



Optimizing Assessment for Learning in Islamic Education through Authentic and Diagnostic Assessment : A Systematic Literature Review

Nilna Fadlillah^{1*}, Kusaeri²

^{1*}Faculty of Tarbiyah, Universitas Qomaruddin Gresik, Indonesia.

²Faculty of Science and Technology, UIN Sunan Ampel Surabaya, Indonesia.

*Corresponding Author. Email: nilna@uqgresik.ac.id

Abstract: This study aims to provide a comprehensive overview of research trends in authentic and diagnostic assessments, analyze the factors that influence their implementation and effectiveness, and the potential for optimizing both assessments to improve the quality of Islamic learning. Using the Systematic Literature Review method with Watase Uake and Publish or Perish tools, this study screened 825 articles according to PRISMA guidelines. After identifying, screening, and eligibility, 46 articles Scopus Indexed, Sinta 1, and Sinta 2 were selected for further mapping and thematic analysis. The results showed that 1) the main trends of the research were related to the integration of technology in both assessments through e-portfolios and eDia System; 2) factors affecting effectiveness included validity and reliability of instruments, simplification of trials and validation, and integration of technology, while the obstacles were dominated by the lack of understanding of teachers, the complexity of procedures, and limited resources and time; 3) optimization steps included comprehensive training for teachers, development and validation of instruments, provision of supporting facilities, as well as the need for technology integration to make Islamic learning more dynamic, efficient, holistic, and meaningful. This study can be a reference for educators and education managers to improve assessment practices in learning Islamic Religion so that it can effectively achieve the goals of holistic Islamic education.

Article History

Received: 14-03-2024
Revised: 21-04-2024
Accepted: 27-05-2024
Published: 22-06-2024

Key Words:

Assessment For Learning;
Authentic Assessment;
Diagnostic Assessment;
Islamic Education.

How to Cite: Fadlillah, N., & Kusaeri, K. (2024). Optimizing Assessment for Learning in Islamic Education through Authentic and Diagnostic Assessment : A Systematic Literature Review. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran*, 10(2), 654-667. doi:<https://doi.org/10.33394/jk.v10i2.11555>



<https://doi.org/10.33394/jk.v10i2.11555>

This is an open-access article under the [CC-BY-SA License](https://creativecommons.org/licenses/by-sa/4.0/).



Introduction

Islamic education is integral to developing holistic Muslim individuals (Fadlillah et al., 2023). It aims not only to impart knowledge but also to enhance spirituality, moral values, and social qualities. To achieve these goals, education needs to be optimized from various perspectives (Ahmed, 2018), with continuous evaluation of teaching and learning quality being crucial (Puteri et al., 2023). However, traditional assessment methods, such as exams, which primarily assess the cognitive domain, are still prevalent in Islamic education, posing challenges (Baroroh & Hamani, 2022; Gebiril, 2016). The lack of understanding among Islamic Religious Education teachers regarding valid assessment practices is another significant challenge (Achmad & Prastowo, 2022; Hamdi & Muslimah, 2022).

Ineffective educational evaluation can obstruct student potential development and reduce motivation (Karim et al., 2018), leading to a disconnect between desired learning outcomes and assessment realization, hindering the holistic goals of Islamic education (Puteri et al., 2023). To achieve holistic educational objectives, evaluations must encompass all domains of education—cognitive, psychomotor, and affective—following the perspective of



Ki Hajar Dewantara (Markus et al., 2023). Furthermore, evaluations should provide meaningful insights and recommendations for enhancing learning (Monteiro et al., 2021).

Various studies have highlighted the importance of developing holistic and meaningful assessments in the context of Islamic education (Ismail, 2023; Khoiriyah et al., 2023; Maimori, 2017; Zulkifli & Azman, 2021). Maimori (2017), implemented authentic assessments to evaluate student competence in learning Islamic Cultural History, covering cognitive, psychomotor, and affective aspects. Zulkifli and Azman (2021) applied self-assessment in Islamic religious education to promote independent reflection on students' academic progress. Khoiriyah et al. (2023) reviewed the School Excellent Model's (SEM) implementation in Singapore, showcasing quality assessment techniques applicable to Indonesian Islamic education. Ismail (2023) explored diagnostic assessment in Islamic Education to gauge the affective domain, aiding in identifying student strengths and weaknesses for targeted improvements.

This study focuses on authentic and diagnostic assessments in Islamic education due to their comprehensive and meaningful approach, aligning with the goals of Islamic education. While both assessments have been implemented in Indonesia, the utilization of authentic assessment has not been fully optimized (Achmad & Prastowo, 2022; Baroroh & Hamani, 2022; Hamdi & Muslimah, 2022; Kristiawan & Elnanda, 2017), and research on diagnostic assessment remains limited (Ismail, 2023). However, their potential as assessment models in the Indonesian education curriculum, particularly in the K-13 and Merdeka Curriculum, (Sufyadi et al., 2021), needs to be maximized to achieve holistic Islamic education goals.

Various studies have also described teachers' implementation and understanding of authentic assessment in Islamic education. Al-Basheer et al., (2015) found that most Arabic and Islamic Religious Education teachers in Jordan are highly aware of and understand authentic assessment, although they still face challenges and lack experience in its implementation. Research by Kristiawan and Elnanda (2017), Baroroh and Hamani (2022), Hamdi and Muslimah (2022), Achmad and Prastowo (2022) indicates that the implementation of authentic assessment in schools and *madrasahs* has not been fully maximized due to teachers' lack of skills and understanding, especially in the affective and psychomotor domains. On the other hand, Mahmudi et al. (2024) studied the application of Portfolio Authentic Assessment (PPA) in learning Nahwu at the Modern Pesantren al-Ikhlas in West Java, showing that students using PPA exhibited better conceptual understanding, problem-solving skills, and higher engagement and participation. Meanwhile, research on implementing diagnostic assessments is still not widely done. In addition to the study by Ismail (2023) described above, research on the implementation of diagnostic assessments was conducted by Fahmi (2023) on Islamic Religious Education Subjects at SMKN 1 OKU. Diagnostic assessment is used to identify students' strengths and weaknesses in the learning process, which is then used as a basis for designing more effective and relevant learning programs.

