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## CHARACTERIZING TEACHER READINESS AND STRATEGIES FOR EMBEDDING HIGHER-ORDER THINKING SKILLS (HOTS) IN THE ISLAMIC EDUCATION CURRICULUM

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### Abstract:

This research explores two main areas: first, what prevents Islamic Education teachers from fully understanding and mastering Higher Order Thinking Skills (HOTS), and second, what challenges they face when developing effective teaching strategies and collaborative approaches. This research follows a straightforward qualitative methodology to explore our research questions. Five Islamic Education teachers from secondary schools were interviewed and carefully selected through purposive sampling. The interviews followed a semi-structured format. The analysis process involved manually coding the data and organizing the findings into major themes. The findings indicate that teachers struggle to implement HOTS successfully because they only possess a fundamental understanding of the concept. Factors leading to these issues were lack of specific HOTS training, dense syllabus, high workload, and lack of teaching materials. In addition, challenges such as lack of collaborative work culture and administrative support also hinder the effective implementation of HOTS. Participants suggested various forms of support, including professional training, relevant teaching materials, mentoring, strengthening of Islamic Education committees, and parental support for embedding HOTS in teaching strategies. This study makes an important contribution to enhance teaching strategies among Islamic Education Teachers by emphasizing the need for structured and comprehensive support to help teachers overcome the challenges of implementing HOTS. In addition, this study proposes an integrated support model that can be applied to increase the effectiveness of implementing HOTS in Islamic Education.

**Keywords:**

Administrative Support, Collaborative Work Culture, Higher Order Thinking Skills, Islamic Education, Professional Training

**Introduction**

Higher Order Thinking Skills (HOTS) are an important element in today's global education system, in line with efforts to produce students who are critical, creative, and innovative. Through group work activities with similar abilities, teacher guidance, and solving problems without immediate solutions can have a positive impact that can improve higher-order thinking skills (Mitani, 2021). Malaysia has integrated Higher Order Thinking Skills (HOTS) into all subjects under the Standard Secondary School Curriculum (KSSM), with Islamic Education being no exception. According to Hasanah et al. (2022) Islamic Education is crucial not only for building students' character and moral values but also for developing their ability to handle future challenges. Beyond academic learning, Islamic Education cultivates students' moral character, strengthens their religious values, and builds their confidence to uphold truth which are the qualities that create positive ripple effects throughout families and communities (Hasanah et al., 2022). Therefore, the integration of HOTS in this subject not only improves teaching effectiveness but also ensures that students can apply knowledge practically in their daily lives. According to Muhammad Talhah Ajmain @ Jima'ain et al., (2023) research, to develop Higher Order Thinking Skills effectively, Islamic Education teachers need a combination of positive attitude, personal motivation, strong knowledge foundation, and well-developed reasoning capabilities (Muhammad Talhah Ajmain @ Jima'ain et al., 2023).

While implementing Higher Order Thinking Skills (HOTS) in Islamic Education, teachers face significant challenges. Many struggle to effectively integrate HOTS into their teaching methods, which impacts the quality of classroom instruction. Teachers who handle Islamic Education in Malaysian schools face obstacles when trying to integrate Higher Order Thinking Skills (HOTS) into their lessons (Rafizah Mohamed Salleh et al., 2020). There are several main factors that contribute to this issue. First, teachers' level of understanding of the HOTS concept is too low, which causes difficulties in meaningfully integrating this approach into their teaching. According to Retnawati et al. (2018), Teachers understand that Higher Order Thinking Skills (HOTS) are essential for effective teaching, yet many still need to strengthen their knowledge in this area (Retnawati et al., 2018). Teachers that don't understand the concepts and applications of HOTS tend to implement traditional teaching methods, which focus more on memorization and basic understanding than on exploring new ideas or applying knowledge in real situations. However, the application of HOTS elements in teaching involves students in thinking and questioning after learning process, which can solve the challenges faced by teachers. (Libasa et al., 2023).

