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CHALLENGES OF FIQH TEACHERS IN DEVELOPING HOTS-BASED ASSESSMENTS: A CASE STUDY IN INDONESIAN ISLAMIC SENIOR HIGH SCHOOL

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Abstract

The low critical thinking performance of Indonesian students, as highlighted by PISA and World Bank reports, underscores the urgency of implementing Higher Order Thinking Skills (HOTS) in assessment practices. While HOTS-based evaluation is emphasized in the Merdeka Curriculum, its application in Islamic subjects, particularly fiqh, remains underexplored. This study investigates the process and challenges faced by fiqh teachers in developing HOTS-based assessments at an Islamic senior high school in Indonesia. Employing a qualitative case study, data were gathered through classroom observation, semi-structured interviews, and document analysis, then analyzed using an interactive model with triangulation for validation. Findings indicate that teachers follow standard steps—competency analysis, blueprint design, stimulus development, item writing, and rubric construction—but encounter significant barriers, including limited mastery of Bloom's Taxonomy, difficulties in creating contextual stimuli, dependence on textbooks, and lack of training. This study highlights the need for targeted professional development to strengthen teachers' capacity in designing HOTS-oriented assessments.

Keywords*: HOTS, assessment, fiqh teachers, challenges, Islamic education*

Abstrak

Rendahnya kemampuan berpikir kritis siswa Indonesia yang ditunjukkan oleh laporan PISA dan Bank Dunia menegaskan urgensi penerapan Higher Order Thinking Skills (HOTS) dalam praktik evaluasi. Meskipun Kurikulum Merdeka menekankan pentingnya penilaian berbasis HOTS, penerapannya pada mata pelajaran keagamaan, khususnya fikih, masih jarang dikaji. Penelitian ini bertujuan menganalisis proses penyusunan serta tantangan guru fikih dalam mengembangkan soal berbasis HOTS di salah satu madrasah aliyah di Indonesia. Metode yang digunakan adalah kualitatif studi kasus dengan teknik pengumpulan data melalui observasi, wawancara semi-terstruktur, dan analisis dokumen. Data dianalisis secara interaktif dengan uji keabsahan melalui triangulasi. Hasil penelitian menunjukkan bahwa guru mengikuti tahapan umum—analisis kompetensi, penyusunan kisi-kisi, pengembangan stimulus, penulisan soal, dan penyusunan rubrik—namun menghadapi hambatan serius, seperti keterbatasan penguasaan Taksonomi Bloom, kesulitan merancang stimulus kontekstual, ketergantungan pada buku teks, serta minimnya pelatihan. Temuan ini menegaskan perlunya pengembangan profesional berkelanjutan bagi guru untuk memperkuat kapasitas dalam merancang penilaian berbasis HOTS.

Kata Kunci: HOTS, asesmen, guru fikih, tantangan, pendidikan Islam

Introduction

Higher Order Thinking Skills (HOTS) are essential twenty-first century competencies that play a pivotal role in education. HOTS emphasize the ability to analyze, evaluate, and create, enabling students not merely to memorize knowledge but to think critically and creatively in solving real-world problems (Thomas & Thorne in Febrina et al., 2019). The urgency of HOTS has been underscored by the 2018 *Programme for International Student Assessment* (PISA), which ranked Indonesia 74th out of 79 participating countries in reasoning and problem-solving (OECD, 2018). Similarly, the World Bank (2022) reported only minimal improvements in Indonesian students' literacy index, highlighting the persistent weakness in critical thinking skills nationwide. These findings emphasize the need for HOTS-based learning and assessment to enhance students' academic outcomes.

The Merdeka Curriculum explicitly promotes HOTS-oriented assessment as a core strategy to strengthen student competencies. Nevertheless, its implementation remains challenging. Previous studies reveal several obstacles faced by teachers, including limited understanding of the revised Bloom's Taxonomy, difficulties in designing contextual stimuli, and heavy reliance on textbooks and student worksheets (Agustini & Fajriyah, 2018; Utari et al., 2022). Although some studies indicate positive perceptions of HOTS among teachers and students (Ome, 2019), effective application requires systematic support, such as professional training, exemplar question banks, and well-structured evaluation frameworks (Widhiyani et al., 2020; Suhaimi et al., 2022).