This study distinguishes itself from previous research by employing the Systematic Literature Review (SLR) method to delve into the outcomes of authentic and diagnostic assessments within the context of Islamic education. Unlike prior studies that primarily relied on field research, this study aims to 1) provide a comprehensive overview of research trends on authentic and diagnostic assessments, 2) analyze the factors that influence the implementation and effectiveness of both types of assessments, and 3) present an analysis of the optimization of both assessments in improving the quality of learning and achieving holistic Islamic education goals. This research presents new insights into using authentic and



diagnostic assessments within Islamic education, a less explored area. It moves beyond traditional academic-focused assessment methods by aligning evaluations with Islamic education's holistic values, which include character-building, spiritual growth, and practical skills. The study introduces a unique approach by integrating both types of assessments to evaluate academic and religious knowledge and the practical application and internalization of Islamic values in everyday student life.

Research Method

This study used a systematic literature review method with a qualitative approach to explore research on authentic and diagnostic assessments in Islamic religious education. Following PRISMA guidelines, the research was conducted in three stages: identification, screening and eligibility assessment, inclusion and data extraction (Hijriyah et al., 2024). The identification stage involved using the Watase Uake and Publish or Perish (PoP) tools to find relevant articles. Watase Uake was chosen for its ability to identify Scopus-indexed articles and integrate ScimagoJR data, providing efficiency in source identification (Wahyudi, 2020). The PoP tool complemented this by identifying articles from Scopus and Google Scholar, particularly in Islamic education, offering efficient article identification despite fewer features (Bensman, 2011).

Table 1. Article search keywords with Watase Uake and Publish or Perish tools

No.	Keyword	Quantity	
		Watase Uake	Publish or Perish
1	Authentic Assessment for Education	39 articles	50 articles
2	Authentic Assessment for Learning	59 articles	107 articles
3	Authentic Assessment Islamic Education	1 article	200 articles
4	Diagnostic Assessment for Education	8 articles	19 articles
5	Diagnostic Assessment for Learning	74 articles	87 articles
6	Diagnostic Assessment Islamic Education	-	181 articles
Total (825 articles)		181 articles	644 articles

Table 1 shows that the keywords used focus on authentic and diagnostic assessments in education, especially Islamic Religious Education. These two tools found 825 articles from the Scopus and Google Scholar databases related to authentic and diagnostic assessments. The same articles (duplicates) were deleted, as were the inclusion and exclusion criteria for the articles. The criteria are as in Table 2.

Table 2. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Journal Article	Book Chapter, Proceedings, Review Article
Articles published between 2014-2024	Published articles before 2014
Article indexed in Q1-Q4, Sinta 1, or Sinta 2	Articles not indexed in Q1-Q4, Sinta 1 or 2
Articles related to authentic and diagnostic assessment in the context of education and Islamic education	Articles related to authentic and diagnostic assessment but not in the context of education and Islamic education

The second stage involved screening and assessing the eligibility of the articles. Out of 153 articles initially screened by title and abstract for relevance and appropriateness to keywords, 81 articles were excluded for not meeting the criteria, leaving 72 articles. These were then checked for eligibility using the Watase Uake tool and the Mendeley application to ensure full-text access, resulting in 46 eligible articles likely to address the research questions. In the third stage, the 46 articles were extracted and synthesized based on the research questions. The entire process is depicted in the flow diagram in Figure 1.

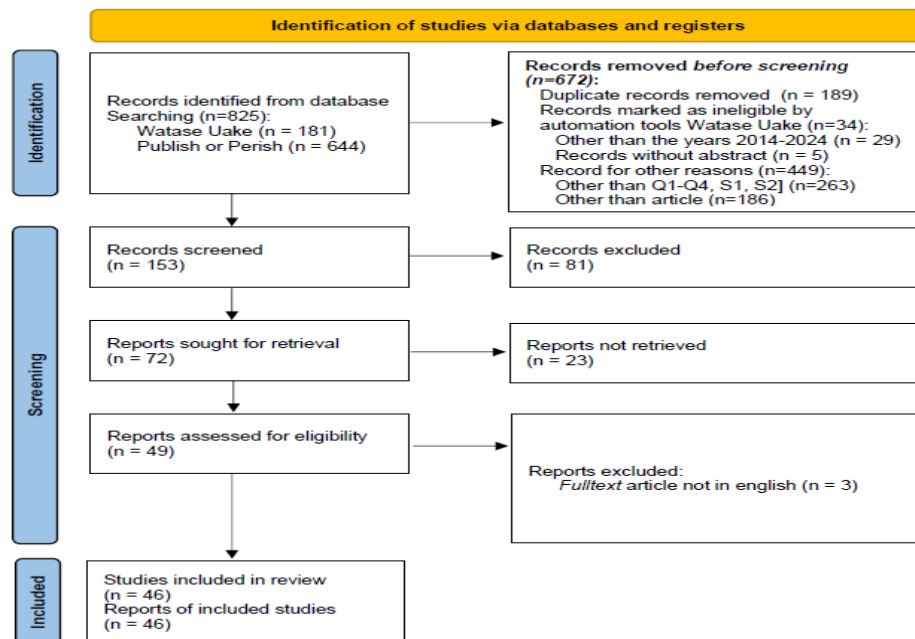


Figure 1. PRISMA Flow Diagram

The 46 selected articles were subjected to a thorough data completeness check using the Mendeley application and were then saved in RIS format. Following this, the articles were imported into VoSviewers version 1.6.17 to analyze the interconnected themes from 2014 to 2024. This comprehensive mapping process helped identify significant trends and relationships in the research on authentic and diagnostic assessments in Islamic education.

