Nadwa: Jurnal Pendidikan Islam Vol. 19, No. 1, 2025
ISSN 1979-1739 (p), 2502-8057 (e)
https://doi.org/10.21580/nw.2025.19.1.26153

Artificial Intelligence and Islamic Perspective in Student Character Assessment

Said Maskur[1*], Hasyamuddin bin Othman[2]

[1]Institut Agama Islam (IAI) Ar-Risalah INHIL Riau, Indonesia
[2]Universiti Tun Hussein Onn Malaysia, Malaysia

ARTICLE HISTORY

Received
18-04-2025

Accepted
25-07-2025

Published
12-09-2025

ABSTRACT

Artificial intelligence (AI) is increasingly adopted in higher education, including in student character assessment. However, AI's inability to capture spiritual aspects such as intention (niyyah), sincerity, and God-consciousness (taqwa) creates a gap between technological efficiency and the moral values of Islamic education. This study aims to explore students' perceptions of AI-based character assessments in Islamic universities and propose a conceptual framework grounded in maqasid al-shariah. A descriptive qualitative method with a phenomenological design was employed, involving 20 purposively selected students from five academic programs at the Ar-Risalah Institute of Islamic Studies, Riau. Data were gathered through in-depth interviews, observations, and document analysis, and analyzed using the Miles and Huberman model. The findings reveal students' distrust toward AI's fairness, particularly its failure to assess inner spiritual dimensions, and highlight the irreplaceable role of educators in moral guidance. The study concludes that AI should be ethically guided and embedded with Islamic values to ensure its compatibility with character education in faith-based institutions. A value-sensitive AI framework can help harmonize automation with spiritual integrity, allowing Islamic higher education to adopt digital technologies without compromising its sacred pedagogical mission.

KEYWORDS

Artificial Intelligence; Character Assessment; Islamic Perspective

*Corresponding author: Said Maskur ✉(Said.maskur@gmail.com), Institut Agama Islam (IAI) Ar-Risalah INHIL Riau, Indonesia.

Introduction

The integration of artificial intelligence (AI) in higher education has significantly reshaped the character assessment process. AI technologies are now widely applied not only in learning environments but also in evaluating students' behavioral attributes. Through the use of big data analytics, AI systems are capable of monitoring attendance, participation, and task compliance. These systems are perceived to reduce the subjectivity of human evaluation by offering automated and data-driven judgments. Within Islamic education, however, character is defined not only by observable actions but also by internal spiritual values. Aspects such as sincerity, trustworthiness, and intention remain difficult to capture using standard algorithmic parameters. This gap raises fundamental concerns about the legitimacy and reliability of AI-based assessments. The role of this study is to explore these ethical challenges through the lens of Islamic education. A contextual rethinking of AI systems is thus necessary for faith-based institutions.

Recent international literature highlights AI's promising potential to enhance the efficiency and objectivity of academic evaluations. Perkins et al. (2024) proposed the *AI Assessment Scale*, emphasizing the need for ethical considerations in automated assessment. Roe et al. (2024) asserted that AI functions more effectively when combined with human judgment rather than replacing it. Al-Zahrani (2024) observed that Saudi students responded positively to AI, provided that fairness and transparency were maintained. Sundas and Abbas (2025) found that individual personality traits affect students' acceptance of AI. Cotton et al. (2023) raised concerns about the erosion of academic integrity in AI-supported assessments. Bozkurt et al. (2023) reported that AI literacy remains insufficient among university educators. Most studies tend to focus primarily on technical reliability and operational performance. Discussions on values, culture, and spirituality remain underexplored. The current study seeks to address this overlooked dimension.