Teachers' workloads that are too high also contribute to this difficulty. Islamic Education teachers are often involved in various additional tasks such as co-curricular management, reporting, and other administrative responsibilities. Islamic education teachers have a great responsibility not only in the field of Islamic studies, morals, and physical education, but also social education and intellectual education (Nurhadi & Harahap, 2021). This situation limits their time to plan, prepare and implement learning activities that support HOTS consistently.

The lack of collaboration between Islamic Education teachers in developing effective teaching strategies was also identified as a major obstacle. Collaborative support between teachers is important to enable them to share best practices and solve common challenges. Student academic performance can be improved by Teacher collaboration in schools but factors such as teacher reluctance, engagement, and training hinder its implementation (García-Martínez et al., 2021). However, the lack of this collaborative culture often causes teachers to struggle individually to integrate HOTS into their teaching.

Guided by these issues, this study was conducted to fulfil two main objectives. First, This research aims to uncover what prevents Islamic Education teachers from fully understanding and successfully implementing Higher Order Thinking Skills (HOTS) in classroom instruction. This objective is important to identify the root causes of the problems faced by teachers, thus providing a basis for developing more effective solutions. This research also examines how Islamic Education teachers navigate challenges when developing collaborative approaches and effective strategies for integrating Higher Order Thinking Skills (HOTS) into their teaching. This analysis can provide guidance to stakeholders to design more relevant support for teachers.

This study provides significant contributions to various parties. This research offers practical recommendations to help the Ministry of Education Malaysia create targeted initiatives for improving how Islamic Education teachers implement HOTS in their classrooms. Training programs tailored to the needs of teachers can help them understand the HOTS concept more deeply and apply it more effectively. Teachers will be able to improve their competence to implement higher-order thinking skills-oriented learning through training programs, participate in professional development by organizations, and collaborating with colleagues. (Susilowati & Suyatno, 2021).

Second, this study provides guidance to the education community such as schools in providing a more supportive environment for the implementation of HOTS. School administrators, colleagues, and parents play kind of important role in providing moral, material, and technical support to teachers that facilitate learning activities requiring HOTS, such as books, educational games, and access to technology (Cigdem Hursen, 2021). With a conducive environment, teachers can perform their duties more effectively.

Third, this study also benefits the education industry, such as in the provision of teaching materials and technology support. The findings of this study can be used by educational resource providers to develop teaching materials that are appropriate for the needs of Islamic Education Teachers. In addition, technologies such as applications or learning platforms that support HOTS (Mazlina Ahmad et al., 2021) can also be developed to assist teachers in planning innovative learning activities.

Finally, this work adds significant insights to the growing body of knowledge in Islamic Education. This research offers new insights into the issue of teacher readiness in implementing HOTS, especially in the context of Islamic Education. By contributing to the existing literature, this study helps to broaden understanding of the challenges and strategies in implementing.

## Literature Review

Like many countries globally, Malaysia recognizes Higher Order Thinking Skills (HOTS) as an essential component of modern education. Students need various thinking skills to meet modern challenges effectively. These include critical and creative thinking, Problem-solving abilities, analytical skills, evaluation capabilities, and synthesis of information. All together these skills foster innovation and creativity needed for the 21st century (Helena Silva et al., 2021). Through the Standard Secondary School Curriculum (KSSM), Malaysia prioritizes HOTS development, enabling students to transfer their academic knowledge to practical, everyday situations. Effective HOTS implementation requires innovative teaching strategies that can increase critical thinking, creativity, and problem-solving such as scenario-based education, cultural adaptation, and job shadowing, which have been identified as transformative educational activities (Muh. Ibnu Sholeh et al., 2023). The implementation of HOTS in Islamic Education encounters significant obstacles, particularly regarding teachers' readiness, comprehension, and ability to develop effective instructional approaches. Many teachers continue to rely on traditional, teacher-centered methods that do not foster critical thinking or problem-solving skills. (Muhammad Talhah Ajma'in@Jima'ain et al., 2024). Therefore, this section discusses the literature relevant to this study, including the concept of HOTS, its implementation challenges, and potential strategies that can help resolve related issues.