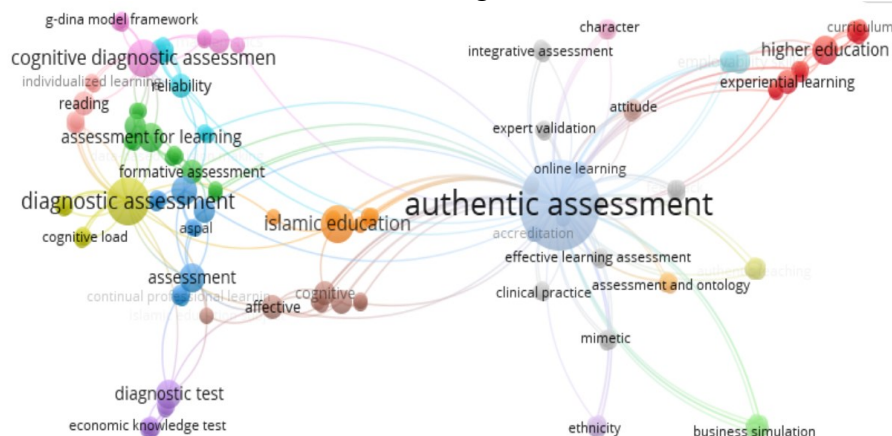


Figure 2. Initial Network Visualisation VoSviewers

The VOSviewers diagram in Figure 2 illustrates the complex network of associations surrounding authentic assessment and diagnostics. Authentic assessment research intersects with various thematic areas such as "higher education," "curriculum experiential learning," "integrative assessment," "effective learning assessment," "clinical practice," "Islamic education," and both "affective" and "cognitive" domains. On the other hand, diagnostic assessment has a more limited scope, connecting to themes like "economic knowledge test," "diagnostic test cognitive load," "cognitive diagnostic assessment," "reading," "spelling," and "Islamic Education." The themes that bridge authentic and diagnostic assessment are primarily "Islamic Education" and "affective assessment." However, the light colors in the figure indicate that these connections are not extensively explored, suggesting a need for

further research to deepen the understanding and application of holistic and meaningful assessment in Islamic education.

This study employed thematic analysis as the data analysis technique to address the research objectives. The thematic analysis allowed for the identification, analysis, and reporting of patterns (themes) within the data, facilitating a structured and comprehensive overview (Gupta et al., 2024) of the research trends in authentic and diagnostic assessments. By categorizing aspects found in the selected articles into relevant themes, the study could systematically analyze the factors influencing the implementation and effectiveness of these assessments. Furthermore, thematic analysis enabled the exploration of optimization strategies to improve the quality of Islamic learning, thus providing valuable insights for educators and education managers aiming to enhance assessment practices in holistic Islamic education.

Results and Discussion

Article Mapping on Authentic and Diagnostic Assessment

The articles included in the inclusion stage were then mapped based on data related to publication and relevance to the research objectives. Of the 46 articles included in the inclusion stage, 32 articles related to authentic assessment and 14 on diagnostic assessment were obtained. Research related to the two assessment models in the last ten years can be classified as follows:



Figure 3. Article Distribution Data Based on Year of Publication

The graph in Figure 3 illustrates the distribution of articles that met the inclusion criteria from 2014 to 2024. Early research (2014-2015) focused on basic and theoretical concepts such as the ontological concept of authentic assessment (Vu & Dall'Alba, 2014) and comparative studies of assessment approaches (Van der Kleij et al., 2015). Quantitative studies on cognitive diagnostic assessments (Jurich & Bradshaw, 2014) and teachers' awareness of self-assessment in Islamic religious education (Al-Basheer et al., 2015) were also prominent.

From 2016, research topics expanded to include archaeology (Wright & Veness, 2016), nursing (Chong et al., 2016), seafar competence (Ghosh et al., 2016), and the development of self- and peer-assessment models (Kearney et al., 2016). The emphasis was on validity and reliability in authentic assessment. In 2017, studies focused on authentic assessment of Islamic Civilisation History learning (Kristiawan & Elnanda, 2017) innovative assessments in health education and physics (Egan & Wengell, 2017; Rochmawati & Wahyuni, 2017). Between 2018 and 2020, the authentic assessment was applied in various fields including character education (Karim et al., 2018), business education (James & Casidy, 2018), and online learning (Alverson et al., 2019). Diagnostic assessments were explored for economic entrance tests (Schlax et al., 2020) and integrated into digital

platforms for regular feedback (Csapó & Molnár, 2019). Technology in assessment was highlighted by research on clinical ePortfolios (Tepper et al., 2020).

In 2021-2022, research spanned diverse applications such as cognitive diagnostic assessments (Tang & Zhan, 2021; Zhan et al., 2021), physics learning (Önder Çelikkanlı & Kızılcık, 2022), and various fields including English learning (Abdulaal et al., 2022), statistics education (Maas et al., 2022), employability (Sokhanvar et al., 2021), doctoral education (Keenan & Stewart-Wells, 2021), engineering (Sampath Kumar et al., 2022), and Islamic education (Achmad & Prastowo, 2022; Baroroh & Hamani, 2022; Hamdi & Muslimah, 2022).

Research in 2023 continued to explore diagnostic assessments in physics (Wancham & Tangdhanakanond, 2023) and the affective domain in Islamic education (Ismail, 2023). Self-assessment studies included online learning (Winarno et al., 2023), English (Daud et al., 2023), and hospitality studies (Nyanjom et al., 2023). In 2024, topics included diagnostic assessment in Arabic language learning in Pesantren (Mahmudi et al., 2024), literacy in English (Kahn-Horwitz & Goldstein, 2024) and the integration of GenAI tools in authentic assessment (Salinas-Navarro et al., 2024), indicating innovative approaches to enhance students' learning experiences and skills.

