Assessment for Learning and Value Internalization: Cognitive Assessment in Islamic Religious Education at Indonesian Middle Schools

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ABSTRACT

Assessment in Islamic Religious Education (PAI) plays a strategic role in measuring cognitive achievement while simultaneously internalizing religious values. This aligns with the theory of assessment for learning, which emphasizes assessment as a continuous process of constructive feedback and Bloom's taxonomy as a reference for developing cognitive questions from lower to higher-order thinking. This study analyzes the cognitive assessment practices of PAI teachers at a junior high school in Bandung, covering teachers' understanding, planning, implementation, use of assessment results, and professional development. A qualitative approach with an instrumental case study design was employed, involving four purposively selected PAI teachers. Data were collected through structured interviews, classroom observations, and document analysis of teaching modules, test items, and rubrics, then analyzed using Huberman's stages of reduction, presentation, and conclusion drawing. Findings reveal that assessment planning is supported by curriculum and MGMP forums, though rubrics remain holistic; implementation combines various techniques but written tests dominate; results are used for remedial; while professional development occurs through MGMP but still requires practical training on HOTS and analytic rubrics. This study contributes by mapping the contextual assessment cycle of PAI and recommending rubric strengthening, differentiation, and continuous professional development, enabling assessment to function as both a driver of holistic learning and a medium for value internalization.

ABSTRAK

Asesmen pembelajaran dalam Pendidikan Agama Islam (PAI) memiliki fungsi strategis untuk mengukur capaian kognitif sekaligus menginternalisasi nilai religius. Hal ini sejalan dengan teori assessment for learning yang menekankan asesmen sebagai proses berkelanjutan untuk memberikan umpan balik konstruktif serta taksonomi Bloom yang menjadi acuan dalam pengembangan soal kognitif dari level rendah hingga berpikir tingkat tinggi. Penelitian ini menganalisis praktik asesmen kognitif guru PAI di salah satu SMP di Kota Bandung, mencakup pemahaman guru, perencanaan, implementasi, pemanfaatan hasil asesmen, dan pengembangan profesional. Pendekatan kualitatif dengan desain studi kasus instrumental digunakan, melibatkan empat guru PAI yang dipilih secara purposif. Data diperoleh melalui wawancara terstruktur, observasi kelas, serta analisis dokumen berupa modul ajar, soal, dan rubrik, kemudian dianalisis menggunakan tahapan reduksi, penyajian, dan penarikan kesimpulan menurut Huberman. Hasil penelitian menunjukkan bahwa perencanaan asesmen didukung kurikulum dan MGMP, namun rubrik masih bersifat holistik; implementasi bersifat kombinatif tetapi tes tertulis tetap dominan; hasil asesmen dimanfaatkan untuk remedial; sementara pengembangan profesional berlangsung melalui MGMP namun masih membutuhkan pelatihan aplikatif terkait HOTS dan rubrik analitik. Kontribusi penelitian ini terletak pada pemetaan siklus asesmen kontekstual PAI serta rekomendasi penguatan rubrik, diferensiasi, dan pengembangan profesional berkelanjutan, sehingga asesmen berfungsi sebagai motor pembelajaran holistik sekaligus sarana internalisasi nilai religius.

A. INTRODUCTION

Learning assessment is a vital element of the educational process, significantly influencing students' overall success. [1] It offers a clear understanding of student progress and serves as an essential evaluation tool, providing constructive feedback to both students and teachers. Consequently, assessment extends beyond merely evaluating final outcomes; it actively supports the learning journey. Through assessments, educators can assess the depth of students' understanding of the material, pinpoint areas for improvement, and adapt their teaching strategies as necessary.

In the realm of Islamic Religious Education (PAI), assessment fulfills two vital roles. Firstly, it serves as a tool for measuring cognitive development. Secondly, it is a strategic method for cultivating students' religious character, internalizing Islamic values, and enhancing their spiritual attitudes.[2] A thoughtfully designed assessment process can provide a comprehensive overview of students' learning progress, addressing cognitive, affective, and psychomotor dimensions. This approach aligns with the directives of the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, as outlined in Permendikbud Number 21 of 2022, which focuses on Education Assessment Standards and underscores the importance of holistic assessment in national education practices.[3]

The importance of assessing Islamic Religious Education is well acknowledged; however, preliminary findings reveal a significant disconnect between theoretical ideals and practical application, particularly in cognitive assessment. Ideally, cognitive evaluation in Islamic Religious Education should extend beyond measuring mere memory retention or memorization of Islamic teachings. Instead, it should function as an intellectual tool that fosters the internalization of values.[4] In practice, the cognitive assessment instruments currently utilized predominantly consist of lower-level thinking questions and exhibit a mechanical approach. Consequently, they fail to serve as effective catalysts for fostering a deeper appreciation of religious teachings. Islamic Religious Education teachers often struggle to create assessment items that bridge textual comprehension with spiritual awareness, mainly due to their limited expertise and administrative pressures. This stagnation in quality is supported by a study conducted by Awaluddin et al. which found that assessment techniques in educational institutions primarily rely on conventional formats, lacking variety and failing to adequately explore the depth of student understanding.[5] Furthermore, Rohim and Madzaly emphasized that the narrow and rigid focus of academic assessment represents

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[1] Yusoff, Lijie, and Basal, "Investigating The Influence Of Pedagogical Content Knowledge On Formative Assessment Practices In Islamic Religious Education Of Malaysian Secondary Schools."

[2] Awaluddin, Afizah, and Purnama, "Teknik Assesmen Pengetahuan Dasar Pendidikan Agama Islam Studi Komparasi Di Perguruan Tinggi Dan Sekolah."

[3] Rahmah and Cahyadi, "Analisis Implementasi Permendikbud No. 21 Tahun 2022 Dalam Standar Penilaian Pendidikan Di Indonesia."

[4] Huda, "Islamic Education Learning Management Based on Religious Moderation Values."

[5] Awaluddin, Afizah, and Purnama, "Teknik Assesmen Pengetahuan Dasar Pendidikan Agama Islam : Studi Komparasi Di Perguruan Tinggi Dan Sekolah."

a significant barrier to achieving an integration of knowledge and character development.[6] Thus, the urgent challenge today is to revitalize cognitive assessment design so that it not only measures what students know but also validates the depth of their understanding and its influence on their attitudes and behaviors.

The increasing urgency of this research is evident, as cognitive assessment within Islamic Religious Education (PAI) functions not only as a measurement tool for knowledge but also as a strategic medium for internalizing values and shaping the character of students. If cognitive assessment practices are allowed to remain mere administrative formalities, PAI risks losing its significance, potentially resulting in students who are theologically knowledgeable yet spiritually and ethically vulnerable.[7] The phenomenon of a split personality in students, characterized by a disconnect between academic achievements in religious studies and their behavior in daily life serves as an indicator of the evaluation system's failure to effectively capture the internalization of values.