However, most prior research has predominantly focused on general subjects such as mathematics and science (Rahayu et al., 2020; Kamid et al., 2021), while HOTS development in religious subjects—particularly fiqh—remains underexplored. Fiqh is not only a cognitive subject but also a medium for value internalization, character formation, and the cultivation of critical thinking grounded in Islamic principles (Muchith, 2018). Designing HOTS-based fiqh questions poses unique challenges, as teachers must integrate cognitive, affective, and spiritual dimensions simultaneously.

This gap highlights two pressing needs. First, although the importance of HOTS has been widely acknowledged, studies investigating its application within Islamic education are scarce. Second, the specific challenges faced by fiqh teachers in developing HOTS-oriented assessments remain insufficiently examined through empirical research. Addressing this gap, the present study aims to analyze the process of designing HOTS-based fiqh assessments and to identify the challenges teachers encounter in practice.

The findings are expected to contribute theoretically by expanding HOTS discourse in the context of Islamic education and practically by offering recommendations for teacher professional development to strengthen assessment literacy. Ultimately, this study seeks to enhance the quality of fiqh assessment in Islamic senior high schools and support the broader implementation of the Merdeka Curriculum's competency-based approach.

Methods

This study employed a qualitative approach with a descriptive case study design, which was considered appropriate to obtain an in-depth understanding of the challenges encountered by fiqh teachers in developing HOTS-based assessments. The case study design enabled the researchers to focus on authentic classroom practices, thereby providing a comprehensive exploration of individual experiences as well as the contextual factors influencing the assessment process. The study was conducted at MA Mamba'ul Hisan Kediri, with two fiqh teachers, Mr. Faidhol and Ms. Nailul, as the primary participants. They were selected through purposive sampling on the basis of their direct involvement in designing and implementing HOTS-oriented questions in fiqh. To complement the teachers' perspectives, eleventh-grade accounting students were also included as supporting informants, providing additional insights into how HOTS-based assessments were experienced from the learners' standpoint.

Data were collected through three main techniques. First, passive participant observation was employed to capture the natural process of designing and implementing HOTS-based assessments without direct researcher intervention. Second, semi-structured interviews were conducted with the teachers to gain deeper insights into their experiences, perceived challenges, and strategies in constructing HOTS-oriented items. The interviews were guided by open-ended prompts but allowed flexibility for participants to elaborate on issues they deemed important. Third, document analysis was undertaken by examining relevant materials such as test blueprints, question scripts, and scoring rubrics that had been developed and used by the teachers. These multiple sources of data ensured that the findings reflected both practice and documentation.

The research procedure was carried out in three stages. The pre-fieldwork stage included obtaining permission from the institution, identifying suitable participants, and preparing research instruments. The fieldwork stage involved direct data collection through observation, interviews, and documentation over a period of several weeks to capture consistency and variation in practice. The final post-fieldwork stage focused on data analysis, verification, and reporting, ensuring that the findings were systematically grounded in the evidence gathered.

Data analysis followed the interactive model proposed by Miles, Huberman, and Saldaña (2014), which consists of data condensation, data display, and conclusion drawing. In the condensation phase, raw data were selected, simplified, and categorized into thematic units. These were then displayed in the form of descriptive narratives, matrices, and illustrative excerpts from interviews, enabling the researchers to organize and interpret the data effectively. The process of drawing and verifying conclusions was carried out iteratively, with constant reference to the collected evidence to ensure accuracy and coherence.

To ensure the trustworthiness of the findings, several strategies were applied. Triangulation was employed across sources (teachers and students), methods (observation, interview, documentation), and time (data collected at different moments) to enhance credibility. In addition, member checking was conducted by sharing preliminary findings with the participants, allowing them to confirm or clarify the interpretations made by the researchers. These measures strengthened the validity and reliability of the study, making the conclusions more robust and dependable.