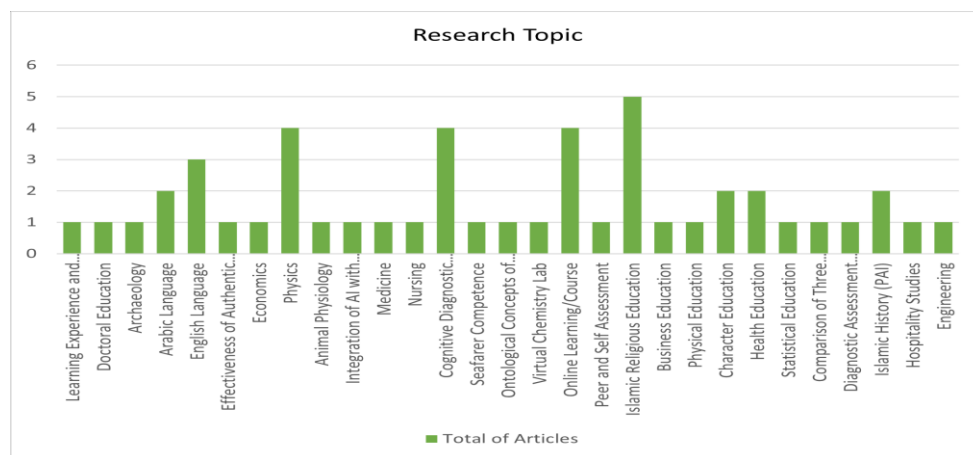


Figure 4. Distribution of Research Topics

The distribution of articles that fulfill the inclusion criteria from 2014 to 2024 shows significant development in the understanding and application of diagnostic and authentic assessment in various contexts. The articles collectively cover conceptual, methodological, and implementation aspects of diagnostic and authentic assessments across multiple fields and learning contexts, including Islamic education. The articles will be explored further to understand their implementation, factors influencing their effectiveness, and their potential to improve the quality of Islamic learning.

Research Trends of Authentic and Diagnostic Assessment in Education

Authentic assessment evaluates students' application of knowledge in real-life situations, measuring not only academic achievement but also practical skills (Ghosh et al., 2016; Vu & Dall'Alba, 2014). Various forms of authentic assessment, such as collaborative projects (Keenan & Stewart-Wells, 2021; Way et al., 2021; Yakob et al., 2023), self-and peer assessment (Fuentes-Nieto et al., 2022), and presentations (Achmad & Prastowo, 2022), foster active learning, critical thinking, creativity, and problem-solving abilities. Diagnostic assessments provide a detailed view of students' strengths and weaknesses, allowing for targeted interventions (Van der Kleij et al., 2015; Zhan et al., 2021). Its main function is as an early identification tool to uncover areas that require further intervention. This allows



teachers to adjust teaching strategies and resource allocation more appropriately, to meet the individual learning needs of each student (Abdulaal et al., 2022; Önder Çelikkanlı & Kızılcık, 2022). By ensuring that each student receives support tailored to their specific needs, diagnostic assessments increase students' chances of success in learning.

Tabel 3. Research Trends of Authentic and Diagnostic Assessment

Research Trends	Result
Authentic Assessment for Character Development	Supports social and emotional growth (Karim et al., 2018; Winarno et al., 2023)
Diagnostic Assessment for Learning Identification	Identifies learning needs for targeted support (Ismail, 2023; Kahn-Horwitz & Goldstein, 2024; Wancham & Tangdhanakanond, 2023)
Rubric Development	Enhances transparency and objectivity (Ghosh et al., 2016; Maimori, 2017)
Technology Integration	Facilitates personalized, interactive learning (Csapó & Molnár, 2019; Tepper et al., 2020)

Table 3 illustrates some recent research trends in authentic and diagnostic assessments. Winarno et al., (2023) studied online learning, while Karim et al., (2018) focused on character education, both highlighting how authentic assessment promotes students' social and emotional development. The development and use of authentic assessment rubrics, as demonstrated by Ghosh et al. (2016) and Maimori (2017) improve objectivity and consistency. Validity and reliability tests on these rubrics enhance transparency and objectivity in evaluations. On the other hand, diagnostic assessments, as explored by Ismail (2023), Kahn-Horwitz and Goldstein (2024), and Wancham and Tangdhanakanond (2023), are vital for pinpointing learning needs and supporting targeted student development.

One of the most interesting trends in recent studies on authentic and diagnostic assessments is the integration of technology, which enhances personalized and interactive learning experiences. Clinical e-portfolios (Tepper et al., 2020) and the eDia System (Csapó & Molnár, 2019) highlight that technology can improve assessments by providing timely, relevant feedback to enhance student learning. The clinical ePortfolio (Tepper et al., 2020) is a digital platform for medical students accessible via mobile devices, facilitating clinical assessment at the patient's side. It features a data aggregation dashboard, guest assessors, GPS attendance recording, access to learning modules, quizzes, skills assessment by clinical supervisors, and real-time feedback in voice or text. As an Assessment for Learning tool, the ePortfolio enables continuous feedback, self-reflection, progress monitoring, early intervention, and personalized learning.

Meanwhile, the eDia System (Csapó & Molnár, 2019) serves as a diagnostic test platform for reading, maths, and science. It employs a three-dimensional approach covering psychological assessment, applications, and disciplines, with a multimedia question bank exceeding 25,000 items. Tests are conducted online with automatic scoring and immediate feedback. eDia's statistical analysis module supports personalized learning, real-time feedback, continuous progress monitoring, improved assessment efficiency, and student engagement through multimedia. Both ePortfolios and the eDia System highlight how technology enhances learning through efficient assessment and personalization. These platforms play a crucial role in preparing college and university students with the necessary skills and knowledge for the future while ensuring a customized approach to learning that meets individual needs. Both platforms showcase the evolution of modern education, integrating technology deeply to enhance education quality and learning outcomes.



Factors Influencing the Effectiveness of Assessment Implementation

Factors influencing the effectiveness of assessment implementation in education, whether authentic or diagnostic, are critical for enhancing student learning. Table 4 outlines these factors, drawing from various studies.

