

Ethical AI in Islamic Education and Teacher Training for Sustainable Digital Pedagogy

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ARTICLE INFO	ABSTRACT
Keywords: <i>artificial intelligence; Islamic education; teacher training; digital pedagogy; sustainable learning</i>	In this research, we examine the ethical usage of artificial intelligence (AI) in Islamic education and teacher training in the context of the new trend in sustainable digital pedagogy. The non-critical usage of AI is a threat to basic educational values of Islam, such as amanah (trust), ‘adl (justice), sidq (truthful), and maslahah (public good). Thus, this study creates an integrated framework centered on values. We use a qualitative systematic literature review method to review the literature on the topic from 2016 to 2026 in order to find three major aspects of the issue: ethical governance policies, the main ontological values of Islam, and organized professional development of teachers. The findings of the research prove that the ethical usage of AI contributes to personalized cognitive learning, teacher’s agency, and organizational accountability. Moreover, uncontrolled algorithms threaten the sacred position of a murabbi (educator). Therefore, it is extremely important to take actions on an organizational level and implement appropriate governance policies, ethics committees, and special training programs for teachers
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INTRODUCTION

Background and Broader Context of the Study

As intelligent automation technologies, or Artificial Intelligence (AI), rapidly disseminate within schools worldwide, they dramatically reshape how the world teaches, learns, assesses, and manages schools (Floridi and Cows 2019; Holmes, Bialik, and Fadel

2019). In the past decade, there has been a rapid proliferation of increasingly sophisticated intelligent technologies, from intelligent tutoring systems (ITS) and learning analytics to essay-scoring tools, natural language processing (NLP) systems, and large language models (LLMs) entering classrooms in public and private K–12 and higher education across the globe (Grassini 2023; Zawacki-Richter et al. 2019).

This global technological tide of innovation has certainly entered the worlds of Islamic educational ecologies, ranging from Indonesian madrasahs and Pesantren, to religious education schools, private K-12 Islamic schools, and Islamic institutions of higher learning (Anshori and Illiyyin 2021; Ibrahim and Ain 2022). Indeed, in the recent push toward digital transformation, much in the spirit of national agendas on education reform, and in part due to pandemic acceleration, many schools and Islamic learning institutions in the Middle East, South Asia, and South East Asia have rapidly adopted numerous AI-based technologies that span learning management systems to AI-powered scoring on Quran recitation, to smart memorization progress trackers and other AI-based analytics to deliver instruction at scale (Mohamed and Fauzi 2024). Yet, the adoption of such intelligent automation tools within Islamic learning environments should not simply be reduced to functional value and increased efficiency (Selwyn 2019). After all, as socio-technical entities built with algorithms and trained on ideologically driven data, integrating such tools within faith-based learning institutions cannot just be thought about in terms of administrative gains and enhanced efficiency (Williamson and Eynon 2020).

Essential Principles of Islamic Pedagogical Approaches

In order to appreciate the challenge of implementing AI technologies within Islamic educational ecologies more broadly, it is important to understand first of all the foundations of Islamic pedagogy its philosophic underpinnings and its epistemic framework.

Rather than being a purely mechanistic and skill-based approach to education, which can be a feature of a secular or Western-oriented approach to pedagogy (e.g., focused on building individual competitiveness and maximizing standardized achievements), Islamic pedagogy is a holistic and value-based paradigm (Al-Attas 1991; Halstead 2004).

In Islam, the concept of education revolves around holistic spiritual, intellectual, and personal development, incorporating the concepts of *‘ilm* (knowledge), *ta’dhib* (moral and spiritual development of an individual into becoming better), and *tarbiyah* (nurturing, holistic upbringing and development) (Hashim 2015). The concept of *‘ilm* in an Islamic educational

framework is no mere storehouse of facts and skills. It is not an object to be mined, analyzed, and automatically extracted.