Recent studies have corroborated that the lack of integration between cognitive and affective domains in assessments is a contributing factor to diminished self-efficacy and character among students, particularly in the context of information disruption.[8] Furthermore, in light of the implementation of the Independent Curriculum, which calls for the establishment of a Pancasila Student profile, the absence of an assessment model capable of encapsulating higher-order thinking skills (HOTS) and facilitating the internalization of values will obstruct the attainment of national educational objectives.[9] Thus, there is an urgent need for this research to reformulate the governance of PAI assessments, emphasizing not only the knowledge students possess but also their beliefs and actions. This gap is underscored by previous research. Over the past decade, studies focusing on PAI assessment have exhibited fragmented development. For instance, Rosyidi highlighted the techniques and characteristics of cognitive domain items.[10] Dinata et al. emphasized psychomotor assessment through the use of checklists and portfolios.[11] Abrori et al. focused on the integration of technology into PAI assessment.[12] Hidayat and Maemonah applied diagnostic assessments to map learning outcomes.[13] Janah and Inayati explored formative, summative, and authentic assessments at the junior high school level.[14]

Despite the contributions of these studies, their focus remains primarily on technical aspects or partial implementations of assessments, without addressing the comprehensive relationship between the planning, implementation, and utilization of assessment results as

[6] Rohim and Madzaly, "Analysis Of Evaluation Techniques In The Book 'Islamic Religious Education And Ethics' for Eleventh Grade."

[7] Muthoharoh, "Internalisasi Nilai-Nilai Pendidikan Karakter Melalui Pembelajaran Pendidikan Agama Islam Di Sekolah."

[8] Rahmawati et al., "Problematika Menilai Ranah Kognitif , Afektif , Dan Psikomotorik Pada."

[9] Achmad et al., "Penilaian Autentik Pada Kurikulum Merdeka Belajar Dalam Pembelajaran Pendidikan Agama Islam Di Sekolah Dasar."

[10] Rosyidi, "Teknik Dan Instrumen Asesmen Ranah Kognitif."

[11] Dinata et al., "Asesmen Pembelajaran PAI (Teknik Dan Instrumen Asesmen Ranah Pengetahuan Psikomotor)."

[12] Abrori, "Peningkatan Asesmen Pembelajaran Pendidikan Agama Islam Pada Lembaga Pendidikan Islam Di Era Digital."

[13] Hidayat and Maemonah, "Asesmen Diagnostik: Analisis Hasil Konsentrasi Peserta Didik Dalam Pembelajaran PAI Di SMP Plus Nusantara Kota Medan."

[14] Janah and Inayati, "Upaya Guru PAI Dalam Mengevaluasi Hasil Belajar Pendidikan Agama Islam Siswa Di SMPN 3 Ponjong."

an integrated learning cycle. This study seeks to address a critical gap by conductively analyzing the cognitive assessment practices of Islamic Religious Education (PAI) teachers at SMP Negeri 9 Bandung. The analysis focuses on five primary components: (1) teachers' understanding of assessment, (2) assessment planning, (3) implementation of assessment in the classroom, (4) the use of assessment results to enhance learning strategies, and (5) teacher professional development. This research not only aims to elevate teachers' assessment literacy but also provides a solid empirical foundation for improving educational policy and fostering the professional growth of educators.

In essence, the study emphasizes the urgent need to create a cognitive assessment for Islamic Religious Education (PAI) that transcends mere academic evaluation. It also seeks to internalize values and support the development of student character. By embedding assessment within the learning process, this research aspires to significantly strengthen teachers' assessment literacy, enhance professional development for educators, and inform national education policy. Additionally, the study highlights that assessment should not be viewed solely as a measurement tool, but rather as a transformative instrument that guides the direction of religious education in Indonesia, facilitating the cultivation of well-rounded, knowledgeable, and character-driven students aligned with the Pancasila philosophy.

B. METHODS

This research utilized a qualitative approach with an instrumental case study design to conduct an in-depth exploration of the implementation of cognitive assessment in Islamic Religious Education (PAI) learning. The study was carried out from June to August 2025 at SMP Negeri 9 Bandung and involved four PAI teachers, selected through purposive sampling based on their active engagement in the entire learning evaluation cycle. Data collection methods included in-depth interviews, participant observation, and documentation studies. The focus of this research was informed by the assessment literacy competency indicators from Abell & Siegel and aligned with the Educational Assessment Standards procedures established in Regulation of the Minister of Education, Culture, Research, and Technology No. 21 of 2022.[15] The analysis was concentrated on five key aspects: (1) teachers' understanding of assessment, (2) assessment planning, (3) implementation of assessment in the classroom, (4) utilization of assessment results to enhance learning strategies, and (5) teacher professional development.

To streamline the analysis process, the researcher implemented a coding system. Each Islamic Religious Education teacher received a unique code; for example, Islamic Religious Education Teacher 1 was designated as GPAI01, Islamic Religious Education Teacher 2 as GPAI02, and so forth. This coding system ensures consistent data presentation while safeguarding the confidentiality of the informants' identities, thereby upholding research ethics. An explanation of the informant codes can be found in table 1.

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[15] Hung and Wu, "High School Science Teachers' Assessment Literacy for Inquiry-Based Science Instruction."

Table 1. Informant Codes

No	Teacher	Information
1	Informant 1	GPAI01
2	Informant 2	GPAI02
3	Informant 3	GPAI03
4	Informant 4	GPAI04

The data collection techniques utilized in this study included structured interviews, observations, and documentation. Structured interviews were conducted with Islamic Religious Education (PAI) teachers using a pre-developed questionnaire to gather focused and consistent information regarding their understanding, planning, implementation, evaluation, and development of learning assessments.[16] Observations were performed not only in the classroom to witness the direct implementation of assessments during learning but also during the development of assessment instruments, such as the creation of assessment rubrics and the formulation of questions. Additionally, documentation including teaching modules, exam questions, and assessment rubrics was collected to complement the data obtained from interviews and observations.[17]

For data analysis, Huberman's model was employed, comprising three stages: data reduction, data presentation, and conclusion drawing.[18] During the reduction stage, the researcher selected and filtered data pertinent to the research focus. The relevant data was then presented in narrative or tabular form to facilitate the analysis process. In the final stage, the researcher drew conclusions by interpreting how cognitive assessments in Islamic Religious Education function not only as a measure of academic achievement but also as an assessment strategy that provides constructive feedback and aids in internalizing religious values among students. This conclusion serves as the basis for formulating recommendations aimed at developing an assessment model that is integrative, holistic, and adaptable to the evolving dynamics of education in junior high schools.

To ensure scientific accuracy and accountability, the researchers conducted a data validity test involving member checking and a procedural document audit trail. Specifically, they validated the interview data by returning the interview transcripts to each participant (GPAI) for review and confirmation. Participants signed the transcripts to formally affirm that the data was both accurate and mutually agreed upon.[19] Additionally, the authenticity of the document data was guaranteed by collecting physical materials, such as Teaching Modules and test instrument scripts, which were endorsed with the signatures of the teachers who created them. The researchers further ensured consistency by triangulating the interview data with visual documentation sourced from field observations, verifying the alignment among written plans, verbal statements, and the actual implementation of assessments within the classroom. This research method enabled the researchers to gain a deeper understanding of the application of assessments in Islamic Religious Education (PAI) for junior high school students, as well as how these assessments foster the internalization of religious values alongside the development of critical thinking skills. The findings offer a strategic contribution to designing more adaptive and humanistic assessments, where cognitive

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[16] Elhami and Khoshnevisan, "Conducting an Interview in Qualitative Research: The Modus Operandi 1."