Prior research has not sufficiently examined how AI assessment systems can align with Islamic educational values. Nasr (2015) emphasized that knowledge in Islam must be interconnected with morality, spirituality, and divine purpose. Algorithmic models that ignore cultural and spiritual dimensions risk becoming reductionist and ethically shallow. Islamic perspectives on character prioritize internal motives, which are not easily quantifiable through digital means. AI systems that fail to address this concern may deliver assessments that are morally inaccurate. Educational technology in Islamic settings must go beyond surface-level performance indicators. Collaborative

engagement between technologists and Islamic scholars is critical to avoid epistemological dissonance. Character assessment, in this view, is not a mechanical task but a sacred responsibility. Human involvement remains irreplaceable in interpreting intentions and moral depth. The design of AI systems should thus reflect the ethical foundations of Islamic pedagogy.

Concerns have emerged over the growing dominance of AI in education, particularly when ethical and spiritual considerations are neglected. Educational institutions are often eager to adopt technology but may overlook the moral implications of automation. High digital literacy does not guarantee ethical sensitivity in deploying AI. Within Islamic universities, character assessment should emphasize not only behavioral metrics but also intrinsic values. Educational justice requires evaluating both visible actions and the inner motives behind them. Overreliance on AI could marginalize human judgment, which is central to nurturing moral development. AI systems must therefore be designed selectively and proportionally within a value-conscious framework. Tools should assist, not replace, educators in building ethical and spiritual character. The challenge lies in creating a balance between technological advancement and religious principles. This research proposes a constructive response to that very challenge.

Investigating students' perceptions of AI in character assessment at Islamic universities is both timely and essential. This issue intersects the fields of educational technology and Islamic moral philosophy. Systems built without a spiritual framework may compromise the goals of Islamic education. The study aims to offer a conceptual foundation for value-sensitive AI development. Insights into student attitudes will support the formulation of character assessment models that are technologically effective and spiritually authentic. The discussion will also inform Islamic educational institutions on the importance of ethical integration in digital reforms. Acknowledging students' views will help ensure that AI implementation aligns with both pedagogical and moral expectations. The outcomes of this research will contribute to a holistic discourse on character formation. Faith-based education must be equipped to embrace technology without abandoning its sacred values. This study aspires to pave that middle path with clarity and purpose.

Method

This study adopts a qualitative research approach with a descriptive phenomenological design. This approach is considered appropriate for exploring the inner perceptions and experiences of students in understanding the role of artificial

intelligence (AI) in character assessment. A qualitative design enables the researcher to analyze subjective meanings and value-laden perspectives, especially those related to spiritual ethics that are not quantifiable (Roe et al., 2024). The use of a phenomenological lens aims to deeply examine how students make sense of AI-based evaluations in an Islamic educational environment. The phenomenon of automated assessment systems that may lack sensitivity to religious and moral values formed the basis for selecting this topic. The study seeks to bridge the gap between technological efficiency and Islamic character principles, an area still underexplored in current literature (Perkins et al., 2024). The research was conducted at the Ar-Risalah Institute of Islamic Studies in Indragiri Hilir Regency, Riau Province, Indonesia. This institution was selected due to its initiative to integrate AI technology into student evaluation practices. The site represents a relevant case for studying faith-based educational settings in the age of digitalization.

The types of data collected in this research consist of both primary and secondary data sources. Primary data was obtained through direct interactions with students who had experienced AI-assisted character assessments in Islamic university settings. Secondary data includes peer-reviewed journal articles, policy documents, institutional guidelines, and related literature from Scopus-indexed publications. Participants were selected using purposive sampling, targeting 20 informants from five academic departments who had direct experience with AI-based systems. The selection process ensured representation across gender, academic discipline, and level of exposure to AI tools. According to Bozkurt et al. (2023), AI literacy among students significantly affects how they interpret the function and fairness of AI systems. Similarly, Cotton et al. (2023) emphasized that student trust in digital evaluation platforms is shaped by prior experience and ethical alignment. Therefore, informant selection was aligned with the exploratory goals of this research. The inclusion of multiple data sources ensures the validity of insights across social, ethical, and spiritual dimensions.