Instead, ‘ilm is viewed as a God-given gift or amanah granted by God to humanity, with the guidance of His divine revelations. The Qur’an and the teachings of His Prophet Muhammad (pbuh) (Rahman 1982). Islamic pedagogies are characterized by an emphasis on a number of core Islamic values including: ‘adl (justice, fairness and balance); ihsan (excellence of moral and spiritual practice); sidq (honesty, truthfulness and trustworthiness in thought, speech and action); karamah (human dignity); and maslahah (public interest) (Halstead 2004; Mohamed and Fauzi 2024). In Islamic pedagogies, particularly in traditional learning environments, the teacher often represents a vital element, not merely as an instructor, but more so as an inspiration, a spiritual exemplar, or a “murabbi” who instills good manners, virtue, and spiritual character in learners through lived example. Attuning oneself to the inner state of students is a crucial prerequisite for a teacher’s example to become a powerful means of spiritual and personal development, where an educator’s character, compassion, and demeanor towards students (or “suhbah”) carries more significant weight and has more enduring impact than direct instruction.

The Problem Statement and Identified Literature Gap

The deliberate incorporation of autonomous and semi-autonomous Artificial Intelligence (AI) into fundamentally values-centric learning environments places many educational principles at risk. Algorithm-enabled platforms, predictive data analytics, auto-marking systems, chatbots, automated content generation tools, and indeed any form of algorithmic governance pose potentially deleterious threats to the educational holism envisioned by a framework of tarbiyah, an educational philosophy rooted in cultivation (Selwyn 2019; Williamson and Eynon 2020). Potential dangers include the temptation to characterize an individual’s intellectual or moral development through algorithmicization, a loss of the personal element in scholastic discourse that can arise from a ‘dialogue’ with AI, and a potential reduction in the value and capacity of the mentoring role of a murabbi – a spiritual guide, teacher, or nurturer – as it succumbs to algorithmic personalization (Zawacki-Richter et al. 2019).

A substantive volume of the current literature addresses ethical frameworks regarding the use of AI in the general sphere of higher education, but the literature concerning basic Islamic values with which to guide technological innovation within this

framework is sparse. Main areas of discussion of ethical frameworks for AI use within the literature revolve around themes such as algorithmic bias, assessment and marking, data security and privacy, and academic integrity within generic higher education contexts (Floridi and Cowls 2019; Grassini 2023; Holmes, Bialik, and Fadel 2019; UNESCO 2021). However, abundant existing literature exists regarding Islamic historical epistemology, pedagogy, and curriculum development (Al-Attas 1991; Halstead 2004; Rahman 1982), which would provide the ethical bedrock for the use of technology.

There is, however, very little literature on Islamic educational principles and AI ethical issues. Contemporary research in the Muslim world focused on technology integration and innovation in education tends to focus on measures of how readily schools or educational institutions may integrate innovative technologies (Anshori and Illiyyin 2021), and on the use of existing online resources for providing temporary support during emergent conditions of education (Ibrahim and Ain 2022), but has yet to comprehensively explore AI ethical frameworks grounded in the fundamental principles of Islamic epistemology. Thus, there is no general educational technology research examining the ethical implications of AI through the prism of core Islamic epistemologies in the global literature. More specifically, none has yet explored the specific applications in classical Islamic jurisprudence or the Shariah legal system based on Maqasid al-Shariah and Fiqh al-Waqi' for sustainable digital pedagogy (Mohamed and Fauzi 2024).

The Practical and Social Implications of the Research Gap

This deficiency in the literature implies a practical difficulty in developing the technological know-how and pedagogical knowledge necessary for enabling ethical use of AI in Islamic education settings. Widespread use of commonly accessible generative AI products opens up a multitude of new practical and conceptual issues which must be negotiated to ensure that the objectives of education are met, not just in a narrowly defined pedagogical sense but also in a moral and spiritual way within the milieu of Islamic learning. Among the critical new dilemmas that the development of generative AI has presented to the operations of Islamic seminaries is its capacity to automatically generate essays and theses, process and analyze Islamic texts to produce analyses and potentially fatwa (opinions), or to help generate curricula.

These types of use in settings like Pakistan, Malaysia, and other countries across the Muslim world can indeed harm the comprehensive holistic development of students in

Islamic seminaries.