[17] Yudin Citriadin, *Metode Penelitian Kualitatif*.

[18] Miles, Huberman, and Saldafia, "Qualitative-Data-Analysis."

[19] Ahmed, "The Pillars of Trustworthiness in Qualitative Research."

evaluation serves as an assessment for learning, effectively mapping students' understanding proficiencies as a whole rather than simply classifying them based on cognitive hierarchy.

C. RESULTS AND DISCUSSION

1. Teachers' Understanding of Islamic Education Cognitive Assessment in Middle School

Teachers' comprehension of cognitive assessment in Islamic Religious Education (PAI) constitutes a fundamental foundation for enhancing the quality of learning. An analysis of how educators interpret this assessment should encompass both conceptual frameworks and empirical data, derived from interviews, classroom observations, and document analysis. This triangulation of data facilitates a comprehensive understanding of the alignment between teachers' understanding, planning, and implementation of cognitive assessment within a junior high school in Bandung City.

PAI teachers characterize cognitive assessment as the evaluation of students' knowledge and understanding of Islamic Religious Education material, which typically commences with a diagnostic assessment at the beginning of a session or semester. GPAI01 stated, *"Cognitive refers more to students' knowledge and understanding… at the beginning of learning, there is a cognitive diagnostic assessment"* (personal communication, June 18, 2025). GPAI02 remarked, *"This is more about whether the students understand the material"* (personal communication, June 17, 2025), while GPAI04 noted, *"It involves measuring students' thinking skills, memorization, and understanding of the material"* (personal communication, June 21, 2025). Observations conducted in the classroom corroborated these perspectives through the use of short quizzes and prompt questions, while the teaching module documents included formative assessments designed to evaluate students' initial competencies.

Moreover, findings from the field revealed that educators' perspectives on the application of Higher Order Thinking Skills (HOTS) questions remained limited. Several educators merely memorized the general outline of Bloom's taxonomy without a thorough understanding of its application, often favoring questions that address lower cognitive levels (C1–C3: remembering, understanding, and applying). An analysis of the assessment instruments indicated a predominance of questions focused on memorization and literal comprehension, with a scarcity of analytical questions. Furthermore, the teaching modules demonstrated that most assessments remained at the levels of understanding and application, although there were isolated instances of basic analytical questions. An example of the assessment instrument's question grid is depicted in figure 1.

No	Indikator Soal	Materi	Level Kognitif
1.	Bentuk nilai cinta tanah air	Terjemah dari surat al-qasas ayat 85	C1
2.	إنَّ الَّذِي	Hukum tajwid	C3
3.	مَنْ جَاءَ	Hukum tajwid	C3
4.	Menerjemahkan arti perkata	Terjemah QS. Al-Qasas ayat 85	C2
5.	Menerjemahkan arti perkata	Terjemah QS. Al-Qasas ayat 85	C2

Figure 1. Example of the Assessment Instrument's Question Grid

Overall, junior high school PAI teachers view cognitive assessment as an important instrument for measuring students' knowledge, understanding, and application of religious values. This assessment serves to map initial abilities and adjust learning strategies, but limited understanding of Bloom's taxonomy means that questions are still dominated by low levels (C1–C3). A summary of the findings can be seen in table 2.

Table 2. Summary of Teachers' Understanding of Assessment

Teacher Code	General Understanding	Key Quote
GPAI01	Cognitive assessment is an evaluation of students' knowledge and understanding, conducted at the beginning of learning as a diagnostic assessment. It focuses on understanding, memorization, and application of religious values. The objectives are initial mapping and peer teaching.	*"Cognitive refers more to children's knowledge and understanding… at the beginning of learning, there is a cognitive diagnostic assessment"*
GPAI02	Cognitive assessment measures understanding of subject matter, evaluates memory, comprehension, and application of religious values.	*"It's more about 'do children understand the material?'"*
GPAI03	Cognitive assessment evaluates memorization, comprehension, simple analytical skills, and reading of the Qur'an. It is used to determine student learning outcomes.	*"Measuring students' thinking skills, memorization, and Quran reading tests."*
GPAI04	Cognitive assessments evaluate students' memorization, comprehension, and critical thinking in responding to religious cases. They are used to gain a deeper understanding of students' needs.	*"Measuring students' memorization, understanding, and critical thinking."*

Table 2 highlights the consistent understanding among teachers that cognitive assessment is designed to capture knowledge, understanding, memorization, and the application of religious values. This finding is consistent with the principles of diagnostic[20] assessment, which underscores the importance of initial mapping as a foundation for instructional differentiation. Furthermore, the *ulû al-ʿilm* model reinforces the notion that cognitive assessment can serve as an adaptive tool to enhance students' knowledge retention and conceptual understanding.[21]

Teachers distinctly differentiate the cognitive domain from the affective and psychomotor domains. As stated by GPAI02, *"Cognitive focuses on the brain… affective pertains more to attitude, while psychomotor involves practice"* (personal communication, June 17, 2025). Observations support this distinction, indicating that cognitive assessments are conducted more frequently than assessments of attitudes or practices.[22] The literature confirms that cognitive assessment emphasizes critical thinking and problem-solving skills, while the

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[20] Sujinah et al., "Utilizing Cognitive Diagnostic Assessments to Identify and Address Student Needs in Differentiated Classrooms."

[21] Budiyanti et al., "Impact of the Ulû Al-Ilm Model on Six Domains of Student Learning Outcomes in Islamic Religious Education."

[22] Ismail et al., "Assessment Model of Islamic Religious Education in the Psychomotor Domain during the COVID-19 Pandemic in Indonesia."

affective domain evaluates attitudes and the internalization of values, and the psychomotor domain focuses on ritual skills. Consequently, integrating expressive writing activities is essential, as they have been shown to strengthen the affective dimension without detracting from the cognitive focus.[23]

Instrument analysis showed that the majority of test items were at the C1–C3 level, with some attempting to reach C4–C5. GPAI01 mentioned the order of Bloom's categories, although he admitted to forgetting the details: *"The categories are like remembering, understanding, applying, analyzing, and evaluating"* (personal communication, June 18, 2025). This was corroborated by several other teachers who admitted to not remembering the order. Reported barriers included the complexity of the assessment system, limited HOTS literacy, and class heterogeneity. These findings are consistent with research by Zana et al. which highlighted teachers' difficulties in developing HOTS questions.[24] Recommendations include the development of HOTS-specific teaching modules and ongoing training in designing C4–C6 items.[25]

Teachers understand that cognitive assessment goes beyond simply recording report card scores. GPAI01 emphasized that assessment is used to map initial competencies, develop teaching strategies, and form study groups or peer teaching. Observations revealed remedial practices in the form of additional practice for students who have not yet completed their studies, as well as providing appreciation for students who have achieved their targets. The teaching module document reinforces this with an explicit remedial plan. Literature on learning-oriented assessment and value internalization suggests that students who have completed the course should not only be rewarded but also given more challenges. Students in this group should be involved as peer tutors or given case analysis projects that require critical thinking (HOTS). This approach will help them understand the material better and practice religious values, such as caring and cooperation, in real life.[26]

Teachers have started using online diagnostic tools like Quizizz and Google Forms, although their implementation is limited by school policies. Observations indicate that teachers provide feedback both directly in class and through comments on answer sheets. Assessment documents include a column for teacher notes that guides students on corrective actions. The use of diagnostic applications has been shown to speed up feedback and help teachers adjust their instruction in real time.[27]

Overall, the combination of interview, observation, and document data suggests that junior high school Islamic Religious Education (PAI) teachers have a solid understanding of cognitive assessment's role in competency mapping, developing learning strategies, and internalizing religious values. However, a limited grasp of Bloom's taxonomy leads to a predominance of lower-level assessments (C1–C3). To promote higher-order thinking skills and a deeper internalization of values, it is essential to enhance teachers' technical skills in

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[23] Kurniawan et al., "Islamic Emotional-Cognitive Integration: How Islamic Education Shapes Students' Cognitive Processes and Outcomes through Expressive Writing."