Results and Discussion

Process of Developing HOTS-Based Questions

The findings indicate that fiqh teachers at MA Mamba'ul Hisan Kediri generally followed the standard stages of developing HOTS-based assessments. These stages included analyzing basic competencies, preparing test blueprints, formulating contextual stimuli, writing items, and constructing scoring rubrics or answer keys. However, the implementation was not entirely consistent, and several deviations from theoretical guidelines were observed.

1. Analysis of Basic Competencies

At the first stage, teachers analyzed the basic competencies (BC) outlined in the curriculum to determine which could be transformed into HOTS-oriented items. Operational verbs from the revised Bloom's Taxonomy—analyzing (C4), evaluating (C5), and creating (C6)—were adopted to construct indicators. For example, students were expected to connect concepts to detect errors (C4), assess arguments based on established criteria (C5), or design new solutions to religious or social issues (C6).

Although this process aligned with the theoretical framework of HOTS (Majid, 2018), the findings suggest that teachers often stopped at identifying potential competencies without translating them into concrete indicators that truly demanded higher-order reasoning. This reflects a partial implementation of HOTS principles and echoes Utari et al. (2022), who found that many teachers operate at a moderate level of HOTS proficiency.

2. Development of Test Blueprints

Blueprints are critical for ensuring balanced content coverage, clarity of objectives, and alignment with cognitive levels. In this study, only one teacher (Mr. Faidhol) systematically developed a test blueprint, while the other (Ms. Nailul) proceeded directly to item construction without a structured plan. This inconsistency undermines the reliability and validity of the assessments, as highlighted by Mustahdi (2019), who emphasizes the blueprint as a prerequisite for high-quality HOTS item development.

The absence of blueprints resulted in unbalanced items, with some competencies underrepresented and others overemphasized. This unevenness reflects gaps in assessment literacy among teachers and highlights the urgent need for capacity-building.

3. Designing Contextual Stimuli

Stimuli provide the foundation for HOTS-based questions by presenting problems that require analysis, evaluation, or creation. Both teachers integrated contextual stimuli drawn from historical and social issues, such as the conquest of Makkah, the story of Pharaoh, and contemporary cases of intolerance. These efforts align with Kamid et al. (2021), who assert that contextualization can engage students and promote critical reflection.

However, the diversity and depth of stimuli remained limited. Many items still relied on memorization rather than problem-solving, indicating a lack of creativity in adapting real-world contexts to religious education. Compared with HOTS studies in mathematics or science, where problem scenarios are more systematically developed (Rahayu et al., 2020), the integration of stimuli in fiqh remains underdeveloped. This

points to a unique challenge of religious subjects, where contextualization requires balancing cognitive skills with moral and spiritual considerations.

4. Writing Items Based on Blueprints

The quality of item writing was strongly influenced by whether teachers had prepared a blueprint. For instance, one essay item asked students to evaluate a real-life event through the Qur'anic principle of obedience to Allah and His Messenger (QS. Al-Maidah: 48). This item demonstrated alignment with HOTS at the evaluation level (C5), requiring students to apply normative-religious perspectives to contemporary issues.

Yet, most items focused on analysis (C4) and evaluation (C5), with very few reaching the creation level (C6). This limitation confirms Widhiyani et al. (2019), who observed that teachers often succeed in developing analytical items but rarely extend to creative problem-solving. The findings underscore the challenge of designing C6-level items in fiqh, where creativity must remain faithful to Islamic principles.

5. Constructing Scoring Rubrics

Both teachers constructed scoring rubrics for essay and multiple-choice items. For example, the midterm exam (PTS) consisted of 10 essay questions scored on a scale of completeness, while the final exam (PAS) combined 40 multiple-choice and 5 essay questions. Scoring was conducted systematically, with clear differentiation between complete, partial, and incorrect answers.

While these rubrics demonstrate awareness of systematic assessment practices (Widana, 2020), they were primarily oriented toward the completeness of student responses rather than the quality of reasoning or originality. This outcome-oriented approach limits the ability of assessments to capture the depth of students' critical and creative thinking processes.