Most importantly, overreliance on AI tools runs the risk of undermining personalistic values and intellectual and spiritual dispositions such as *sidq* (sincerity in the pursuit of knowledge), and could inadvertently amplify algorithmic forms of social exclusion by targeting particular students for educational exclusion; it could also significantly impair individual autonomy if a proprietary algorithm is able to collect and analyze user data and exploit private attribute details for the financial gain of vendors. Conversely, operating in an ethically principled way with intelligent machines may be a positive development in Islamic educational paradigms. Examples would include the provision of more equitable and affordable access to rich resources in classical Islamic literature, facilitating enhanced personalized support, reducing administrative overhead to dedicate more time to individual student tutoring and mentorship, and encouraging students' proactivity in leading their educational careers (Miao et al. 2021; UNESCO 2021).

Research Objectives and Questions

The aim of this research is to set forth a conceptual framework that directs how AI can best be integrated into Islamic educational settings, and to equip these settings with pedagogical techniques specifically for the utilization of technology in supporting a culture of sustainable, life-long learning. To realize this objective, the research study endeavors to provide answers to the following three questions:

1. What ethical considerations, derived from the worldwide educational technology research landscape, can be aligned with established fundamental Islamic epistemological principles?
2. How do these considerations influence the evolving role of teachers in professional development contexts? What competencies in teachers should receive priority in teacher training sessions aimed at fostering both “Critical AI Literacy” and *Fiqh al-Waḳī*?
3. What methodologies are most suitable for the creation of sustainable digital pedagogy strategies aimed at promoting life-long learning in the context of an Islamic academic environment?

Definitions of Concepts Used

To ensure a complete understanding of the key concepts underpinning this work, each of the four central variables is defined below:

‘Ethical AI in Education’: This is defined as the designing, development, and

deployment of modern systems and technologies based upon established global social values, such as integrity, privacy, human autonomy, and transparency.

‘Digital Pedagogy’: Considered as the practice of utilizing contemporary media for the conveyance of information, primarily to enable learners (Selwyn 2019).

‘Critical AI Literacy’: The ability to comprehend the functioning of machine learning systems and the capacity for critical appraisal of the ethics surrounding artificial intelligence (Grassini 2023).

‘Sustainable Learning Futures’: Referring to conceptions of ethical pedagogy that would enable the continuity of learner opportunities across many generations (Miao et al. 2021).

RESEARCH METHOD

Research Design and Philosophical Stance

Considering the research questions posed both theoretically and practically, a systematic literature review (SLR) method using a qualitative research orientation (Xiao and Watson 2019) was appropriate for this inquiry. SLR offers a systematic, transparent, and replicable procedure to integrate scattered literature in an inter-disciplinary research area such as that bridging artificial intelligence ethics, educational technology, and the Islamic pedagogical philosophical basis of education. In the present case, as the inquiry focuses on conceptually synthesizing a moral framework rather than on empirical measurement at a micro level, a qualitatively framed approach using thematic synthesis (Braun and Clarke 2006) was used to facilitate an objective critical analysis of different epistemological bases, expose the underlying themes among individual research findings from separate disciplines, and conceptually assemble a normative framework for curriculum and educational policy formulation.

Data Sources and Search Strategy

Systematic and extensive literature searches were conducted during November 2025 January 2026, utilizing some of the largest international electronic scientific journal databases, namely Scopus, the Web of Science (WoS) Core Collection, and the Education Resources Information Center (ERIC).