[24] Zana et al., "Curriculum and Teacher Assessment Practices in Mathematics Learning: Alignment with Higher Order Thinking Skills in Indonesian Secondary Schools."

[25] Mat et al., "Need Analysis: Development of a Teaching Module for Enhancing Higher-Order Thinking Skills of Primary School Students."

[26] Vanderlelie and Alexander, "Learning-Oriented Assessment Increases Performance and Written Skills in a Second Year Metabolic Biochemistry Course."

[27] Bu, "An Empirical Study on the Effectiveness of Online Diagnostic Assessment Report for Teaching and Learning."

designing Higher Order Thinking Skills (HOTS) questions, systematically integrate diagnostic technology, and implement a more structured follow-up framework, such as involving high-performing students as peer tutors. In this way, cognitive assessment can evolve from a mere administrative evaluation tool into a crucial driver for enhancing critical reasoning and fostering religious character.

2. Planning of Cognitive Assessment of Islamic Education in Middle School

Cognitive assessment planning in Islamic Religious Education (PAI) for junior high schools is essential for ensuring the quality of learning. The analysis of teacher practices is based not only on the national curriculum framework but also supported by empirical data collected through interviews, classroom observations, and document analysis. This triangulation of data provides a comprehensive view of the alignment between written designs, planning, and the actual implementation of cognitive assessments in the classroom.

PAI teachers develop assessments by referring to Learning Outcomes (CP) and Learning Objectives (TP), which they then adapt to fit the school context and the characteristics of their students. GPAI01 emphasized, *"We look at the CP, then discuss the indicators again with the MGMP because we often go back to each school"* (personal communication, June 18, 2025). Similarly, GPAI02 noted, *"Before creating the questions, we first conceptualize the indicators, the general abilities of the students, and the relevance of the material"* (personal communication, June 17, 2025).

Classroom observations further support these findings, showing that learning objectives are presented at the beginning of each session, in line with the teaching modules. Additionally, the teaching module documents highlight the flexibility to use various media, such as videos, posters, and case discussions. Field documentation can be seen in Figure 2.

Figure 2. Delivery of Learning Objectives and Utilization of Digital Media

In developing indicators and rubrics, teachers start with the Core Competence and then translate these into operational assessment forms. GPAI01 noted, *"I usually develop indicators based on learning objectives... assessment rubrics tend to be simple"* (personal communication, June 18, 2025). GPAI02 added that rubrics often *"Only assess true-false answers, although ideally, they should be more detailed"* (personal communication, June 17, 2025). GPAI03 emphasized that rubrics are used to evaluate Quran recitation, understanding of verse content, and accuracy of answers (personal communication, June 18, 2025). An analysis of

the assessment instruments revealed that the rubrics tend to be simple, categorizing performance as good, sufficient, or poor without fully capturing the complexities of higher-level cognitive indicators.

Student involvement in goal-setting remains limited. GPAI01 stated, *"Students don't participate in setting goals, but we help socialize the goals"* (personal communication, June 18, 2025). While some teachers create opportunities for reflection at the beginning or end of lessons, this has not been structured as part of an assessment co-design process. Overall, while the PAI cognitive assessment is supported by the curriculum and MGMP and is responsive to student characteristics, it predominantly focuses on lower cognitive levels. A summary of the findings can be found in table 3.

Table 3. Summary of Cognitive Assessment Planning by Middle School Islamic Education Teachers

Teacher Code	General Understanding	Key Quotes
GPAI01	Assessment planning starts from CP and MGMP indicators, adapted to school conditions. A simple rubric is used, with students only given an explanation of the objectives	*"We look at CP... the indicators... talk with MGMP... go back to their respective schools."*
GPAI02	Develops assessments by considering learning objectives, material, students' cognitive levels, and relevance to daily life. Curriculum guidelines are the basis, but teachers must be creative.	*"Before creating questions, consider indicators, students' general abilities, and the relevance of the material."*
GPAI03	Assessment planning starts from CP and indicators, then is modified to suit students' needs and characteristics. Rubrics are used to assess Quran recitation, comprehension of verses, and accuracy of answers.	*"The content of the teaching module is changed... to suit students' needs and their characteristics."*
GPAI04	Assessment planning must take into account the school context and students' characteristics. The curriculum provides sufficient guidance, but implementation often varies. Student involvement in goal setting is still minimal.	*"Planning cannot be separated from the school context and the different characters of students."*

These findings indicate that cognitive assessments in Islamic Religious Education (PAI) at the junior high school level are primarily teacher-oriented, with limited involvement from students. This aligns with the research conducted by Ratnaningsih et al. which highlights the importance of implementing blended learning-based assessment innovations to enhance student participation.[28] Studies on Problem-Based Learning (PBL) also demonstrate significant improvements in conceptual understanding and critical thinking skills through authentic scenarios that promote in-depth reflection.[29]

In planning cognitive assessments for Islamic Religious Education (PAI) in junior high schools, the development of teacher indicators and rubrics is largely dominated by a global descriptive format, rating performance as good, fair, or poor. While this approach emphasizes

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[28] Ratnaningsih et al., "The Effectiveness of Using Edmodo-Based E-Learning in the Blended Learning Process to Increase Student Motivation and Learning Outcomes."

[29] Amirudin, Muzaki, and Nurhayati, "Problem-Based Learning as a Pedagogical Innovation for Transforming Higher Education Students' Islamic Religious Comprehension."

ease of implementation, it fails to adequately capture the diversity of student cognitive achievements. Literature suggests that using analytical rubrics with clearly defined criteria and standards can improve the transparency of expectations, the reliability of assessments, and the effectiveness of feedback.[30]

To evaluate higher-order thinking skills, several frameworks for HOTS indicators have been developed and validated. Liu, Liu, Wang, and Cheng (2024) present a three-tiered framework that encompasses metacognition, problem-solving, and innovative creation, serving as a guide for developing detailed assessment items and rubrics. However, findings from the field indicate that Islamic Education teachers have not yet systematically adopted this framework, resulting in analysis and evaluation questions that remain sporadic rather than becoming mainstream.[31]

Multimodal learning strategies have been shown to effectively enhance learning outcomes and literacy-numeracy skills,[32] highlighting the importance of using a variety of assessment methods to cater to different learning styles. Integrating multicultural values into religious education projects fosters tolerance and cross-cultural appreciation, reinforcing the connection between social context and cognitive reasoning.[33] The ulū al-ʿilm model provides a comprehensive framework encompassing six domains: cognitive, affective, psychomotor, social, ethical, and spiritual. This model has demonstrated that combining lectures, discussions, and field practice can improve cognitive achievement.[34]

Despite these advancements, traditional written assessments still dominate. The inconsistency in multimodal techniques often depends on teachers' creativity, as well as their limited time and resources. This situation underscores the necessity for institutional support, including pedagogical training and flexible scheduling of in-person class hours, to ensure the sustainable implementation of multimodal assessments.

