facing the Society 5.0 era which is full of opportunities and challenges

CONCLUSION

Islamic education must be able to face the challenges of the Society 5.0 era by developing emotional, spiritual, and skills-based competencies in society so that they are in line with the goals of Society 5.0, namely a super smart society. Islamic education must also prepare students to become future leaders who are globally competitive, with a strong moral and ethical foundation by Islamic values. HOTS (Higher Order Thinking Skills) is important in Islamic education in the Era of Society 5.0 because it helps students develop high-level thinking skills which are very necessary in facing changes and challenges in the increasingly complex and diverse modern era. Students must be able to think critically, analytically, and creatively in understanding complex issues in a religious context.

Several HOTS-oriented Islamic education learning models include Problem-Based Learning (PBL), Inquiry-Based Learning (IBL), Project-Based Learning (PjBL), and Flipped Classroom. These models are designed to develop higher-order thinking skills in students, encourage a deep understanding of religious teachings, and relate them to real-life contexts. HOTS-oriented learning helps students become adaptive, innovative, and effective individuals in facing the challenges of the modern world. By strengthening the HOTS-oriented learning approach, Islamic education can produce a generation of quality Muslims and contribute positively to creating a better society in the Society 5.0 era.

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