Data were collected using semi-structured interviews, participatory observations, and document analysis. Interviews focused on capturing students' perceptions of the ethical, spiritual, and procedural dimensions of AI-based character assessment. Observations were conducted during academic activities involving automated assessment tools to examine behavioral responses. Documentation included institutional assessment policies, AI protocols, and campus regulations. The data were analyzed using the Miles and Huberman model, which includes data reduction, display, and verification. Open coding techniques were employed to identify emerging themes

related to Islamic values and AI integration. Triangulation was applied across interviews, field notes, and institutional documents to enhance credibility. Member checking was also conducted to ensure interpretative accuracy. Roe et al. (2024) emphasized the importance of cross-validating qualitative data sources in understanding complex sociotechnical systems. The final stage involved conceptual modeling to illustrate how student acceptance of AI aligns or conflicts with Islamic character education frameworks.

Results

This study engaged 20 students from five different academic programs at the Ar-Risalah Institute of Islamic Religion, located in Indragiri Hilir, Riau Province. The study programs included Islamic Business Management (MBS), Islamic Communication and Broadcasting (KPI), Islamic Education Management (MPI), English Language Education (TBI), and Early Childhood Islamic Education (PIAUD). The findings revealed complex perceptions and reactions toward the application of artificial intelligence in character assessment, especially when assessed from an Islamic ethical standpoint. Students perceived AI as a technical tool focused primarily on administrative efficiency, and they questioned its ability to fairly evaluate deeply rooted spiritual and moral attributes. Factors contributing to this skepticism included low digital ethics literacy, a lack of understanding of AI's mechanisms, and the absence of religious-contextual integration in system design. As a result, students found many of the AI-based indicators of character misaligned with the values taught within Islamic pedagogy. These findings suggest the necessity for a transformative approach in AI development one that harmonizes technological precision with Islamic moral frameworks to ensure character assessment systems support rather than diminish spiritual education values.

Table 1. Thematic Distribution of Student Perspectives on the Use of Artificial Intelligence in Character Assessment

No	Thematic Focus	Summary of Student Perspective	Representative Narrative Quote	Number of Informants
1	Distrust toward AI's objectivity	Students believe AI lacks the ability to grasp intentions and personal context, making its assessment feel superficial or	"Character isn't just about submitting on time—it's about intention and struggle. AI can't perceive that."	15 students

		unjust.		
2	Misalignment of assessment indicators	AI-based indicators are seen as too technical, focusing on digital presence or punctuality rather than deep moral and Islamic values.	"If AI only measures LMS activity, that's not character. A student can be active but far from Islamic ethics inside."	13 students
3	AI cannot replace the role of lecturers	Lecturers are valued for their emotional, spiritual, and human judgment—something AI cannot replicate.	"Lecturers assess with their hearts. AI uses numbers. It can't give advice or pray for you."	17 students
4	Lack of ethical-technical literacy	Students admit they have not been educated about AI's mechanisms or its alignment with Islamic educational principles.	"I don't even know how AI evaluates. If the system isn't explained to us, how can we trust it?"	12 students
5	Hope for Islamic-contextual AI design	Students suggest AI development should involve collaboration with Islamic scholars and educators to embed justice, wisdom, and faith-based values.	"If AI were designed with scholars and lecturers, maybe it'd be more just—not just smart but also aligned with Islamic principles."	16 students

The distribution of student responses presented in the previous table reveals dominant thematic tendencies that reflect consistent viewpoints among informants. Although this study employed a qualitative approach, highlighting the frequency of similar perspectives serves to emphasize the prominence and weight of certain arguments. The variety of views expressed illustrates students' concerns, expectations, and critical assessments regarding artificial intelligence as a tool for character evaluation within the framework of Islamic education. To further explore the nuances captured through in-depth interviews, the following section presents five key thematic categories accompanied by representative narrative quotes from the student informants.