In junior high schools, cognitive assessment planning shows that teachers have started to blend the national curriculum framework with specific adaptations. Thus, more multimodal strategies, blended learning, and the integration of multicultural values are essential, as they have been proven to enrich cognitive achievement, despite the continuing prevalence of conventional written assessments.

To promote more holistic and meaningful learning, it is crucial to strengthen three main aspects: (1) articulation of indicators across various cognitive levels, (2) standardization of analytical rubrics to accommodate Higher Order Thinking Skills (HOTS), and (3) encouraging student participation in setting goals and criteria. With sufficient institutional support, cognitive assessment in Islamic Religious Education can serve not only as a tool for evaluation but also as a pedagogical strategy that cultivates students' critical reasoning, tolerance, and religious character.

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[30] Krebs, Rothstein, and Roelle, "Rubrics Enhance Accuracy and Reduce Cognitive Load in Self-Assessment."

[31] Liu et al., "K-12 Students ' Higher-Order Thinking Skills : Conceptualization , Components , and Evaluation Indicators."

[32] Arifin et al., "The Influence of Multimodal Learning Strategies on Prospective Biology Teachers' Literacy-Numeracy Learning Outcomes."

[33] Muhajir et al., "Integrating Multicultural Values To Foster Tolerance and Inclusivity in Islamic Religious Education."

[34] Budiyanti et al., "Impact of the Ulû Al-Ilm Model on Six Domains of Student Learning Outcomes in Islamic Religious Education."

3. **Cognitive Assessment Strategies and Techniques for Islamic Education in Middle School**

Cognitive assessment strategies and techniques in Islamic Religious Education (PAI) teaching at junior high schools are essential for achieving learning objectives and internalizing religious values. Assessment planning and implementation are not solely focused on knowledge acquisition; they also aim to develop critical thinking skills, conceptual understanding, and the application of values in everyday life. Data triangulation from teacher interviews, classroom observations, and document analysis indicates that cognitive assessment practices in schools combine traditional and innovative approaches, with various techniques adapted to student characteristics and the learning context.

PAI teachers utilize a range of assessment techniques, including written tests (both multiple choice and essay), classroom Q&A sessions, Quran recitation tests, group discussions, and mini-projects. For example, GPAI01 stated, *"I use written tests, classroom Q&A, group discussions, and sometimes projects" (personal communication, June 18, 2025). GPAI02 noted, "I vary them to suit the children's learning styles"* (personal communication, June 17, 2025). Classroom observations revealed effective practices such as classical Q&A sessions, case discussions, and oral reading tests on the material taught. The teaching module documents supported these findings by including mini-project instructions, posters/infographics, and case studies as formative assessments. Field documentation can be found in figure 2.

Figure 2. Implementation of Cognitive Assessment Based on Group Discussion

A variety of assessment strategies are designed to cater to different learning styles, including visual, auditory, and kinesthetic. However, their implementation is limited by the workload and available face-to-face hours. Observations reveal a blend of oral quizzes, discussions, and written exercises within a single session. Instrument analysis shows the inclusion of case-based questions and score assessments, although these are not yet prevalent compared to multiple-choice questions.

A differentiated approach is more commonly applied to students with special needs (ABK), where the format and number of questions are adjusted based on recommendations from their accompanying psychologist. For regular students, assessments tend to be uniform,

although there are efforts to introduce differentiation through varying question difficulty and achievement targets, such as different standards for Quran recitation.

The use of technology is beginning to appear in the form of digital applications like Quizizz, Google Forms, Wordwalls, barcodes, and YouTube videos. However, their implementation is still constrained by school policies on device usage and student discipline. Teaching module documents offer the option to use digital applications for quizzes and projects, but this remains optional and dependent on available resources.

Evaluation of assessment effectiveness is carried out through observations, student feedback, results analysis, and post-exam reflections. Instrument documents indicate there are records of revisions to questions and rubrics, showing a continuous cycle of improvement. A summary of the findings can be found in Table 3.

Table 3. Cognitive Assessment Strategies and Techniques by Middle School Islamic Education Teachers

Teacher Code	General Understanding	Key Quotes
GPAI01	Uses a combination of assessment techniques: written tests (multiple choice, descriptive), classical question and answer, group discussions, and creative projects. Adjustments are made based on student abilities.	*"I use written tests with multiple choice… classical question and answer… group discussions… sometimes projects."*
GPAI02	pplying a variety of assessment formats (written, oral, pictorial, small projects) to suit students' learning styles. Also using short quizzes and essay questions to measure understanding.	*"I create a variety of items: written, oral, pictorial, small projects… to suit students' learning styles."*
GPAI03	Emphasizes Quranic recitation assessments at the beginning of the semester to map students' basic abilities. Simple analytical questions are also used, although projects are rarely conducted.	*"Quranic recitation tests at the beginning of the semester are important to map students' basic abilities."*
GPAI04	Prioritizes discussions of religious cases as a form of assessment that challenges students to think critically. Assesses analytical skills and the application of religious values in a social context.	*"Discussing cases is important, so children can think critically."*

These empirical findings reinforce the importance of multimodal strategies in cognitive assessment, as highlighted by previous research. An approach that integrates multiple-choice tests, essays, traditional question-and-answer sessions, group discussions, and mini-projects has proven effective in enhancing the measurement of cognitive achievement.[35] A study focused on Problem-Based Learning (PBL) revealed significant improvements in students' conceptual understanding and critical thinking skills in Islamic Religious Education (PAI), facilitated by authentic problem scenarios that encouraged deep reflection and discussion.

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[35] Amirudin, Muzaki, and Nurhayati, "Problem-Based Learning as a Pedagogical Innovation for Transforming Higher Education Students' Islamic Religious Comprehension."

Moreover, multimodal learning strategies have been shown to improve learning outcomes and literacy-numeracy skills among prospective biology teachers, illustrating the effectiveness of diverse methods designed to accommodate various learning styles.[36]

The implementation of Edmodo-based blended learning in PAI has led to increased student participation and motivation, especially in online discussions and collaborative assignments. This approach has successfully maintained cognitive engagement, even when certain activities transitioned to a digital format.[37] Additionally, incorporating multicultural values into religious learning projects has fostered the development of tolerance and appreciation for cross-cultural differences, thereby creating an inclusive learning environment while reinforcing the link between social context and cognitive reasoning.[38] The ulû al-'ilm model offers a comprehensive framework with six domains, namely cognitive, affective, psychomotor, social, ethical, and spiritual. This model has been shown to improve students' cognitive achievement holistically through a combination of lectures, discussions, and practical field experiences.[39]

The strategies and techniques for cognitive assessment in Islamic Religious Education (PAI) at junior high schools encompass a blend of traditional and innovative methods. While written tests continue to be the predominant form of assessment, there are ongoing initiatives aimed at diversifying assessment formats, embracing technology, and implementing differentiated evaluations.