### *Concept and Importance of HOTS*

Higher Order Thinking Skills, as described in Bloom's Taxonomy, represent advanced cognitive processes where learners analyse information critically, evaluate concepts systematically, and create new knowledge from existing understanding (Anderson & Krathwohl, 2001). Through advanced cognitive processes such as problem-solving, decision-making, and creative thinking, HOTS enable students to navigate complex situations, adapt to new challenges and succeed in today's dynamic world (Letchumanan et al., 2023). In educational settings, HOTS serves as a crucial bridge that connects academic knowledge with practical, everyday applications. Therefore, combining creative pedagogy with Problem-Based Learning can significantly enhance students' HOTS by encouraging students to analyse, evaluate, and derive innovative solutions to complex problems (Harry Affandy et al., 2024).

In the Malaysian education system, HOTS is a focus in the modern curriculum through the Malaysian Education Blueprint (PPPM) 2013–2025. HOTS is seen as an important element to produce students who are balanced in terms of intellect, emotion, and spirituality. The integration of HOTS in Islamic Education enables students to both comprehend religious teachings and effectively apply them to diverse life situations. This approach is expected to produce students who are not only excellent in terms of academics but also have high moral and ethical standards.

### *Level of Understanding and Mastery of Teachers on HOTS*

Teachers' role in implementing HOTS in the classroom is very important. However, studies have found that teachers' level of understanding of this concept is often insufficient. According to research by Indah Wigati et al. (2023) shows that teachers had low abilities to prepare and not creative in developing teaching strategies. They are also not very independent in exploring knowledge with low motivation in reading for understanding of the HOTS concept. This problem stems from the lack of professional training tailored to the needs of teachers, especially in the Islamic Education subject.

Islamic Education teachers often consider HOTS as an approach that is difficult to implement because it requires a major change in traditional pedagogy that is more focused on memorization and basic understanding. The lack of teaching materials that support HOTS is also one of the factors contributing to this weakness. According to research by Haswani Dzul et al., (2022), Administrative support, particularly in providing adequate facilities and teaching resources, is crucial for maintaining effective professional learning communities in schools. This support indirectly enhances teachers' confidence in their ability to teach effectively (self-efficacy). To effectively implement HOTS-based learning activities, teachers need more practical training and guidance. Meanwhile, school leadership must ensure ongoing professional development opportunities that are relevant to teachers' specific teaching disciplines (Narimo et al., 2021).

### ***Challenges of Implementing HOTS in Islamic Education***

The incorporation of HOTS in Islamic Education is hindered by multiple substantial challenges. First, the demanding workload teachers face becomes a major barrier when they need to tackle complex educational challenges, particularly in designing lessons that incorporate Higher Order Thinking Skills (Indah Wigati et al., 2023). Teachers not only have to teach but also carry out additional tasks such as preparing reports, managing co-curricular activities, and other administration tasks. This situation makes it difficult for them to focus on creative and innovative lesson planning. To manage these additional tasks effectively, teachers require adequate support from school administration and access to resources that facilitate their professional duties (Mangahas, 2023). Second, the lack of support from the school and administration also contributes to the weakness in implementing HOTS. Support such as providing additional time for planning, relevant teaching resources, and ongoing training is essential to help teachers implement this approach more effectively. Ongoing professional development is vital for HOTS implementation, requiring a combination of skills-based workshops, collaborative peer learning and interactive professional training (Muzirah Musa & Wan Nor Atiqah Meor Samsudin, 2021). Third, the dense Islamic Education curriculum is also a challenge. Teachers often rush to complete syllabus content, making it difficult for them to integrate HOTS activities that require additional time for implementation. According to Aceng Kokasih et al. (2022), teachers are frequently under pressure to cover extensive syllabus content and leaving little room for the additional time required to implement HOTS activities effectively (Diane Marie Wilson & Suthagar A/I Narasuman, 2020).