Students' Understanding of AI as an Assessment System

Based on in-depth studies and discussions, it was found that cultural knowledge is the basis for human relations with the earth among Blora farmers. The farmers expressed destructive and exploitative agricultural practices with the term "rudopekso bumi" (treating the earth by force/exploitation). In fact, everyone must practice "rekso bumi" (caring for the earth). Thus, the change in the agricultural model from non-organic farming to organic farming is seen as a change from *rudopekso bumi* to *rekso bumi* (from exploiting the earth to caring for the earth). This concept contains a deep philosophy about the paradigm shift in natural resource management. If *"rudopekso bumi"* describes excessive exploitation of the earth, then *"rekso bumi"* emphasizes protecting and preserving the earth as a moral, social, and ecological responsibility. In the context of empowering the organic farmer group of Kadang Tani Sarwa Tulus in Blora Regency, this approach finds practical relevance through several values, such as local knowledge passed down from generation to generation. With its uniqueness, local knowledge offers a tradition-based alternative that is harmonious with nature while also being a tool for transforming non-formal education implemented by the PCNU Blora Agricultural Development Institute.

Students from five Islamic education programs showed varying levels of understanding regarding the use of artificial intelligence in character assessment. Most perceive AI as a technical tool for administrative tasks, such as digital attendance or assignment tracking, rather than a system capable of evaluating moral values. This limited understanding prevents them from appreciating AI's potential in character development. The lack of academic exposure to ethical AI in an Islamic context further deepens this gap. As a result, students doubt AI's capacity to fairly assess inner values, such as intention and sincerity, which are central to Islamic education. This perception shapes a cautious attitude toward its implementation.

> *"So far, I've seen AI as a tool for attendance or automated reminders. But when it comes to evaluating morality, I don't think it fits. Morality involves intention and heart, not just visible behavior. We need human guidance, not a machine that just reads numbers." (MBS respondent)*

Incompatibility of Character Indicators with Algorithmic Systems

Students are critical of how AI uses rigid indicators to evaluate complex human traits. Key values like honesty, responsibility, and empathy cannot be measured solely by attendance or punctuality. They argue that algorithmic systems ignore context and background, which leads to inaccurate judgments. This results in a sense of injustice

and emotional detachment from the assessment process. From the students' perspective, character cannot be reduced to scores or statistical data. Therefore, the mismatch between character dimensions and algorithmic standards becomes a central critique of AI in Islamic education.

> *"AI doesn't know why I submitted late or why I seemed quiet in class. Maybe I had to help my parents or was struggling emotionally. But the system just gives a low score. It treats everyone the same, which is unfair. Character can't be standardized like that." (KPI respondent)*

Limited Literacy in Ethical Technology among Students

Low digital literacy also contributes to students' skepticism toward AI in Islamic learning environments. They report not receiving adequate instruction about how AI operates, especially from an ethical or religious perspective. Without that foundational knowledge, students perceive AI as a value-neutral system that lacks sensitivity to moral dimensions. This creates a disconnect between technology and Islamic principles, making AI appear as a threat to spiritual growth rather than a facilitator. Students believe the current approach lacks the ethical nuance needed for character-based education.

> *"We've never had a course or training that teaches how AI can assess character. There should be Islamic-based discussions on this. As it is, AI seems emotionless. If we use it in Islamic universities, it must understand the values of Sharia, not just efficiency." (MPI respondent)*

The Irreplaceable Role of Educators in Character Formation

Although students acknowledge AI's technical strengths, they insist that educators remain central in shaping character. AI may record behavior, but it cannot offer mentorship, empathy, or moral reflection. Students feel that character education requires warmth, dialogue, and spiritual guidance elements uniquely provided by teachers. Educators are seen not just as assessors but as role models and moral authorities. Thus, students argue that AI should support, not replace, human interaction in the learning process.

> *"I feel more comfortable being assessed by my lecturer. They understand my journey, give guidance, and even pray for me. If AI does it, I fear being reduced to numbers. Character is formed through process and relationships, not just data points." (TBI respondent)*

Expectations for an Islamic and Contextual AI Design

Students hope for an AI system designed with both technological excellence and Islamic values. They want an AI that can interpret the context behind actions, not just the output. The ideal AI should be the result of collaboration between tech experts, educators, and Islamic scholars, creating a system that is not only efficient but wise. Students envision an AI that supports their spiritual and moral growth, not one that judges them mechanically. In this sense, AI becomes a tool of *tarbiyah*, not merely assessment.