To improve the effectiveness of assessments, it is essential to increase the proportion of case-based and Higher Order Thinking Skills (HOTS) questions, expand differentiation for regular students, and develop robust policies for assessment tools. These enhancements will foster a more interactive assessment environment while ensuring integrity. As a result, cognitive assessments should function not only as instruments for evaluating knowledge achievement but also as catalysts for learning that align with the contemporary needs of society.

4. Using the Results of Islamic Education Cognitive Assessments in Middle Schools

The application of cognitive assessment results in Islamic Religious Education (PAI) at junior high schools is vital. It underscores that assessment extends beyond merely recording scores; it serves as a foundation for enhancing the learning process, providing feedback, and facilitating differentiated follow-up. A triangulation analysis of data from teacher interviews, classroom observations, and teaching module documents indicates that assessment functions as a continuous development tool, linking student achievement to adaptive learning strategies.

PAI teachers leverage assessment results to guide their remedial activities. Teacher GPAI01 stated, *"If the score is low, we provide remedial work… Those who excel in theory should be given additional challenges, but honestly, I rarely do that"* (personal communication, June

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[36] Budiyanti et al., "Impact of the Ulû Al-Ilm Model on Six Domains of Student Learning Outcomes in Islamic Religious Education."

[37] Arifin et al., "The Influence of Multimodal Learning Strategies on Prospective Biology Teachers' Literacy-Numeracy Learning Outcomes."

[38] Ratnaningsih et al., "The Effectiveness of Using Edmodo-Based E-Learning in the Blended Learning Process to Increase Student Motivation and Learning Outcomes."

[39] Muhajir et al., "Integrating Multicultural Values To Foster Tolerance and Inclusivity in Islamic Religious Education."

18, 2025). Teacher GPAI02 added, *"I value those who grasp concepts quickly… I strive to support those who find it difficult"* (personal communication, June 17, 2025). Classroom observations support these assertions, demonstrating the implementation of remedial programs for students who have yet to complete the course.

Moreover, the teaching module documents reveal a disconnect between lesson planning and implementation. Although enrichment activities are listed, they are often not realized due to time constraints. Feedback is provided in various forms, including direct comments during class and notes on answer sheets. Differentiated follow-up strategies are also apparent in the treatment of student groups. Remedial groups are assigned to redo their assignments, while those who complete their work are either rewarded or allowed to advance to new material. Students with special needs (ABK) receive adjustments to the format and difficulty level of assessments, as recommended by their accompanying psychologist.

In addition, assessment results are used to adjust teaching strategies. GPAI02 stated, *"If many students don't understand, I repeat the material or change the teaching method"* (personal communication, June 17, 2025). However, GPAI01 stated that in practice, there are often students who do not show any improvement due to the relatively large number of students. Observations support this statement by noting that improvements are predominantly made in groups, namely a shift from lectures to group discussions and the use of visual media when students' understanding levels are low. A summary of the findings from the use of assessment results can be seen in table 5.

Table 5. Utilization of Cognitive Assessment Results by Middle School Islamic Education Teachers

Teacher Code	General Understanding	Key Quote
GPAI01	Assessment results are used for remedial work for students who have not yet achieved the Minimum Competency (KKM) and verbally evaluate those who have achieved it. Feedback is provided in class so students understand their weaknesses.	*"If their score is low, we give them remedial work… We give praise to those who have done well… However, sometimes it's not very effective because of the large number of students."*
GPAI02	Assessment results are used to differentiate follow-up actions. Students who quickly grasp the material are given suggestions to work on more challenging tasks, while students who struggle are given intensive guidance. Feedback is provided through discussions or notes on answer sheets.	*"I give suggestions to those who quickly grasp the material to work on more challenging tasks… I provide more intensive guidance to those who struggle."*
GPAI03	Assessment results form the basis for additional guidance for students who have not yet completed the material, while students who have mastered the material are given in-depth project assignments.	*"Students who have not yet completed the material are given additional guidance, while those who have completed the material are given other assignments."*
GPAI04	Assessment results are used to evaluate teaching strategies and provide suggestions for improvement. Differentiated follow-up actions are important so that all students develop to their full potential	*"Feedback is not just a grade, but also suggestions for improvement so students know what to do next."*

These findings are consistent with the existing literature that highlights assessment as a fundamental basis for follow-up learning. Remedial programs have been shown to enhance student retention and problem-solving skills through opportunities for relearning and additional practice.[40] For students who complete the course, enrichment programs that incorporate mini-projects, case analyses, and challenges related to religious values are vital for fostering critical reasoning at the higher-order thinking skills (HOTS) level.[41] The ulū al-ʿilm framework, which merges cognitive and affective dimensions, also indicates holistic improvements in cognitive outcomes, reinforcing the effectiveness of both intervention strategies.[42]

Formative feedback plays a critical role in promoting continuous improvement. Corrective verbal feedback enables students to address errors in real time, while written diagnostic notes encourage deeper reflection on the criteria for improvement. Both methods have demonstrated their effectiveness,[43] but personalized one-on-one dialogue is essential to promote self-regulation and clarify specific steps for advancement.[44] The integration of these three strategies emphasizes the role of assessment as a learning tool rather than merely an evaluative measure.

Cognitive assessment data plays a crucial role in developing adaptive instructional plans. The Assessment to Instructional Planning (ATIP) framework underscores the importance of analyzing this data to establish learning targets and instructional checkpoints.[45] The Learning-Oriented Assessment (LOA) approach employs formative assessments to identify the most effective strategies for various student learning phases.[46] Additionally, the Cognitive Diagnosis Model (CDM) facilitates individual skill profiling, which supports the design of targeted tasks and the creation of both homogeneous and heterogeneous learning groups. [47]

In an inclusive setting, ongoing differentiation ensures that all students have access to learning opportunities and achieve success. Students with special needs (ABK) receive tailored modifications to test formats, durations, and assessment rubrics based on psychologist recommendations.[48] Research on mixed-ability grouping indicates that scaffolded tasks and co-teaching can significantly enhance motivation and participation among all students, provided that teachers receive adequate training and resources.[49][50]

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[40] Tunzana, Mukuka, and Tatira, "Exploring Grade 11 Learners' Understanding of Trigonometric Equations: An Evaluation of a Remedial Teaching Intervention."

[41] Renzulli, Reis, and Brigandi, "Enrichment Theory, Research, and Practice."

[42] Budiyanti et al., "Impact of the Ulû Al-Ilm Model on Six Domains of Student Learning Outcomes in Islamic Religious Education."

[43] Ramos-Neyra et al., "Using the Podcast for Feedback: A Qualitative Study."

[44] Piyumi Udeshinee, Knutsson, and Männikkö-Barbutiu, "Text Chat-Mediated Dynamic Assessment Towards Self-Regulation in Language Learning."