Table 4. Factors Influencing the Effectiveness of Assessment Implementation

Type of Assessment	Supporting Factors	Inhibiting Factors
Authentic Assessment	<ol style="list-style-type: none"> Validity and reliability of assessment tools Simplify the instrument testing and validation process Use and integration of technology in the assessment process 	<ol style="list-style-type: none"> Lack of teacher preparation and understanding of assessment Complexity of evaluation procedures Limited resources and time allocation
Diagnostic Assessment	Use of digital platforms and development of algorithms for data analysis	<ol style="list-style-type: none"> Lack of teacher readiness and resistance to new methods Lack of understanding and training for teachers Limited infrastructure and resources

The effectiveness of authentic assessment is supported by the validity and reliability of assessment instruments (Ghosh et al., 2016), simplification of piloting and validation processes (Baroroh & Hamani, 2022), and the integration of technology (Tepper et al., 2020; Winarno et al., 2023). Challenges include teachers' lack of preparation and understanding (Fuentes-Nieto et al., 2022), limited resources in rural areas (Daud et al., 2023), and inadequate time allocation for developing and validating assessment instruments (Karim et al., 2018). For diagnostic assessment, technology enables in-depth data analysis and timely feedback, supports personalized education (Csapó & Molnár, 2019) and the customization of learning pathways (Jiang et al., 2022). Challenges include teacher training gaps, infrastructure limitations, and resistance to new methods (Bangeranye & Lim, 2020; Ismail, 2023; Tang & Zhan, 2021).

Optimizing the effectiveness of both assessments involves maximizing technology use for data analysis and feedback. Digital platforms such as ePortfolios (Tepper et al., 2020) and eDia System (Csapó & Molnár, 2019) can provide detailed information on student performance quickly and accurately. Addressing barriers, such as teacher understanding and preparedness requires continuous training covering assessment theory, technology use, and data interpretation (Bangeranye & Lim, 2020; Fuentes-Nieto et al., 2022). By equipping teachers with the necessary skills and making optimal use of technology, assessments can significantly enhance educational outcomes.

Optimizing the Implementation of Authentic and Diagnostic Assessment to Enhancing the Quality of Learning in Islamic Education

Articles on authentic and diagnostic assessments in Islamic education reveal diverse practices and challenges, contributing to meaningful learning experiences. Authentic assessment implementation spans various education levels, emphasizing cognitive, affective, and psychomotor domains for critical thinking, reflection, and real-world application (Achmad & Prastowo, 2022; Kristiawan & Elnanda, 2017; Maimori, 2017). However, challenges persist, such as the need to simplify assessments for better validity and reliability, highlighting the importance of resource development and teacher training (Baroroh & Hamani, 2022). This reflects the importance of resource development and teacher training in enhancing the effectiveness of authentic assessment.



Authentic assessment fosters holistic education, emphasizing students' knowledge (Hamdi & Muslimah, 2022), actions, and identity, promoting deep understanding and practical skills (Achmad & Prastowo, 2022; Al-Basheer et al., 2015; Mahmudi et al., 2024). On the other hand, diagnostic assessment in Islamic education aids in identifying learning needs and tailoring teaching methods, facilitating personalized and spiritual growth (Ismail, 2023). Such assessments inform both teaching and learning, enabling early identification of knowledge gaps and targeted interventions (Abdulaal et al., 2022; Kahn-Horwitz & Goldstein, 2024).

In optimizing the implementation of authentic and diagnostic assessments to enhance the quality of learning in Islamic education, it is essential to provide comprehensive teacher training. This training should cover Islamic methodologies and assessment practices, including workshops on rubric creation and validation (Ghosh et al., 2016). Additionally, simplifying the administration of assessments and ensuring adequate resources are available are crucial steps (Baroroh & Hamani, 2022; Daud et al., 2023). Furthermore, integrating technology into the assessment process can significantly enhance engagement and facilitate personalized learning experiences (Tepper et al., 2020; Csapó & Molnár, 2019).

Adapting e-portfolios in Islamic education enhances student engagement and learning experiences (Mahmudi et al., 2024) by archiving activities like memorizing Qur'anic verses, designing socio-religious projects, and participating in class discussions on Islamic history, with multimedia features enabling the upload of audio recordings of recitations, video presentations on fiqh topics, and written reflections on the stories of the prophets. E-portfolios facilitate continuous, individual assessment, allowing teachers to monitor progress and provide real-time feedback, ultimately strengthening students' cognitive and spiritual learning (Tepper et al., 2020). Meanwhile, the eDia System, when adapted for diagnostic assessment in Islamic learning, efficiently identifies students' learning needs and directs interventions (Csapó & Molnár, 2019). This technology enables the evaluation of understanding of Islamic concepts, Arabic language skills, and the application of Islamic values in daily life. Based on test results, it provides personalized feedback and recommendations to develop tailored learning plans. The eDia System's ability to analyze learning data supports adaptive, differentiated learning, ensuring every student receives the necessary academic and spiritual support.

Authentic and diagnostic assessments strengthen students' academic understanding and life competencies, connect classroom activities to the outside world and their personal experiences, and instill confidence and independence in their learning process (Jiang et al., 2022; Vu & Dall'Alba, 2014). Therefore, both assessments need to be optimized for their potential as assessment for learning tools (Sokhanvar et al., 2021; Van der Kleij et al., 2015), evaluating learning for interventions that can deepen religious understanding and practice. Integrating both assessments into PAI learning can be done lively and interactive, ensuring that students not only absorb knowledge but can also apply it in real situations, facilitating intellectual and spiritual comprehensive development. Through strategically implementing these two types of assessments, the Islamic learning process becomes more dynamic and holistic, preparing students for exams and life.