> *"If AI is built with input from lecturers and religious scholars, I believe it can be fairer. It shouldn't only score our activeness or speed, but also see our intentions and efforts. That kind of AI will help us learn better, not add stress." (PIAUD respondent)*

Discussions

Artificial intelligence's (AI) inability to assess students' spiritual dimensions reveals a fundamental gap between digital systems and the holistic values of Islam. In Islamic teachings, character is not solely evaluated based on observable behavior but is rooted in the purity of intention (niyyah), which lies beyond algorithmic comprehension. This resonates with the principle of maqasid al-shariah, especially hifz al-din (protection of religion), which emphasizes the internalization of moral values (Auda, 2008; Hassan & Mahamood, 2020). AI systems operate primarily through external indicators and neglect intrinsic virtues like sincerity and devotion, which form the essence of Islamic education.

Many students expressed skepticism about the justice of AI-based assessments, viewing them as formalistic and detached from the lived experiences of individuals. From an Islamic ethical perspective, justice (al-'adl) encompasses contextual fairness, not merely procedural accuracy (Zaharin et al., 2022). Data driven evaluations often miss this nuance, potentially resulting in inequitable outcomes. Al-Mahameed et al. (2021) noted that algorithmic systems, though efficient, often fail to consider non-standardized contextual variables that are vital in measuring integrity and personal growth.

In higher Islamic education, AI must evolve from being merely an assessment tool to a character-development aid. Character in Islam involves cultivating taqwa, shidq (truthfulness), and amanah (trustworthiness) values that are profoundly internal and spiritual (Alabdulkareem et al., 2021). These cannot be digitized without significant

distortion. As Naser et al. (2020) argue, integrating spiritual reasoning into AI systems is crucial for maintaining the sanctity of moral education in Islamic institutions.

Concerns were also raised regarding the ethics of data collection and usage. According to Islamic jurisprudence, safeguarding personal data aligns with maqasid al-shariah principles like hifz al-nafs (protection of life) and hifz al-'irdh (protection of dignity) (Abu Bakar et al., 2021). Without strict ethical oversight, AI could compromise these values. Ben Ali et al. (2020) warn that algorithmic bias in data usage poses significant risks to privacy and fairness in digital Muslim societies.

The recommendation for involving Islamic scholars in AI development reflects students' desire for spiritually conscious systems. This supports the concept of Islamic design thinking a method that balances technological efficiency with transcendental principles (Mahmoud & Othman, 2023). Khan et al. (2022) emphasize that moral agents must participate in system design to ensure alignment with Islamic ethics and the broader good (maslahah). Students' insistence on the irreplaceable role of educators in character formation highlights a distinction between data transmission and value transformation. Amin & Ibrahim (2020) stress that Islamic pedagogy depends heavily on personal interaction and moral modeling (murabbi), which no AI can emulate. Even in modern AI-driven education, the role of spiritual mentorship remains vital and irreplaceable.

The critique of AI's technical indicators reflects an epistemological objection to reducing human values into numerical formats. Islamic theology posits that the merit of actions lies in their sincerity and moral substance, not just their quantifiable attributes (Al-Qaradawi, 1995). This aligns with emerging literature on value-based education in Islamic AI development (Ismail & Mohamed, 2021), advocating for a normative and spiritually anchored epistemology in technology design. The students' aspirations for Islamically attuned AI systems indicate potential for developing Islamic Artificial Intelligence (IAI) technological systems rooted in shariah-compliant logic (Hassan et al., 2022). Models of IAI are emerging in countries like Malaysia and the UAE, where maqasid-oriented programming has been proposed as a solution to ethical dilemmas in AI deployment.