### ***Collaboration and Support between Teachers***

Professional collaboration between teachers is seen as one of the best ways to overcome this challenge. Through Professional Learning Communities (PLCs), teachers collaborate to share successful HOTS teaching methods, support each other's professional growth and create integrated HOTS implementation strategies. Training programs should focus on developing teachers' competencies in designing HOTS-oriented lesson plans and assessments (A. S. Ab Halim et al., 2021)

However, research shows that the individual work culture practiced by most teachers in Malaysia often hinders the formation of this collaboration. This individualistic approach is reinforced by the design of their work and the lack of strong pedagogical leadership (Karin Roa-Tampe & Catalina Jesús Zenteno-Silva, 2024). Lack of time and opportunities to collaborate is also a barrier which are most of the teachers often lack the necessary tools and support to create engaging and effective HOTS lessons (Lulwa Khalid et al., 2021).

Collaborative teacher development leads to enhanced student learning outcomes through shared professional growth (Sudrajat et al., 2020). A significant challenge emerges from the shortage of well-structured opportunities for teacher collaboration. To ensure the successful implementation of HOTS, support from the school and administration is critical in creating an environment conducive to professional collaboration. Therefore, encouraging collaborative teaching models and interdisciplinary approaches can help break down silos and promote a more integrated approach to teaching HOTS and lead to the sharing of best practices and innovative methods for integrating HOTS (Mathias Mbu Fonkam & Narasimha Rao Vajjhala, 2024).

### ***Effective Strategies for Integrating HOTS***

Previous studies have identified several effective strategies to help teachers implement HOTS. These include problem-based learning (PBL) approaches (N. Fadilla et al., 2021), collaborative learning (Kaili Lu et al., 2021), and critical inquiry techniques (Damajanti Kusuma Dewi et al., 2021). These approaches can help students develop their analytical, creative, and reflective skills and teachers act as facilitators, guiding students through the problem-solving process and modelling critical thinking skills (Kurnia Fermani Hidayah et al., 2020).

Educational technology serves as a vital tool in facilitating effective HOTS implementation. Digital platforms such as learning applications and visual aids can help teachers plan and implement activities that are appropriate for HOTS requirements. Bloom's Taxonomy-aligned digital assessments serve as valuable tools for evaluating and enhancing students' higher-order thinking capabilities (Vijayakumar. S et al., 2023). Training modules specifically designed for Islamic Education teachers are also needed to increase their level of understanding of how HOTS can be integrated into their teaching. Continuous and intensive training is essential for teachers to effectively implement HOTS in their teaching practices (Nurzalina Hashim et al., 2019).

Although there are many studies on HOTS, there is a significant gap in the context of Islamic Education, especially in Malaysia. Most previous studies have focused more on science and mathematics subjects (A. S. Ab Halim et al., 2021; Harry Affandy et al., 2024; Letchumanan et al., 2023; Mazlina Ahmad et al., 2021; N. Fadilla et al., 2021; Tamilarasi Chandran et al., 2023), while less attention has been paid to religious subjects. Therefore, issues such as factors contributing to Islamic Education teachers' lack of understanding of HOTS, the unique challenges faced by teachers in developing collaboration, and practical strategies that are appropriate to the reality of Islamic education still require further research.

The literature review informed the development of a conceptual framework comprising three essential components. First component is the teacher factor, which includes the level of understanding, professional training, and their attitudes towards HOTS. The second component is institutional barriers, including workload, time constraints, and lack of teaching materials. The third component is collaborative support, which includes the role of professional learning communities, peer guidance, and technological support. All three components are interrelated in determining the effectiveness of HOTS implementation in Islamic Education.

Previous studies indicate that the effectiveness of HOTS implementation depends significantly on teachers' comprehension of its principles. However, there is debate about the best approach to address this issue and according to Mohamad et al., (2021) systematic drill practices enhance

secondary school students' Higher Order Thinking Skills performance in examinations (Mohamad et al., 2021). Professional training emerges as a key solution, as it enhances both teaching practices and students' academic performance across all subject areas (Kalinowski et al., 2020), while others have emphasized that systemic workplace culture improvements and institutional support, particularly through enhanced teamwork and collaborative problem-solving, positively impact HOTS implementation in teaching (Hajime Mitani, 2021).