Conclusion

Based on the results of the systematic literature review, the results show that; 1) the main trends of the research are related to the integration of technology in both assessments through e-portfolios and eDia System; 2) factors affecting effectiveness include validity and reliability of instruments, simplification of trials and validation, and integration of technology, while the



obstacles are dominated by the lack of understanding of teachers, the complexity of procedures, and limited resources and time; 3) optimization steps include comprehensive training for teachers, development and validation of instruments, provision of supporting facilities, as well as the need for technology integration to make Islamic learning more dynamic, efficient, holistic, and meaningful. This paper can be a reference for educators and education managers to improve assessment practices in learning Islamic Religion so that it can effectively achieve the goals of holistic Islamic education.

Recommendation

Based on the results and discussion of this article, it is recommended that lecturers and policymakers in Islamic education prioritize the integration of authentic and diagnostic assessments into the curriculum, with a strong emphasis on spiritual development. Lecturers had better receive training on developing and implementing these assessments to enhance student engagement and provide continuous academic and spiritual feedback. Policymakers should support this initiative by allocating resources for technological tools like e-portfolios and the eDia System, which facilitate personalized learning and comprehensive development. By fostering a dynamic and holistic approach to assessment, incorporating intellectual and spiritual growth, lecturers and policymakers can better prepare students for academic success, life challenges, and deepened religious practice.

References

- Abdulaal, M. A. A. D., Alenazi, M. H., Tajuddin, A. J. A., & Hamidi, B. (2022). Dynamic vs. diagnostic assessment: impacts on EFL learners' speaking fluency and accuracy, learning anxiety, and cognitive load. *Language Testing in Asia*, 12(1). <https://doi.org/10.1186/s40468-022-00179-0>
- Achmad, G. H., & Prastowo, A. (2022). Authentic Assessment Techniques on Cognitive Aspects in Islamic Religious Education Learning at Elementary School Level. *Jurnal Ilmiah Sekolah Dasar*, 6(1), 75–84. <https://doi.org/10.23887/jisd.v6i1.43470>
- Ahmed, F. (2018). An exploration of Naquib al-Attas' theory of Islamic education as ta'dīb as an 'indigenous' educational philosophy. *Educational Philosophy and Theory*, 50(8), 786–794. <https://doi.org/10.1080/00131857.2016.1247685>
- Al-Basheer, A., Ashraah, M., & Alsmadi, R. (2015). Arabic Language teachers and Islamic Education teachers' awareness of authentic assessment in Jordan. *Teacher Development*, 19(4), 483–495. <https://doi.org/10.1080/13664530.2015.1064824>
- Alverson, J., Schwartz, J., & Shultz, S. (2019). Authentic assessment of student learning in an online class: Implications for embedded practice. *College and Research Libraries*, 80(1), 32–43. <https://doi.org/10.5860/crl.80.1.32>
- Bangeranye, C., & Lim, Y. S. (2020). How to Use Cognitively Diagnostic Assessments of Student Performance as a Method for Monitoring and Managing the Instructional Quality in Undergraduate Medical Education. *Academic Medicine*, 95(1), 145–150. <https://doi.org/10.1097/ACM.0000000000002954>
- Baroroh, U., & Hamani, T. (2022). Development of Authentic Assessment in Islamic Religious Education in Elementary School. *Nazhruna: Jurnal Pendidikan Islam*, 5(3), 940–955. <https://doi.org/10.31538/nzh.v5i3.2380>
- Bensman, S. J. (2011). Anne-Wil Harzing: The publish or perish book: Your guide to effective and responsible citation analysis. *Scientometrics*, 88(1), 339–342. <https://doi.org/10.1007/s11192-011-0388-8>
- Chong, E. J. M., Lim, J. S. W., Liu, Y., Lau, Y. Y. L., & Wu, V. X. (2016). Improvement of



- learning domains of nursing students with the use of authentic assessment pedagogy in clinical practice. *Nurse Education in Practice*, 20, 125–130. <https://doi.org/10.1016/j.nepr.2016.08.002>
- Csapó, B., & Molnár, G. (2019). Online diagnostic assessment in support of personalized teaching and learning: The eDia system. *Frontiers in Psychology*, 10(JULY). <https://doi.org/10.3389/fpsyg.2019.01522>
- Daud, A., Azhar, F., Isjoni, I., & Chowdhury, R. (2023). Complexities of Authentic Assessment Implementation in English Learning at Rural Areas-Based High Schools. *International Journal of Language Education*, 7(3), 494–510. <https://doi.org/10.26858/ijole.v7i3.41345>
- Egan, K., & Wengell, M. (2017). Creating An Authentic Assessment to Make Health Education Meaningful for All Students. *Strategies*, 30(1), 50–52. <https://doi.org/10.1080/08924562.2017.1253376>
- Fadlillah, N., Bakar, M. Y. A., & Assegaf, A. R. (2023). Optimizing Human Development: The Relevance of Hasan Langgulung's Concept of Islamic Education in the 21st Century. *Jurnal Penelitian Pendidikan Islam*, 11(1), 18. <https://doi.org/10.36667/jppi.v11i1.1525>
- Fuentes-Nieto, T., López-Pastor, V. M., & Palacios-Picos, A. (2022). A combination of transformative and authentic assessment through ICT in Physical Education. In *Retos* (Vol. 45, pp. 728–738). <https://doi.org/10.47197/retos.v44i0.91459>
- Gebriel, A. (2016). Educational Assessment in Muslim Countries: Values, Policies, and Practices. In G. T. L. Brown & L. R. Harris (Eds.), *Handbook of Human and Social Conditions in Assessment* (pp. 204–220). Routledge. <https://doi.org/10.4324/9781315749136-19>
- Ghosh, S., Bowles, M., Ranmuthugala, D., & Brooks, B. (2016). Authentic assessment in seafarer education: using literature review to investigate its validity and reliability through rubrics. *WMU Journal of Maritime Affairs*, 15(2), 317–336. <https://doi.org/10.1007/s13437-015-0094-0>
- Gupta, S. L., Mittal, A., Singh, S., & Dash, D. N. (2024). Demand-driven approach of vocational education and training (VET) and experiential learning: a thematic analysis through systematic literature review (SLR). *Asian Education and Development Studies*, 13(1), 45–63. <https://doi.org/10.1108/AEDS-07-2023-0083>
- Hamdi, S., & Muslimah, M. (2022). The Dilemma of Applying Authentic Assessment to Aqidah Akhlak Subjects. *Nazhruna: Jurnal Pendidikan Islam*, 5(3), 1091–1104. <https://doi.org/10.31538/nzh.v5i3.2211>
- Hijriyah, L., Alias, A., & Mohd Sahabuddin, M. F. (2024). Exploring walkability research trends based on systematic literature review (SLR) by applying PRISMA. *Open House International*, 49(1), 63–121. <https://doi.org/10.1108/OHI-02-2023-0031>
- Ilham Fahmi, M., Wahyu, D., Aisyah, S. A., Harto, K., & Suryana, E. (2023). Implementasi Asesmen Diagnostik Pada Mata Pelajaran Pendidikan Agama Islam Di Sekolah Menengah Kejuruan Negeri 1 Ogan Komering Ulu. *FIKROTUNA: Jurnal Pendidikan Dan Manajemen Islam*, 12(02), 184–197. <https://doi.org/10.32806/jf.v12i02.7239>
- Ismail, F. (2023). The Use of Diagnostic Test for Islamic Education Subject in the Post Covid-19 Assessment on the Affective Domain. *Ta'dib: Jurnal Pendidikan Islam*, 28(1), 35–43. <https://doi.org/10.19109/td.v28i1.17150>
- James, L. T., & Casidy, R. (2018). Authentic assessment in business education: its effects on student satisfaction and promoting behaviour. *Studies in Higher Education*, 43(3), 401–415. <https://doi.org/10.1080/03075079.2016.1165659>