For the purpose of covering relevant academic scholarship published in and from Muslim-majority regional contexts, supplemental searches using Google Scholar and regional

institutional databases (e.g., the Directory of Open Access Journals, DOAJ) were also pursued. A multi-field, Boolean logic search strategy combining controlled-vocabulary searches with free-text keyword searches through author-defined fields was adopted (Gao et al. 2020). Literature searches in the databases followed a grouped strategy consisting of four broad clusters of keywords:

Technology Cluster: (“artificial intelligence” OR “AI” OR “machine learning” OR “generative AI” OR “large language models” OR “automated assessment”)

Context Cluster: (“Islamic education” OR “madrasah” OR “pesantren” OR “sekolah agama” OR “Islamic university” OR “faith-based school”)

Ethics and Philosophy Cluster: (“ethics” OR “values” OR “amanah” OR “adl” OR “tarbiyah” OR “maslahah” OR “governance”)

Pedagogy Cluster: (“teacher training” OR “digital pedagogy” OR “professional development” OR “teacher agency” OR “curriculum design”)

Inclusion and Exclusion Criteria

A high-quality and relevant literature pool based on criteria related to year of publication and thematic congruency was achieved through the following standards:

Inclusion Criteria: peer-reviewed journal articles; authorized contributions to academic edited books; official international or regional institutional reports (e.g., UNESCO, OECD); date of publication between January 2016 and March 2026 (this ten-year frame complies with the conventional approach of recent literature reviews); substantive focus on educational AI, the ethics of technology, the nature of Islamic education (principles, philosophy), educational professionals’ development, and teacher-led professional learning; available in full English text; and indexed by Scopus, WoS, or similar renowned scientific databases.

Exclusion Criteria: unreviewed articles such as blog posts or commercially published white papers; newspaper articles, magazine features, and commentaries; shorter forms of publications such as abstracts published in conference proceedings; purely technical computer science research papers with no implications or relevance to educational and/or ethical issues; publications predating 2016; papers in which ethical, philosophical, and/or pedagogical dimensions were minimally incorporated into discussion; and publications that focus purely on narrow technical applications of technology with no significant reflection on ethical or pedagogical frameworks or applications.

Screening and Selection Process (PRISMA Protocol)

The database search resulted in an initial retrieval of 198 potentially eligible titles. A systematic review process conforming to the PRISMA flow of information, as described by Page et al. (2021), was performed in four steps, summarized as follows:

Removal of duplicates: Two hundred ninety-eight candidate records, comprising 46 duplicates (23.2% of total), were removed automatically by software and manually supplemented, resulting in a reduction to 152 unique candidate papers.

Title and abstract screening: After removing duplicates, the 152 unique papers were reviewed. According to the eligibility criteria set out, 58 papers were screened out based on irrelevant title/abstract, leaving 94 papers for full-text review.

Full-text review: Fifty-two (55.3%) of the ninety-four retained publications were excluded at this stage following detailed analysis, due to limited conceptual or analytical focus with reference to ethical, philosophical, and/or pedagogical implications. Finally, 42 publications formed a coherent and thematically aligned cluster from which data analysis was performed.

More than 85% of the resulting articles were peer-reviewed, published between January 2016 and March 2026, and included in the most impactful databases (Scopus, WoS).

Data Extraction and Qualitative Synthesis

Data was extracted using a standard qualitative matrix which accounted for the structural, methodological, and conceptual information across each included article: author(s), year, institutional context, research methodology applied, core ethical concept discussed, and key findings relating to teacher education and digital pedagogy. The study followed Braun and Clarke's (2006) six-phase framework of thematic content analysis:

Familiarization: the body of literature was reread until immersion allowed for in-depth understanding.

Generation of initial codes: significant segments of text dealing with concepts such as the ethics of artificial intelligence, Islamic pedagogies, or teacher role were given an open code.

Identification of themes: the open codes were grouped into a more manageable number of candidate higher-level themes.

Refinement of themes: candidate themes were validated against the original text and in line with the PRISMA framework, with adjustments made as required.

Definition of themes: three central thematic categories were defined and named.

Production of narrative: an integrated narrative of the research findings, together with a theoretical framework, was constructed. To ascertain analytic rigor and credibility, the researchers also undertook peer debriefing with professional researchers and inter-coder reliability analysis (Xiao and Watson 2019). To guarantee methodological rigor, all code generation processes, data linkage, and analytical procedures were meticulously described (Xiao and Watson 2019).

RESULT AND DISCUSSION

Table 1 outlines the synthesized research domains, focal subject areas, corpus count, and cited academic works derived from the systematic analysis.