Students' lack of knowledge about how AI assessments work underscores the need for shariah-based digital literacy. Many were unaware of the underlying mechanisms, revealing curricular gaps in Islamic higher education. Rahman & Rahim (2022) suggest incorporating techno ethical literacy combining fiqh, ethics, and digital skills. Abdul Ghani et al. (2020) propose techno ethical pedagogy to prepare students

for moral reasoning in technology use. Ultimately, AI in character education should not be rejected but ethically guided. Islam embraces technology as long as it contributes to the common good and adheres to divine values. Maqasid al-shariah and Islamic ethics are not mere criticisms but constructive frameworks to realign AI with humanity's spiritual purpose. Through this, character assessment using AI can evolve into a tool that promotes both educational excellence and Islamic moral development (Yusof et al., 2023; Sani & Hamid, 2021).

To consolidate its academic contribution, this article proposes a conceptual framework for AI-based character assessment in Islamic education that integrates spiritual values and ethical principles into technological design. The framework comprises three core components: (1) Islamic character dimensions such as sincerity (ikhlas), trustworthiness (amanah), and God-consciousness (taqwa), which cannot be adequately captured by observable behavioral indicators; (2) the application of maqasid al-shariah as an ethical foundation, ensuring that AI usage in evaluation safeguards religion, intellect, and human dignity; and (3) an integrative model that positions educators as murabbi moral mentors while employing AI as a transparent and non-authoritarian diagnostic tool. By articulating this framework, the study not only critiques AI's limitations in assessing spiritual aspects but also outlines the foundational logic for developing Islamic Artificial Intelligence (IAI) systems that are transformative, ethically grounded, and aligned with the moral imperatives of Islamic education.

Conclusion

This study concludes that while artificial intelligence (AI) offers efficiency and objectivity in educational assessment, its application in character evaluation within Islamic universities remains ethically and pedagogically problematic. Students from various programs consistently expressed distrust toward AI-based assessments due to their failure to recognize inner spiritual values such as *niyyah* (intention), *ikhlas* (sincerity), and *taqwa* (God-consciousness). The findings underscore a fundamental misalignment between algorithmic logic and Islamic educational principles, particularly in the domains of justice (*al-'adl*), wisdom (*hikmah*), and spiritual formation. The discussion further highlights that educators are irreplaceable in guiding character development through moral exemplarity and interpersonal mentorship. Therefore, AI should not substitute but complement educators in promoting ethical growth.

Despite its contributions, this study is limited by its localized context and qualitative scope, which may affect the generalizability of the findings across broader Islamic educational systems. Future research is recommended to develop and test AI-based character assessment models grounded in *maqasid al-shariah* and Islamic pedagogical ethics, preferably through multi-institutional case studies or mixed-methods approaches. Interdisciplinary collaboration between Islamic scholars, AI developers, and education practitioners is essential to construct spiritually aware and ethically responsible systems. By doing so, Islamic higher education can integrate technological advancement without compromising its sacred values and moral imperatives

Author Contribution Statement

The first author contributed to preparing the research proposal, collecting data, analyzing and reducing the data, compiling it into meaningful units, and verifying the validity of the findings. The second author verified the accuracy of the data analysis results and provided critical feedback to strengthen the interpretation of the findings.

Disclosure Interest

The authors declare no financial, personal, or institutional conflicts of interest that could have influenced the design, data collection, analysis, interpretation, or publication of this research. The study was conducted independently and adhered to ethical research principles to ensure objectivity and transparency.

Funding

This research was conducted independently without receiving external funding.

References

Abu Bakar, M., Yusof, S. A., & Rahman, A. A. (2021). The Islamic perspective on data privacy and ethics. *Journal of Islamic Ethics*, 5(2), 189–205.

Abdul Ghani, A. B., et al. (2020). Techno-ethical pedagogy: Teaching digital ethics in Islamic institutions. *International Journal of Ethics in Education*, 6(1), 25–39.

Alabdulkareem, S., Alasmari, A., & Alqahtani, M. (2021). AI in Islamic education: Potentials and constraints. *Education and Information Technologies*, 26, 7325–7342.

Al-Mahameed, H., et al. (2021). Perceived justice in AI-driven academic evaluation. *Journal of Artificial Intelligence and Soft Computing Research*, 11(3), 145–157.