- Jiang, B., Li, X., Yang, S., Kong, Y., Cheng, W., Hao, C., & Lin, Q. (2022). Data-Driven Personalized Learning Path Planning Based on Cognitive Diagnostic Assessments in MOOCs. *Applied Sciences (Switzerland)*, 12(8). <https://doi.org/10.3390/app12083982>
- Jurich, D. P., & Bradshaw, L. P. (2014). An Illustration of Diagnostic Classification Modeling in Student Learning Outcomes Assessment. *International Journal of Testing*, 14(1), 49–72. <https://doi.org/10.1080/15305058.2013.835728>
- Kahn-Horwitz, J., & Goldstein, Z. (2024). English foreign language reading and spelling diagnostic assessments informing teaching and learning of young learners. *Language Testing*, 41(1), 60–88. <https://doi.org/10.1177/02655322231162838>
- Karim, A. A., Abduh, A., Manda, D., & Yunus, M. (2018). The effectivity of authentic assessment based character education evaluation model. *TEM Journal*, 7(3), 495–500. <https://doi.org/10.18421/TEM73-04>
- Kearney, S., Perkins, T., & Kennedy-Clark, S. (2016). Using self- and peer-assessments for summative purposes: analysing the relative validity of the AASL (Authentic Assessment for Sustainable Learning) model. *Assessment and Evaluation in Higher Education*, 41(6), 840–853. <https://doi.org/10.1080/02602938.2015.1039484>
- Keenan, K. M., & Stewart-Wells, A. G. (2021). Moving Beyond Comprehensive Exams: Implementing Authentic Assessments to Enhance Doctoral Student Learning. *Christian Higher Education*, 20(1–2), 69–86. <https://doi.org/10.1080/15363759.2020.1851815>
- Khoiriyah, S., Faizin, M., Asror, M., & Kusaeri, K. (2023). Research Trends in School Excellent Model (SEM): The Future Insights for Islamic Education Assessment. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, 15(2), 907–922. <https://doi.org/10.37680/qalamuna.v15i2.3143>
- Kristiawan, M., & Elnanda, D. (2017). The Implementation of Authentic Assessment in Cultural History of Islamic Subject. *Al-Ta Lim Journal*, 24(3), 266–276. <https://doi.org/10.15548/jt.v24i3.345>
- Maas, L., Brinkhuis, M. J. S., Kester, L., & Wijngaards-De Meij, L. (2022). Cognitive Diagnostic Assessment in University Statistics Education: Valid and Reliable Skill Measurement for Actionable Feedback Using Learning Dashboards. *Applied Sciences (Switzerland)*, 12(10). <https://doi.org/10.3390/app12104809>
- Mahmudi, I., Imani, A., Yasin Indriyanti, C., & Pooteh, R. (2024). Impact of Portfolio Authentic Assessment on Students' Learning Outcomes of Nahwu at Modern Islamic Boarding School. *Izdihar : Journal of Arabic Language Teaching, Linguistics, and Literature*, 6(3), 279–292. <https://doi.org/10.22219/jiz.v6i3.27441>
- Maimori, R. (2017). the Development of Authentic Assessment Rubric on History of Islamic Culture Subject At Islamic Education Department of Iain Batusangkar. *Ta'dib*, 20(2), 107. <https://doi.org/10.31958/jt.v20i2.674>
- Markus, M., Abu Bakar, M. Y., & Kholis, N. (2023). Integration of Tringo Concept Ki Hadjar Dewantara in Development of Islamic Education Learning Evaluation. *Al-Hayat: Journal of Islamic Education*, 7(2), 544. <https://doi.org/10.35723/ajie.v7i2.400>
- Monteiro, V., Mata, L., & Santos, N. N. (2021). Assessment Conceptions and Practices: Perspectives of Primary School Teachers and Students. *Frontiers in Education*, 6(April), 1–15. <https://doi.org/10.3389/feduc.2021.631185>
- Nyanjom, J., Goh, E., & Yang, E. C. L. (2023). Integrating authentic assessment tasks in work integrated learning hospitality internships. *Journal of Vocational Education and Training*, 75(2), 300–322. <https://doi.org/10.1080/13636820.2020.1841821>
- Önder Çelikkanlı, N., & Kızılcık, H. Ş. (2022). Review of Studies About Four-Tier