6. Challenges in Developing HOTS-Based Questions

Beyond the procedural steps, teachers encountered several key challenges: (1) Limited mastery of Bloom's Taxonomy, particularly in translating theoretical knowledge into practical assessment items; (2) Difficulty in designing contextual stimuli, leading to a dominance of recall-based items; (3) Overreliance on textbooks and worksheets, which reduced originality and hindered innovation; and (4) Insufficient training and professional development, leaving teachers without clear models of HOTS-based assessment in religious education.

These findings resonate with broader literature on HOTS implementation in Indonesia (Agustini & Fajriyah, 2018; Suhaimi et al., 2022). However, this study highlights that the challenges are even more complex in fiqh, where the integration of cognitive, affective, and spiritual dimensions makes HOTS-oriented assessment particularly demanding.

Overall, the findings corroborate existing research indicating that Indonesian teachers struggle with HOTS implementation (Utari et al., 2022). Nevertheless, this study offers new contributions by situating these challenges within fiqh, a subject that goes beyond cognitive knowledge to include moral reasoning and value-based decision-making. Unlike mathematics or science, where HOTS applications are often framed through quantitative problem-solving, fiqh requires students to critically evaluate social and ethical issues within an Islamic framework.

Theoretically, this research expands the discourse on HOTS by demonstrating how its principles must be adapted to the unique demands of religious education. Practically, it highlights the urgent need for professional development programs that not only train teachers in technical assessment skills but also provide strategies for integrating HOTS with Islamic values. Without such interventions, the implementation of HOTS in fiqh risks being superficial and failing to meet the broader objectives of the Merdeka Curriculum, which seeks to foster independent, critical, and creative learners.

Challenges of Fiqh Teachers in Developing HOTS-Based Questions

1. Difficulty in Designing Stimuli and Question Wording

The development of appropriate stimuli is one of the most critical challenges faced by fiqh teachers. HOTS-based assessments require stimuli that are not only engaging but also complex enough to demand analytical, evaluative, or creative responses. As Rahayu, Suryana, and Pranata (2020) highlight, stimuli function as the entry point that frames cognitive processes; weak or oversimplified stimuli inevitably lead to low-level questions. In this study, the teachers attempted to draw on religious narratives such as prophetic stories, as well as social issues like intolerance. While commendable, these efforts were limited in both frequency and variety. Most items still emphasized rote memorization rather than problem-solving, reflecting what Darling-Hammond (2017) terms "surface-level engagement."

The root cause lies in teachers' limited exposure to diverse knowledge sources and insufficient engagement in professional learning communities that encourage the exploration of current socio-religious issues. Moreover, teachers expressed concern about balancing contextualization with doctrinal sensitivity in Islamic education, which often discourages them from experimenting with controversial or ambiguous scenarios. This reluctance constrains their ability to design authentic, challenging stimuli. The implication is clear: without richer and more varied stimuli, students' opportunities to exercise higher-order thinking remain constrained, and the transformative potential of HOTS is left unrealized.

2. Limited Mastery of Bloom's Taxonomy

Another key barrier relates to teachers' partial mastery of Bloom's Taxonomy, particularly its revised version that emphasizes higher-order verbs such as analyzing (C4), evaluating (C5), and creating (C6) (Nafiati, 2021). The study revealed that while teachers recognized these categories in theory, they struggled to operationalize them in practice. As a result, most questions were framed at the comprehension or application levels, with very few extending to evaluation or creation.

This limitation is not unique to fiqh; it reflects a broader issue of assessment literacy in Indonesia, as also reported by Utari et al. (2022). However, in religious education, the challenge is compounded by the dual demand of aligning with Bloom's framework while simultaneously upholding Islamic epistemology and ethics. For instance, while a mathematics teacher can easily design a creation-level problem that asks students to develop a new formula, a fiqh teacher must design a question that encourages innovative reasoning without departing from Sharia principles. This tension contributes to teachers' hesitance and results in conservative item design. The lack of mastery in applying Bloom's taxonomy thus not only reduces the cognitive level of assessments but also perpetuates a culture of low expectations in Islamic learning contexts.