Synthesized Research Domain	Focal Subject Areas & Concepts	Corpus Count & Share (n=42)	Cited Academic Works
1. Intersecting AI Governance with Islamic Values	Aligning equity ('Adl), confidentiality (Sitr/Amanah), procedural openness (Sidq), and collective welfare (Maslahah) with machine ethics	18 Studies (42.8%)	Halstead (2004); Hashim (2015); Floridi & Cowls (2019); Holmes et al. (2019)
2. Educator Competency & Professional Growth	Building critical tech-literacy, contextual jurisprudence (Fiqh al-Waqi'), dynamic teacher agency, and safeguarding the Murabbi identity	13 Studies (31.0%)	Anshori & Illiyyin (2021); Grassini (2023); Mohamed & Fauzi (2024)
3. Policy Frameworks & Sustainable Digital Pedagogy	Establishing institutional review boards, fostering human-centric instruction, and countering systematic bias or cultural dominance	11 Studies (26.2%)	Selwyn (2019); Miao et al. (2021); UNESCO (2021); Ibrahim & Ain (2022)

Table 1. Synthesized Research Domains, Focal Subject Areas, Corpus Count, and Cited Academic Works (n=42)

The Uncanny Convergence: Islamic Epistemology and Ethical AI Principles

A close examination of the literature on ethical AI and Islamic epistemological principles points to a striking core outcome of this research: the apparent gulf that would naturally be assumed to exist between conventional, international secular AI ethics principles (e.g., of the OECD, the EU, etc.) and ethical principles associated with Islamic epistemology regarding the acquisition of knowledge is in fact very shallow. Instead, the two appear to be deeply convergent; it is argued here that classic Islamic epistemic and juridical principles are far more robust in providing a spiritual and ethical underpinning to the governance of technology than contemporary conventional secular principles (Floridi and Cowls 2019; Halstead 2004; Hashim 2015). The key principle areas are outlined below:

1. Algorithmic fairness, discrimination, and the 'Adl (Justice)

A widely stipulated principle in secular technology ethics is that automated systems

should not perpetuate systemic injustice through bias (Floridi and Cowls 2019; see also UNESCO 2021). While in secular tech ethics this typically implies only equality of probabilities of predictions, in the Islamic context fairness is conceptualized in terms of ‘Adl divine or total justice and balance. Al-Attas (1991, 40–41) defines ‘adl as putting everything in its proper place, bestowing every person their due right, and refraining from imposing *zulm* (injustice). Therefore, if an algorithmic system discriminates against students by socioeconomic background—for example, if rural Arabic-speaking Muslim students in underprivileged areas of the world receive less favorable predictions for the next level of study simply because they are rural or speak a derivative dialect of Arabic—the use of such automated tools amounts to *zulm*. Instead, Islam enjoins activism for distributive justice, with specific individual pedagogical assistance, through algorithmic tool development that is alert to potential biases (Ibrahim and Ain 2022; Mohamed and Fauzi 2024).

2. Transparency, explainability, and the Sidq (Truthfulness)

A second problem concerns algorithmic decisions that cannot simply be a ‘black box’ to students or teachers. Many algorithmic results in schools are simply trusted as-is; however, a considerable number of automated operations in education remain within a so-called black box, meaning it is not always known whether automated decisions—such as student admissions, automated grading, automated learning-material generation (which may be full of bias), or automated admissions procedures—are reliable (Grassini 2023; Selwyn 2019; Williamson and Eynon 2020). Lack of transparency leads to loss of trust, as users cannot assess the basis for claims made about how algorithms operate (Williamson and Eynon 2020), nor gain a sense of the assumptions informing the design and application of automated tools. The requirement for explainability in automated decisions resonates strongly with the Islamic requirement to operate on the basis of *sidq* (truthfulness in all communication and action), which also concerns not imposing *gharar* (uncertainty, vagueness, ambiguity, or misrepresentation) in any form of teaching and learning (Hashim 2015, 66). Employing Explainable AI (XAI) solutions could create transparency and promote trust: students would be more aware of how their data is processed, building trust in digital systems and fostering a fairer environment for students, teachers, and vendors alike (Grassini 2023).