- Diagnostic Tests in Physics Educatio. *Journal of Turkish Science Education*, 19(4), 1291–1311. <https://doi.org/10.36681/tused.2022.175>
- Puteri, A. N., Yoenanto, N. H., & Nawangsari, N. A. F. (2023). Efektivitas Asesmen Autentik dalam Pembelajaran. *Jurnal Pendidikan Dan Kebudayaan*, 8(1), 77–87. <https://doi.org/10.24832/jpnk.v8i1.3535>
- Rochmawati, Y., & Wahyuni, S. (2017). Authentic Assessment in Physics Learning Using Physics Chess Game for Senior High School. *International Journal of Learning*, 3(1), 15–18. <https://doi.org/10.18178/IJLT.3.1.15-18>
- Salinas-Navarro, D. E., Vilalta-Perdomo, E., Michel-Villarreal, R., & Montesinos, L. (2024). Using Generative Artificial Intelligence Tools to Explain and Enhance Experiential Learning for Authentic Assessment. *Education Sciences*, 14(1). <https://doi.org/10.3390/educsci14010083>
- Sampath Kumar, V., Veerendra Kumar, A. N., Bisoyi, S. K., & Pandey, J. P. (2022). The novel evaluation scheme for Competency Based Learning, authentic assessment and its implementation strategies for universities of higher education. *Journal of Engineering Education Transformations*, 36(special issue 2), 225–228. <https://doi.org/10.16920/jeet/2023/v36is2/23032>
- Schlax, J., Zlatkin-Troitschanskaia, O., Happ, R., Pant, H. A., Jitomirski, J., Kühling-Thees, C., Förster, M., & Brückner, S. (2020). Validity and fairness of a new entry diagnostics test in higher education economics. *Studies in Educational Evaluation*, 66(October 2019), 100900. <https://doi.org/10.1016/j.stueduc.2020.100900>
- Sokhanvar, Z., Salehi, K., & Sokhanvar, F. (2021). Advantages of authentic assessment for improving the learning experience and employability skills of higher education students: A systematic literature review. *Studies in Educational Evaluation*, 70(March), 101030. <https://doi.org/10.1016/j.stueduc.2021.101030>
- Sufyadi, S., Lmabas, Rosdiana, T., Novrika, S., Isyowo, S., Hartini, Y., Primadonna, M., Rochim, N. A. F., & Rizal, M. L. (2021). Panduan Pembelajaran dan Asesmen Jenjang Pendidikan Dasar dan Menengah (SD/MI, SMP/MTs, SMA/SMK/MA). In *Kepala Pusat Asesmen dan Pembelajaran Badan Penelitian dan Pengembangan dan Perbukuan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknolog*.
- Tang, F., & Zhan, P. (2021). Does Diagnostic Feedback Promote Learning? Evidence From a Longitudinal Cognitive Diagnostic Assessment. *AERA Open*, 7(1). <https://doi.org/10.1177/23328584211060804>
- Tepper, C., Bishop, J., & Forrest, K. (2020). Authentic assessment utilising innovative technology enhanced learning. *Asia Pacific Scholar*, 5(1), 70–75. <https://doi.org/10.29060/TAPS.2020-5-1/SC2065>
- Van der Kleij, F. M., Vermeulen, J. A., Schildkamp, K., & Eggen, T. J. H. M. (2015). Integrating data-based decision making, Assessment for Learning and diagnostic testing in formative assessment. *Assessment in Education: Principles, Policy and Practice*, 22(3), 324–343. <https://doi.org/10.1080/0969594X.2014.999024>
- Vu, T. T., & Dall’Alba, G. (2014). Authentic Assessment for Student Learning: An ontological conceptualisation. *Educational Philosophy and Theory*, 46(7), 778–791. <https://doi.org/10.1080/00131857.2013.795110>
- Wahyudi, L. (2020). *Tentang Watase Uake*. Watase Uake Indonesia. <https://www.watase.web.id/home/index.php>
- Wancham, K., & Tangdhanakanond, K. (2023). Development of learning path map of work and energy for high schoolers by using cognitive diagnostic assessment. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(11), 1–18.



- <https://doi.org/10.29333/EJMSTE/13812>
- Way, K. A., Burrell, L., D'Allura, L., & Ashford-Rowe, K. (2021). Empirical investigation of authentic assessment theory: An application in online courses using mimetic simulation created in university learning management ecosystems. *Assessment and Evaluation in Higher Education*, 46(1), 17–35. <https://doi.org/10.1080/02602938.2020.1740647>
- Winarno, Komalasari, K., & Indrawadi, J. (2023). Authentic assessment in online learning to develop students' character. *Kasetsart Journal of Social Sciences*, 44(4), 1091–1100. <https://doi.org/10.34044/j.kjss.2023.44.4.13>
- Wright, D., & Veness, D. (2016). An Authentic Learning Approach to Assessment in Australian Archaeology. *Archaeologies*, 12(3), 264–280. <https://doi.org/10.1007/s11759-017-9301-2>
- Yakob, M., Sari, R. P., Hasibuan, M. P., Nahadi, N., Anwar, S., & Islami, R. A. Z. El. (2023). the Feasibility of Authentic Assessment Instrument Through Virtual Laboratory Learning and Its Effect on Increasing Students' Scientific Performance. *Journal of Baltic Science Education*, 22(4), 631–640. <https://doi.org/10.33225/jbse/23.22.631>
- Zhan, P., Li, F., & Jiao, H. (2021). Editorial: Cognitive Diagnostic Assessment for Learning. *Frontiers in Psychology*, 12(November), 10–12. <https://doi.org/10.3389/fpsyg.2021.806636>
- Zulkifli, H., & Azman, N. A. (2021). Students' Self-Assessment on Hikmah Pedagogy in Islamic Education. *Religación. Revista de Ciencias Sociales y Humanidades*, 6(29), e210805. <https://doi.org/10.46652/rgn.v6i29.805>