3. Overreliance on Textbooks and Worksheets

The overdependence on textbooks and student worksheets (LKS) constitutes a structural barrier to HOTS implementation. These resources, while beneficial in providing structured content, often encourage replication rather than innovation (Nengsi, Zulyetti, & Nelvi, 2021). The findings demonstrated that many assessment items were directly adapted from textbook exercises, which students could easily memorize. This practice aligns with what Shulman (1987) describes as "pedagogical inertia," where teachers default to pre-packaged materials instead of engaging in the more demanding work of creating original assessments.

The implications are twofold. Pedagogically, students are deprived of authentic learning experiences that demand analysis and creativity. Institutionally, the reliance on standard textbooks reflects a lack of institutional support for developing assessment banks tailored to HOTS, especially in fiqh. Furthermore, the problem perpetuates inequity: students with access to the same textbooks effectively "game the system" by memorizing, while critical reasoning remains undeveloped. Addressing this challenge requires both capacity-building at the teacher level and systemic reform in providing richer assessment resources.

4. Lack of Information, Training, and Socialization on HOTS

Perhaps the most pervasive barrier is the inadequate provision of training and professional development in HOTS-based assessment. While the Merdeka Curriculum formally encourages HOTS integration, teachers reported limited access to practical guidance, workshops, or communities of practice. Suhaimi, Wahdini, and Amberansyah (2022) emphasize that consistent training and socialization are necessary to translate curricular mandates into classroom realities. The COVID-19 pandemic further disrupted opportunities for face-to-face training, reducing the effectiveness of online alternatives that were often generic and poorly contextualized to religious education.

The lack of professional learning has cascading effects: teachers remain unsure of best practices in item construction, unaware of innovative assessment models from international contexts, and disconnected from peer networks that could inspire experimentation. This results in what Fullan (2007) identifies as the "implementation gap," where policy innovations fail to reach classrooms in meaningful ways. Without targeted, sustained training programs, HOTS in fiqh risks being implemented superficially, reinforcing rote-based learning under a new label.

Taken together, these challenges underscore the complexity of implementing HOTS within the domain of religious education. While difficulties in stimulus design, mastery of Bloom's taxonomy, reliance on textbooks, and lack of professional training are not unique to fiqh, the subject introduces additional layers of tension due to its value-laden and doctrinal nature. This study extends existing scholarship by showing that HOTS cannot be transplanted wholesale into all subjects; it requires careful adaptation that respects the epistemological foundations of each discipline.

The findings carry both theoretical and practical implications. Theoretically, they highlight the need for a "context-sensitive" model of HOTS that integrates cognitive skills with ethical-religious reasoning. Practically, they call for systemic interventions: providing fiqh teachers with sustained, context-specific training; developing assessment exemplars that balance HOTS with Islamic principles; and reducing institutional overreliance on textbooks by investing in teacher-led item

banks. By addressing these challenges, fiqh education can move beyond rote learning and foster students who are not only knowledgeable but also critically reflective and morally grounded.

Conclusion

This study concludes that the development of HOTS-based assessments in fiqh at MA Mamba'ul Hisan Kediri generally followed the essential stages: analyzing basic competencies, preparing test blueprints, designing contextual stimuli, writing items, and constructing scoring rubrics or answer keys. However, implementation was not entirely consistent, as some teachers skipped critical steps—for example, omitting the blueprint stage—resulting in weaker construct validity and less structured item development.

The findings further reveal four major challenges faced by fiqh teachers: difficulties in formulating high-quality stimuli and question wording, limited mastery of Bloom's Taxonomy particularly at higher cognitive levels, overreliance on textbooks and student worksheets, and insufficient access to information, training, and socialization on HOTS. These barriers constrained the variety and quality of items produced, leaving many questions focused on recall and comprehension rather than genuine higher-order thinking. Consequently, the intended goals of fostering critical, analytical, evaluative, and creative skills among students were only partially achieved.

Theoretically, this study contributes to the broader discourse on HOTS by situating it within the unique domain of Islamic religious education, demonstrating that HOTS models require contextual adaptation to align with religious and ethical principles. Practically, the findings underscore the urgent need for continuous professional development, the establishment of contextual HOTS-oriented item banks, and stronger institutional support to enhance teachers' assessment literacy. Strengthening these areas will not only improve the cognitive dimension of fiqh learning but also nurture reflective and morally grounded students in line with Islamic values.

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