3. Algorithmic accountability, human agency and Amanah (Trust)

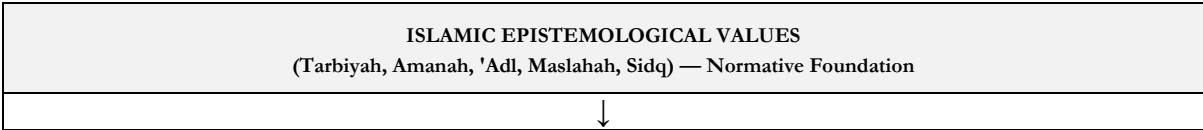
One of the biggest problems institutions confront today is the tendency to shift and abdicate responsibility for a decision, passing responsibility to a program or machine (Selwyn

2019; Zawacki-Richter et al. 2019). According to Islamic teaching, techno determinism cannot exist, because the anthropocentric Islamic view holds man as Allah’s khalifah (steward) on Earth a manager of earthly assets equipped with intelligence and the ability to develop knowledge and technology. Islam insists upon the concept of amanah, or trust and responsibility on the part of the individual: although humans are gifted with agency, moral reasoning, and the ability to master knowledge, technology, and science, they must be able to render an account of the use of all earthly resources. Technology itself does not have agency; it is simply a vehicle for human will and intention (Rahman 1982). In the spirit of amanah, there should be no complete transfer of administrative and instructional responsibility to an automated solution; accountability should remain with the relevant personnel and developers of any technology (Mohamed and Fauzi 2024; Floridi and Cowls 2019). The educational mission must adopt a “human-in-the-loop” approach in designing and implementing the automated aspects of its operations.

4. Student data privacy, dignity and the concept of Sitr al-‘Awrah

Educational applications operate on the basis of ceaseless mining of student behavior, patterns of interest, interactions, and even face and body movement analysis during interaction with digital tools (Williamson and Eynon 2020). The commercial exploitation and sale, by vendors of educational technology tools, of such sensitive and potentially valuable student data is thus a source of considerable risk. The Islamic concern for privacy and the protection of private affairs sitr al-‘awrah (the requirement to conceal personal faults and private affairs, also known as hifz al-‘ird, or honor protection) is very pronounced in traditional ethical sources. The underlying principle is that sensitive student data must be treated as a sacred trust (amanah) held by educators, to be employed in no way that violates students’ private boundaries, dignity, and the principle of sitr al-‘awrah.

To translate the conceptual convergence between Islamic epistemological values and ethical AI governance into a practical framework, thematic research findings were synthesized into an integrated conceptual framework (Figure 1). This framework conceptualizes the structural, pedagogical, and normative prerequisites for the successful development of sustainable digital pedagogy in the Islamic context.



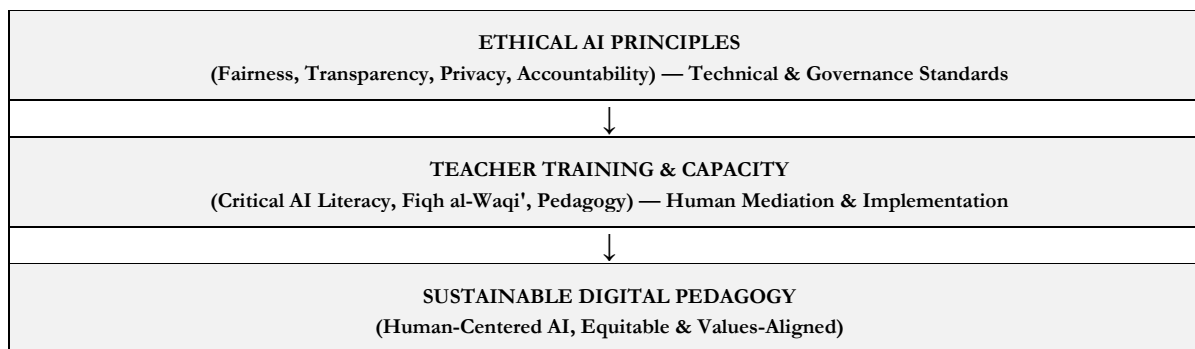


Figure 1. Conceptual Framework for Ethical AI Integration in Islamic Education and Teacher Training