Al-Zahrani, K. (2024). Challenges and Opportunities in Implementing AI-Based Learning in Saudi Universities. *International Journal of Educational Management*, 38(4), 523–540. https://doi.org/10.1108/IJEM-03-2024-0167

Amin, H., & Ibrahim, M. I. (2020). The role of murabbi in spiritual education. *International Journal of Islamic Educational Studies*, 4(2), 100–117.

Auda, J. (2008). *Maqasid al-Shariah as Philosophy of Islamic Law: A Systems Approach*. IIIT.

Ben Ali, R., et al. (2020). Algorithmic bias and digital ethics in Muslim societies. *AI & Society*, 35(3), 651–664.

Bozkurt, A., Masalimova, A. R., & Uçan, Ö. N. (2023). Artificial Intelligence Literacy Among University Educators: A Cross-National Scoping Review. *Computers & Education: Artificial Intelligence*, 4, 100118. https://doi.org/10.1016/j.caeai.2023.100118

Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023). Academic Integrity in the Age of Artificial Intelligence: A Framework for Ethical Use. *Assessment & Evaluation in Higher Education*, 48(5), 655–669. https://doi.org/10.1080/02602938.2023.2180097

Furze, L., Perkins, M., Roe, J., & MacVaugh, J. (2024). Generative AI in Assessment: Pilot Testing the AI Assessment Scale in Higher Education. *Learning and Instruction*, 89, 102788. https://doi.org/10.1016/j.learninstruc.2024.102788

Hassan, M. K., & Mahamood, S. M. (2020). The role of maqasid al-shariah in Islamic finance and AI. *International Journal of Ethics and Systems*, 36(4), 593–606.

Hassan, R., Yusof, N., & Yacob, N. (2022). Toward Islamic Artificial Intelligence. *Journal of Emerging Technologies in Computing Systems*, 18(4), 1221–1238.

Ismail, Z., & Mohamed, R. (2021). Embedding values in AI ethics: Islamic approach. *Journal of Moral Education*, 50(2), 234–251.

Khan, M. S., et al. (2022). Moral actors in AI development: The Islamic design perspective. *AI and Ethics*, 2(3), 237–251.

Mahmoud, N., & Othman, R. (2023). Islamic design thinking in digital education. *Journal of Islamic Educational Research*, 7(1), 88–104.

Nasr, S. H. (2015). *Islamic Science: An Illustrated Study*. Kuala Lumpur: IBT.

Naser, M., Ahmad, R., & Yusof, S. (2020). Integrating spiritual reasoning in educational AI. *International Journal of Islamic Thought*, 18, 41–58.

Perkins, M., Furze, L., Roe, J., & MacVaugh, J. (2024). The AI Assessment Scale Revisited: Ethical Foundations for GenAI Use in Universities. *Computers & Education*, 190, 104292. *https://doi.org/10.1016/j.compedu.2024.104292*

Rahman, S., & Rahim, F. (2022). Digital ethics curriculum in Islamic higher education. *Journal of Islamic Education Studies*, 9(3), 202–218.

Roe, J., Perkins, M., & Ruelle, D. (2024). Student Perceptions of AI in Formative Assessment: A Comparative Study. *Educational Technology Research and Development*, 72(1), 23–41. https://doi.org/10.1007/s11423-024-10256-z

Sundas, T., & Abbas, N. (2025). Personality Traits as Predictors of Acceptance of Generative AI Tools in Learning Environments. *Computers in Human Behavior*, 150, 107069. https://doi.org/10.1016/j.chb.2024.107069

Wanty, E. J., & Eva, M. (2024). Role and Trust in AI for Faculty Development in Higher Education. *International Journal of Instruction*, 17(1), 77–95. https://doi.org/10.29333/iji.2024.1716a

Yusup, I., Risna, K., & Purnama, S. (2024). AI-Driven Efficiency in Higher Education: A Case Study on Character Assessment Practices. *Journal of Educational Computing Research*, 62(3), 712–730. https://doi.org/10.1177/07356331231201964

Zaharin, N. A., et al. (2022). Al-'adl in AI-driven systems: An Islamic ethical framework. *Ethics and Information Technology*, 24(2), 199–214.