[45] Elish-Piper et al., "The Assessment to Instructional Planning (Atip) Framework: A Multidimensional, Contextualized Approach to Using Assessment to Plan Instruction."

[46] Vanderlelie and Alexander, "Learning-Oriented Assessment Increases Performance and Written Skills in a Second Year Metabolic Biochemistry Course."

[47] Choi, Lee, and Park, "What CDM Can Tell About What Students Have Learned: An Analysis of TIMSS Eighth Grade Mathematics."

[48] Putri, Winarta, and Putra, "Integrating Task-Based and Differentiated Instruction (DI) to Overcome Language Learning Challenges."

[49] Goyibova et al., "Differentiation Approach in Education: Tailoring Instruction for Diverse Learner Needs."

[50] Strogilos et al., "Understanding the Development of Differentiated Instruction for Students with and without Disabilities in Co-Taught Classrooms."

Moreover, advancements in artificial intelligence are beginning to be leveraged to streamline the design of real-time differentiation.[51]

The use of cognitive assessment results in Islamic Religious Education (PAI) at junior high schools reflects a transition from traditional administrative evaluations to a more adaptive pedagogical approach. This method involves processing student achievement data to inform both remedial programs and constructive feedback. Although remedial practices for students who have yet to complete their studies align with retention principles, the implementation of enrichment programs aimed at fostering higher-order thinking skills (HOTS) and personal mentoring continues to encounter structural challenges.

To improve educational quality, it is essential to enhance teacher capacity through diagnostic training, to establish school policies that allocate specific time for remedial and enrichment activities, and to promote intensive collaboration within the subject teacher collaboration groups (MGMP). This collaboration should focus on developing task banks and differentiation rubrics.

As a result, cognitive assessment results not only function as a corrective measure, but they also transform into an assessment-for-learning strategy. This approach encourages the comprehensive internalization of religious values in the context of junior high school education in Indonesia.

5. Professional Development for Islamic Education Teachers in Middle Schools: Focus on Cognitive Assessment

The professional development of Islamic Religious Education (PAI) teachers in junior high schools is vital for ensuring that cognitive assessments are relevant, fair, and in line with the demands of 21st-century education. The enhancement of teacher capacity occurs through a combination of independent and collaborative efforts, as well as both formal and informal training. A triangulation of data from interviews, observations, and document analysis reveals that the Subject Teachers' Consultation (MGMP) forum plays a significant role in shaping assessment formats. It acts as a strategic platform for the standardization and innovation of assessment practices.

Teacher capacity development initiatives are implemented through MGMP workshops, peer discussions, exploration of educational content, practical reflection, and direct classroom application. GPAI01 noted, *"MGMP workshops… sometimes I also enjoy watching YouTube… I want to try implementing what I learn with the children"* (personal communication, June 18, 2025). GPAI02 added, "Conversations with fellow teachers are incredibly helpful, often more practical than theoretical" (personal communication, June 17, 2025).

Classroom observations documented reflections following exams, addressing item analysis and the appropriateness of difficulty levels. The teaching module documents contained brief reflective notes, indicating an ongoing cycle of evaluation. Field documentation can be found in Figure 4 below.

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[51] Farhah et al., "AI-Driven Innovation Using Multimodal and Personalized Adaptive Education for Students With Special Needs."

Figure 4. Implementation of the MGMP PAI Forum Discussion at School

Formal training provides knowledge related to Higher Order Thinking Skills (HOTS), authentic assessment, and rubric development. The uniformity of rubric formats and grids across teachers demonstrates the impact of MGMP coordination on assessment standardization. However, the need for further training remains. GPAI02 stated the need for training on rubric creation, project assessment, and technology use (personal communication, June 17, 2025), while GPAI04 emphasized the importance of more practical, rather than purely theoretical, training (personal communication, June 21, 2025). Documentary findings support this, showing that rubrics remain global in nature and HOTS questions have not yet dominated.

Overall, Islamic Religious Education teacher professional development occurs through formal (MGMP, training) and informal channels (reflection, sharing of practices), with a tangible impact on the consistency of assessment formats and the willingness to experiment with various techniques. Interview, observation, and document data reinforce the fact that strengthening teacher capacity directly contributes to the quality of cognitive assessments. A summary of the findings is presented in table 6.

Table 6. Professional Development of Middle School Islamic Education Teachers Related to Cognitive Assessment

Teacher Code	General Understanding	Key Quotes
GPAI01	Developing oneself through MGMP workshops, independent exploration (YouTube), and practical reflection. Assessing professional development as crucial for facing global challenges.	*"MGMP workshops... sometimes I also like watching YouTube... I want to try implementing them with the kids."*
GPAI02	Learning from peer discussions and formal training. Emphasizes the need for further training on rubrics, project assessments, and technology.	*"Discussions with other teachers are very helpful, sometimes more practical than theoretical."*
GPAI03	Developing oneself by reading additional literature and participating in authentic assessment and rubric training. Assessing competency improvements as	*"The training I attend usually focuses on authentic assessment and rubric development."*

	having a direct impact on the quality of learning.	
GPAI04	Personal reflection after teaching serves as a means of self-development. Emphasizes the need for practical training, not just theory, so that it can be directly applied in the classroom.	*"Training should be more practical, not just theory, so that it can be directly used in the classroom."*

These findings are consistent with existing literature that underscores the vital role of professional collaboration through MGMP (Musyawarah Guru Mata Pelajaran) and PLC (Professional Learning Community) forums in enhancing teachers' cognitive assessment literacy. Structured discussions concerning rubrics within MGMPs facilitate a norming process that aligns teachers' interpretations of assessment criteria, ultimately leading to the creation of more valid and reliable rubrics.[52]

The development of a shared question grid ensures that the coverage of CP-TP (Curriculum Penerapan Tenaga Pendidikan) indicators is in alignment with the curriculum, thus aiding in the formulation of representative questions.[53] Furthermore, the practice of sharing question banks among teachers within PLCs enriches the variety of assessment items and fosters peer review, thereby improving the overall quality of questions. Supporting this, a study by Fakhruddin et al. confirmed that structured training on the implementation of the Independent Curriculum (Kurikulum Merdeka) significantly enhances the competencies of Islamic Religious Education (PAI) teachers,[54] particularly in designing authentic assessments and innovative lesson plans through a combination of simulation and mentoring methods.[55]

Formal training, such as MGMP workshops and assessment sessions, strengthens PAI teachers' abilities to create Higher Order Thinking Skills (HOTS)-based instruments, authentic assessments, and analytical rubrics.[56] This authentic assessment training encourages a shift in focus from merely measuring memorization to promoting the application of religious values in real-life contexts.[57] However, there is still a need for additional training, especially in the development of analytical rubrics and project assessments, to ensure that the resulting instruments are not only general but also provide in-depth diagnostic insights.

In addition to formal channels, independent professional development through the exploration of video tutorials, engagement in peer discussions, and reflective practice significantly enhances the quality of test design and feedback.[58] Video self-reflection enables educators to analyze classroom interactions and question-and-answer strategies,[59] thus expediting the identification of error patterns within test items.[60] Peer discussions conducted

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[52] Schoepp, Danaher, and Kranov, "An Effective Rubric Norming Process."