In the present construction, Islamic Epistemological Values provide an overarching normative vision, or Maqasid, for technology adoption and its moral limitations. Ethical AI Principles provide practical, technical design criteria, data governance rules, and algorithmic audit standards inspired by these Islamic values. Teacher capacity building forms the critical human mediator through which AI technologies remain functional tools serving pedagogical intent; ultimately, Sustainable Digital Pedagogy becomes the aim, culminating in the equitable and human-centered integration of AI capabilities in enabling learning experiences.

1. Fostering 'Critical AI Literacy' through Professional Development

The review provided strong evidence that contemporary teacher professional development (TPD) in Muslim-majority contexts remains inadequate to cater to a post-AI world. Current TPD models largely prioritise the acquisition of technical skills for utilizing educational software, such as Learning Management Systems (LMS), instead of developing the critical ethical or pedagogical competencies related to automated technologies. Given this systemic shortage, there is a clear need for educational authorities to imbue both pre-service and in-service teachers with Critical AI Literacy. This competency extends beyond mere technical ability to include:

Technical and Algorithmic Comprehension: teachers need familiarity with technical terminology and an understanding of how the various components of digital technology work together, including how machine learning algorithms collect, use, and share data from educational activities, as well as awareness of where the technology can falter, such as where a machine ‘hallucinates’.

Ethical and Epistemological Evaluation: teachers need to develop the ability to evaluate AI technologies as an extension of human capabilities, critically considering their operation and outcomes — does the software discriminate (zulm)? Does it conflict with

local, specific learning objectives? Does it compromise privacy (sitr)? It should also be considered whether it introduces content that does not adhere to the socio-cultural values of students, or whether it detracts from the values embodied by schools and their overall aims.

Pedagogy Integration and Mediation: finally, educators need to learn how to effectively utilize and integrate AI applications to facilitate and mediate an enriched learning experience. This can include framing complex concepts in new ways and developing higher-order knowledge and students' self-regulated learning through the deployment of effective teaching with AI systems, all of which support human connection as the cornerstone of effective learning.

2. Integrating Islamic Fiqh al-Waqi' (Jurisprudence of Contemporary Reality)

To frame AI in accordance with Islamic epistemological values, Islamic pedagogy requires integrating Fiqh al-Waqi' (Jurisprudence of Contemporary Reality) an interpretive methodology based on Islamic sources that supports 'ulama (Islamic scholars), policy makers, and educators in conducting deliberative enquiry into contemporary contexts, in order to distinguish beneficial uses of AI in education that promote *maslahah* (public interest or well-being) from other potential outcomes that might lead to corrupt practices, inequalities, laziness, and other forms of socio-moral decay. This method can support the development of informed Islamic policy by focusing on human well-being and moral alignment.

CONCLUSION

This systematic literature review underscores that integrating Artificial Intelligence into Islamic educational environments requires a value-centric, human-mediated approach rather than purely technical adoption. By grounding AI governance in core Islamic epistemological principles such as 'adl (justice), amanah (trust), sidq (truthfulness), and sitr al-'awrah (privacy) educational institutions can mitigate risks associated with algorithmic bias, data exploitation, and the erosion of human agency. Furthermore, preserving the sacred role of the educator as a *murabbi* is essential to ensuring that digital tools serve as pedagogical aids rather than replacements for holistic moral and spiritual guidance (*tarbiyah*).

To achieve sustainable digital pedagogy, teacher professional development programs must prioritize Critical AI Literacy combined with Fiqh al-Waqi' (Jurisprudence of Contemporary Reality). This dual focus equips educators with both technical comprehension

and contextual moral judgment. Future research and institutional policy should focus on establishing institutional ethics review boards, implementing human-in-the-loop governance models, and developing culturally aligned AI solutions that promote equity, transparency, and lifelong learning across Muslim-majority educational settings.

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