The integration of HOTS in Islamic Education raises important considerations about maintaining religious authenticity, preserving core educational objectives and adapting teaching approaches effectively. Active learning methods, such as genre-based and blended learning, have been shown to significantly enhance HOTS in Islamic Education. Students develop stronger critical thinking and problem-solving abilities through methods that encourage deep engagement with subject matter (Karwadi Karwadi et al., 2024). Thus, shifting towards more interactive and student-centered approaches is necessary to achieve the desired outcomes (Muhammad Talhah Ajma'in@Jima'ain et al., 2024). This indicates the need to develop an approach that is more sensitive to the context of religious education.

The integration of HOTS in Islamic Education encounters various intricate challenges, as evidenced by existing literature. Lack of teacher understanding (Haswani Dzul et al., 2022), high workload, and lack of professional collaboration (Nurzalina Hashim et al., 2019) are among the key issues that need to be addressed. Despite existing strategic proposals, additional research is necessary to examine the specific factors affecting HOTS implementation in Malaysian Islamic Education. The study seeks to bridge current research gaps through investigating teachers' readiness for HOTS implementation, barriers to effective collaboration and strategic solutions for Malaysian secondary education.

### **Methodology**

This qualitative investigation examines the underlying factors that influence Islamic Education teachers' ability to comprehend HOTS principles, master HOTS implementation and apply HOTS effectively. It is also aimed to analyse the challenges faced by teachers in developing effective collaboration and strategies to integrate HOTS. Five participants consisting of Islamic Education teachers in secondary schools were interviewed in depth. The selection of participants used purposive sampling strategy with an emphasis on four main characteristics. First, participants were teachers who taught Islamic Education in secondary schools, ensuring that they were relevant to the teaching context studied. Second, participants were selected based on their efforts to integrate HOTS in teaching, enabling them to provide significant insights into the challenges and needs of implementing HOTS. Third, participants' willingness to share their experiences and challenges faced was an important criterion for obtaining in-depth and detailed data. Finally, participants were selected from among teachers in secondary schools in Malaysia, ensuring that this study was relevant to the local educational context. The design of this study was basic qualitative inquiry, which is suitable for understanding teachers' experiences and challenges in detail.

The choice of Basic Qualitative Inquiry design was appropriate because it focused on exploring individual experiences in real situations without the need to make broad generalizations. Qualitative research aims to explore people's experiences and gain a deeper understanding of their meanings through various research designs such as qualitative descriptive, case studies, ethnology, phenomenology or grounded theory (Uwe Flick, 2017). This design allowed the

researchers to understand the factors that contribute to teachers' difficulties in adapting HOTS based on their own experiences and perspectives. It also suited the study's objective to identify the challenges and strategies used by Islamic Education teachers, providing the researchers with an opportunity to explore these issues in depth.

The research design utilized semi-structured interviews and observations as primary data collection tools. The interview format was specifically chosen for its dual benefits that provided a structured framework through prepared guidelines while offering participants the freedom to share their experiences and insights organically. This approach facilitated both systematic data collection and the emergence of unexpected but valuable insights through natural conversation flow. Semi-structured interviews provide the researcher with the flexibility to follow a set of question guidelines while still allowing participants to freely share their views and experiences (Belina, 2023). According to Elaine Denny & Annalise Weckesser (2022), Through focus group interviews and systematic observations, this qualitative research captures a range of perspectives and experiences. Data gathering proceeds until saturation is achieved, meaning no additional unique insights are found (Denny & Weckesser, 2022). Interview questions targeted three fundamental areas which are HOTS understanding, implementation challenges, and support needs that can be revealing crucial insights into teachers' experiences. Observations were used to gain insight into how teachers implemented HOTS in their teaching. Through these observations, the researchers were able to confirm and complement the data obtained from the interviews.