[53] Flores-Moncada, Martínez-De-la-Hidalga, and Korres, "Practicum of the Master's in Teacher Education: Design, Implementation, and Competency-Based Assessment Using Rubrics."

[54] Fakhruddin et al., "Pelatihan Implementasi Kurikulum Merdeka Di Sekolah Bagi Guru Pendidikan Agama Islam Di Kabupaten Garut: Meningkatkan Kualitas Pembelajaran PAI Di Era Kurikulum Merdeka."

[55] Lyna, Loong Hung, and Chong, "Promoting Teachers' Instructional Practices in Alternative Assessment through Teacher Collaboration."

[56] Anwar, Supriadi, and Hermawan, "Analisis Instrumen Tes Kognitif Mata Pelajaran Pendidikan Agama Islam Dan Budi Pekerti Di Sd: Aspek Substansi, Konstruksi, Bahasa, Dan High Order Thinking Skill."

[57] Villarroel et al., "Authentic Assessment Training for University Teachers."

[58] Sun et al., "Talking the Talk: Unleashing Pre-Service Teachers' Classroom-Talk Self-Reflection through Video Visualization-Enhanced Training."

[59] Amzat and Valdez Editors, "Teacher Empowerment Toward Professional Development and Practices."

[60] Garcia et al., "Self-Observation and Peer Feedback as a Faculty Development Approach for Problem-Based Learning Tutors: A Program Evaluation."

in a lesson study format empower teachers to ask one another critical questions, refining the logic of their questions and rubrics, ultimately resulting in stronger test items. Structured after-action review sessions facilitate teachers in evaluating the feedback they receive and in devising corrective actions for subsequent instructional rounds.[61]

For this capacity-building endeavor to be sustainable and to effectively enhance differentiation practices, it is imperative that Continuing Professional Development (CPD) models including Professional Learning Communities (PLCs), Communities of Practice (CoPs), lesson studies, and coaching/mentoring are systematically adopted.[62] PLCs foster ongoing collaboration to share rubrics and question banks,[63] while CoPs bolster collective learning through shared practices. Action research enables educators to investigate the impact of assessments within the classroom, while peer coaching provides tailored support for implementing differentiation strategies.[64] Essential follow-up training encompasses differentiated classroom assessments to maximize the application of assessment data, pre-assessments for the design of graded assignments, and practical differentiation strategies, such as flexible grouping.[65]

Overall, the professional development of Islamic Religious Education (PAI) teachers in junior high schools particularly concerning cognitive assessment underscores the importance of fostering synergy among MGMP/PLC collaboration, formal training, independent learning, and ongoing CPD models. The standardization of rubrics and grids is reinforced through MGMP/PLC coordination; workshops focused on Higher Order Thinking Skills (HOTS) improve assessment literacy; peer learning and thorough reflection refine question design; and PLCs/CoPs facilitate the transfer of knowledge into differentiated practices. To strengthen this ecosystem, strategic initiatives may include: (1) institutionalizing the MGMP schedule with a focus on assessment, (2) providing practical modules on analytical rubrics and project assessments, (3) integrating peer coaching training into PLCs, and (4) developing competencies in learning analytics technology. With these strengthening tools, cognitive assessment holds the potential to function not only as an evaluative instrument but also as a catalyst for enhancing the quality and inclusiveness of Islamic Religious Education (PAI) instruction in junior high schools.

In a broader examination of research findings, the practice of cognitive assessment by Islamic Religious Education (PAI) teachers in junior high schools still encounters fundamental challenges, particularly the prevalence of low-level question design and simplistic rubrics. This finding aligns with research conducted by Awaluddin et al., which highlighted a restricted variety of knowledge assessment instruments,[66] and was further supported by findings from Rohim and Madzaly, who emphasized obstacles to the integration of academic

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[61] Bell and Mladenovic, "Situated Learning, Reflective Practice and Conceptual Expansion: Effective Peer Observation for Tutor Development."

[62] Brennan and King, "Teachers' Experiences of Transformative Professional Learning to Narrow the Values Practice Gap Related to Inclusive Practice."

[63] Amzat and Valdez Editors, "Teacher Empowerment Toward Professional Development and Practices."

[64] Grierson and Woloshyn, "Walking the Talk: Supporting Teachers' Growth With Differentiated Professional Learning."

[65] Moon, Brighton, and Tomlison, "Using Differentiated Classroom Assessment to Enhance Student Learning."

[66] Awaluddin, Afizah, and Purnama, "Teknik Assesmen Pengetahuan Dasar Pendidikan Agama Islam Studi Komparasi Di Perguruan Tinggi Dan Sekolah."

assessment with character development.[67] However, this study advances the discourse by mapping the entire assessment cycle from teacher understanding and planning to the implementation and utilization of results an aspect previously underexplored. The implication is that Islamic Religious Education (PAI) teachers must enhance their ability to construct HOTS questions, develop comprehensive analytical rubrics, and follow up on assessment outcomes through remedial, enrichment, and peer tutoring interventions. This approach will ensure that assessment serves not only as a means of evaluation but also as a mechanism for internalizing values.

The contribution of this study provides an empirical framework that can serve as a foundation for educational policies and training programs for Islamic Religious Education (PAI) teachers in junior high schools. The objective is to transform assessment from a mere administrative task into a transformative instrument that promotes critical reasoning and the development of the religious character of students.

D. CONCLUSION

Islamic Religious Education (PAI) teachers at SMP Negeri 9 Bandung demonstrated a notable gap between their comprehension of Bloom's Taxonomy particularly the highest level of creation and their actual teaching practices, which primarily focused on the lower cognitive levels of remembering and applying (C1–C3). While the teachers conceptually acknowledged the significance of critical thinking and value analysis, evidence gathered from instruments and classroom observations revealed that higher-order questions were used only sporadically. Furthermore, instructional differentiation was mainly applied to students with special needs, while regular students received minimal adjustments. These discrepancies were identified through thorough triangulation involving interviews, observations, and document analysis, shedding light on the disconnect between theory and practice in this educational context. While the teachers validated many of the existing literature findings regarding barriers to developing higher-order thinking skills (HOTS) items and the pressing need for continuous training, this study also introduces a fresh perspective by highlighting the integration of religious values within cognitive assessments in Islamic Religious Education (PAI) as a foundation for instructional differentiation. The study seeks to expand the framework of learning-oriented assessments and value internalization by holistically mapping diagnostic, formative, and reflective practices. Additionally, it proposes a methodological model for contextual data triangulation in assessment research within the realm of religious education. However, this research is confined to a small sample of four PAI teachers in junior high schools, covering a limited geographical scope and educational level. It relies solely on qualitative data without large-scale quantitative analysis and does not account for variations in school conditions, gender, age, or student perspectives. Consequently, the generalizability of the findings is somewhat restricted. To achieve a more comprehensive understanding and to formulate more effective assessment policies, further research is recommended. Future studies should encompass larger sample sizes, include other educational levels, employ mixed quantitative and qualitative methods, and adopt longitudinal designs to capture the evolving dynamics of cognitive assessment practices

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[67] Rohim and Madzaly, "Analysis Of Evaluation Techniques In The Book 'Islamic Religious Education And Ethics' for Eleventh Grade."

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