Participants were deliberately chosen using purposive sampling criteria. Purposeful sampling can improve methodological rigor, data reliability, and study findings, as well as address four aspects of reliability (Campbell et al., 2020). The target population consisted of Islamic Education teachers in Malaysian secondary schools who had experience 5 to 15 years in teaching the subject and were trying to implement HOTS in the classroom. Purposive sampling enabled the selection of participants who aligned with the study objectives. For this qualitative research, up to twenty participants were deemed sufficient based on the required depth of information and research scope (Subedi, 2021). A sample size of five was chosen because the qualitative approach places more emphasis on the depth of data than the quantity of participants. These five participants were sufficient to provide rich and meaningful data and reflect various perspectives in the context of this study. The process of collecting interview data took 3 months to complete. The researcher interviewed 3 study participants from the states of Selangor, Negeri Sembilan and Melaka face-to-face and 2 participants from the states of Sabah and Sarawak were interviewed online.

The study employed manual coding and thematic analysis techniques to process research data. The generation of themes in conducting a case study in a qualitative method is important for understanding and contributing to the literature, as well as understanding the research questions and methodology (Mishra & Dey, 2022). All data obtained through interviews and observations were analysed to identify key themes related to the research questions. Hybrid approaches in thematic analysis can effectively interpret various data sources in education and provide insights for researchers (Xu & Zammit, 2020). The coding process helped organize the data into specific relevant categories, while thematic analysis allowed the researchers to identify themes that appeared repeatedly in the data. This manual analysis was conducted with the help of Microsoft Word, which made it easier for the researcher to track patterns and relationships



between themes. This approach is well-suited for this research because it facilitates in-depth data interpretation while maintaining awareness of contextual factors.

Ethical considerations were taken seriously throughout the study. Before data collection, ethical approval was obtained from the relevant authorities. Any research involving human participants requires prior approval before researchers can begin collecting data (Smith, 2024). Participants were fully briefed on the study's purpose, procedures, and data handling methods. All participants signed consent forms and were notified of their freedom to withdraw from the research without repercussions. All personal identifiers were removed from reports and publications to ensure participant confidentiality. While participant confidentiality is guaranteed in social network studies, researchers reserve the right to remove participants who violate community guidelines or pose risks to other members (Abadie et al., 2021).

Rigorous steps were taken to verify data validity and maintain reliability throughout the research process. Data from interviews and observations were combined to provide strong triangulation. Triangulation is a fundamental part of interview research by combining interviews with document review to ensure that information is accurate and reliable (Natow, 2020). Participants were also given the opportunity to review the findings that were relevant to them through a member-checking process, ensuring that the study findings reflected their actual experiences. The researcher's reflection process was also implemented to ensure that the data analysis was free from personal bias.

### **Findings**

The study aims to understand the challenges Islamic Education Teachers face with Higher Order Thinking Skills (HOTS) implementation and identify supportive measures to enhance their teaching practice. Through interviews with five Islamic Education teachers, several key findings were identified indicating various issues that affect the level of understanding, mastery, and effectiveness of HOTS implementation in this subject. Through coding and thematic analysis of interview data, researchers identified central themes that formed the foundation for discussing findings.

Teachers' understanding of HOTS emerged as a key initial finding. Most participants correctly identified HOTS as incorporating critical thinking skills and students' capacity for deep knowledge application. However, teachers had difficulty understanding the specific elements of HOTS, such as identifying questions or activities that met the HOTS criteria, as well as appropriate teaching methods. Teachers also expressed low confidence in implementing HOTS, mainly because they felt they lacked sufficient knowledge about these elements. For example, one participant mentioned that HOTS aims to help students think critically, but it is difficult to apply in Islamic Education because this subject is often seen as a rote subject. Other participants emphasized that they understood the basic concepts of HOTS but did not know how to identify teaching elements that conform to HOTS. This lack of confidence was also influenced by students' perceptions of the subject of Islamic Education, which was seen as more inclined towards memorization rather than critical thinking.

Research revealed multiple critical factors hindering teachers' comprehension and mastery of Higher Order Thinking Skills. The first factor was high workload. Teachers were often involved in various additional tasks such as reporting, co-curricular management, and school administration, which reduced their time to plan HOTS-based teaching. One participant

explained that the high workload caused HOTS not to be a priority in their planning. The second factor was the lack of professional training specifically for Islamic Education. The training provided to teachers often only involved the basics of HOTS without practical guidance on how to integrate it into daily teaching. Other participants stated that the training received was not sufficient to give them a deep understanding of how to implement HOTS in the Islamic Education subject.

In addition, the overly dense Islamic Education syllabus is also a major obstacle to the implementation of HOTS. The pressure to complete the syllabus creates time constraints that limit teachers' ability to implement HOTS-based activities, which typically require extended classroom time. One participant emphasized that their focus is on completing the syllabus, and not on implementing HOTS. The lack of relevant reference materials for Islamic Education also makes it difficult for teachers. One teacher stated that it is difficult to find teaching materials or sample HOTS questions suitable for the Islamic Education subject, which causes them to struggle to plan activities that are in line with HOTS.

Another important aspect identified is the challenge in developing collaboration between teachers. Teachers stated that collaboration with other teachers is important to improve the implementation of HOTS, but there are various obstacles that hinder this effort. One of the main challenges is the busyness of individual work. Teachers are often busy with their respective tasks, resulting in little time to discuss or share best practices. One participant emphasized that their many other tasks prevent them from having discussions together. In addition, the lack of knowledge sharing about HOTS is also an issue. One participant mentioned that some teachers are unwilling to share knowledge, while others face time constraints to engage in discussions.

Another challenge is the lack of self-confidence among teachers. One teacher reported feeling hesitant to collaborate with colleagues regarding HOTS implementation, attributing this reluctance to their own perceived knowledge gaps. Difficulty coordinating schedules between teachers was also a barrier, as stated by one teacher who emphasized that communication became difficult when discussion schedules could not be coordinated. The lack of a collaborative working culture among teachers also contributed to this challenge. One participant stated that most teachers were more focused on their own subjects and did not engage much in collaborative efforts to strengthen the implementation of HOTS.

Teachers also suggested various forms of support needed to help them implement HOTS more effectively. One of the most important forms of support is parental support. One participant stated that parents need to understand and support teachers' efforts to engage students in critical thinking activities and not just memorization. Teachers also emphasized the need for teaching materials that are appropriate for HOTS elements. One participant stated that teaching modules or guides that have been tailored for each field in Islamic Education will make it easier for them to plan relevant activities.

In addition, teachers need additional time for HOTS planning. One participant stated that time constraints are one of the biggest obstacles to implementing HOTS effectively. Teachers also suggested that they be given exposure to management and administrative skills to help them integrate HOTS into teaching. One participant suggested having guidance from a HOTS mentor or facilitator, who can help teachers understand and implement HOTS elements more

confidently. Another suggestion is to strengthen the Islamic Education Committee as a platform for knowledge sharing and ongoing support among teachers.

From all these findings, Islamic Education Teachers face complex challenges in implementing HOTS. Although they have a basic understanding of the HOTS concept, the lack of in-depth understanding and confidence to implement it indicates the need for more comprehensive professional training. Training that focuses on HOTS elements and practical applications in Islamic Education needs to be prioritized. In addition, the high workload, lack of reference materials, and dense syllabus require urgent attention from stakeholders to ensure that teachers have sufficient time and resources to implement HOTS effectively.

The challenges in developing collaboration among teachers also indicate the need to promote a collaborative work culture. The development of professional learning communities (PLCs) by school administrators is crucial for promoting collaborative sharing of proven teaching methods. Support from parents, administrators, and peers is also seen as an important element in increasing the effectiveness of HOTS implementation.

Through systematic analysis, this research identifies the particular challenges Islamic Education teachers face and the support structures they require for effective HOTS implementation. Effective HOTS implementation requires a comprehensive support system, including professional development programs, appropriate instructional resources, and support from both administrators and colleagues. These improvements will enhance Islamic Education instruction while advancing national educational goals of developing students who think critically, create innovatively, and adapt readily to future challenges.

### **Limitations of The Study**

This study focused on five Islamic Education Teachers from secondary school, which may not reflect the experiences of all teachers across Malaysia. In addition, the qualitative approach used focused on individual contexts and experiences, which limited the ability to make broad generalizations about the implementation of HOTS in the Islamic Education Subject.

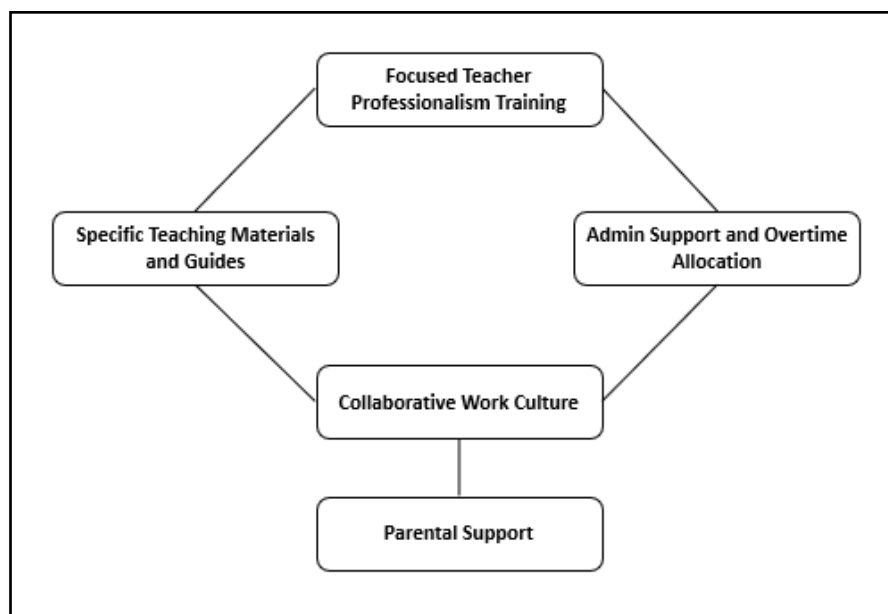
The research maps uncharted territory in understanding how secondary-level Islamic Education teachers navigate unique HOTS implementation challenges. We found several key issues: teachers need better teaching materials, they're struggling with an overcrowded syllabus, and there's room for improvement in how they work together. These findings open doors for future researchers who might want to dig deeper - perhaps by studying more teachers or combining different research methods to get a fuller picture. Importantly, our results suggest it's time to take a fresh look at how we train teachers and structure the syllabus to make HOTS work better in the classroom.

This study provides guidance to school administrators and policymakers to increase support for Islamic Education teachers. Efforts such as the provision of relevant teaching materials, additional time for planning, and the strengthening of Islamic Education committees can enhance the implementation of HOTS. Specific training and mentor guidance are also important to help teachers become more confident and skilled in implementing HOTS.

## Conclusion

This investigation charts previously unexplored territory regarding Islamic Education teachers' HOTS implementation barriers and their essential support needs. Teachers demonstrated a basic understanding of HOTS as an approach to promoting critical and deep thinking, but they faced constraints in its practical application. Lack of specific training, high workload, dense syllabus, and lack of relevant teaching materials were major barriers. In addition, the lack of a collaborative work culture and administrative support also affected the effectiveness of HOTS implementation.

This study highlighted the need for more structured support, such as mentoring, specific teaching materials, additional time, and strengthening of the Islamic Education committee. The research unexpectedly highlighted how parents can influence their children to see Islamic Education as an engaging subject that goes beyond simple memorization. These findings provide important guidance to policymakers and school administrators in supporting the implementation of HOTS.



**Figure 1: Strategies for Embedding Higher-Order Thinking Skills in The Islamic Education Curriculum**

This investigation advances the knowledge base of HOTS implementation in Islamic Education while establishing concrete pathways for nurturing students' critical thinking and innovative capabilities.

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