

Reimagining Islamic Education in the Age of Artificial Intelligence: Towards a Human-Centered Learning Framework

* Najeeb Yahya¹, Mohammad Ahmad Bani Amer², Markhabat Bolat³, Muhammad Eissawy Abu El Yazid⁴, Ahmad Faizal Syahrul Azmi⁵, Ahmad Fauzan Akbar⁶

¹University of Zawia, Libya

²Mutah University, Jordan

³Tokat Gaziosmanpasa University, Kazakhstan

⁴King Saud University Riyadh, Saudi Arabia

⁵International Islamic University, Malaysia

⁶Al Mustafa International University, Islamic Republic of Iran

Abstract

This study aims to examine how Islamic education can be reimagined in the age of AI through a human-centered learning framework that integrates technological innovation with Islamic educational values. The study employed a qualitative library research approach by systematically reviewing and synthesizing scholarly literature on Artificial Intelligence in Education, Human-Centered Learning, Islamic Educational Philosophy, Human-AI Collaboration, and AI Ethics. Data were collected from peer-reviewed journal articles, academic books, policy reports, and international guidelines published between 2021 and 2026 and analyzed using thematic content analysis. The findings indicate that AI has significant potential to enhance personalized learning, expand educational accessibility, improve instructional effectiveness, and support pedagogical innovation in Islamic educational institutions. However, the integration of AI also raises important concerns related to intellectual dependency, ethical governance, privacy, algorithmic bias, and the preservation of meaningful teacher-student relationships. The study further reveals that Islamic educational concepts such as tarbiyah, ta'lim, ta'dib, and the framework of Maqāsid al-Sharī'ah provide a strong ethical and philosophical foundation for guiding responsible AI adoption. The novelty of this study lies in the development of a Human-Centered Learning Framework for Islamic Education that integrates Human-Centered Learning Theory, Artificial Intelligence in Education, Human-AI Collaboration, Islamic Educational Philosophy, and Maqāsid al-Sharī'ah into a unified conceptual model. The study concludes that AI should function as an augmentative educational partner that supports, rather than replaces, the intellectual, moral, and spiritual roles of educators in fostering holistic human development.

Human-Centered Learning, Islamic Education, Artificial Intelligence

Received:11-07-2025

Revised:20-09-2025

Accepted:03-12-2025

Keywords:

(*) Corresponding Author:

yahya@zu.edu.ly

Introduction

The rapid advancement of Artificial Intelligence (AI) has become one of the most transformative developments shaping contemporary education. AI technologies are increasingly integrated into educational environments through adaptive learning systems, intelligent tutoring applications, learning analytics, and generative AI tools. These developments have created unprecedented opportunities to personalize instruction, improve learning outcomes, and expand access to educational resources. At the same time, scholars have expressed concerns regarding the ethical, pedagogical, and social implications of AI-mediated learning. Recent studies suggest that the future of education should not be framed as a competition between humans and machines but rather as a collaborative relationship that enhances human capabilities. Consequently, discussions regarding the role of AI in education have shifted toward human-centered approaches that prioritize human agency, ethical responsibility, and meaningful learning experiences (Kasneji et al., 2023; UNESCO, 2023; Favero et al., 2026).

The emergence of generative AI technologies such as ChatGPT, Gemini, and other large language models has accelerated educational transformation worldwide.



Unlike earlier educational technologies that primarily delivered static content, generative AI systems are capable of producing dynamic responses, personalized explanations, and interactive learning experiences. These capabilities have attracted significant attention from educators seeking innovative solutions to address diverse learner needs. Nevertheless, concerns regarding misinformation, hallucinations, academic integrity, and excessive technological dependency continue to generate scholarly debate. Researchers increasingly argue that educational institutions must carefully balance technological innovation with pedagogical and ethical considerations. Therefore, the challenge is not whether AI should be integrated into education but how such integration can be guided by human-centered educational values (Tlili et al., 2023; Sharples, 2023; Kasneci et al., 2023).

Within this rapidly evolving landscape, Islamic education faces both unique opportunities and significant challenges. Islamic educational institutions are increasingly exposed to technological innovations that influence teaching, learning, curriculum development, and educational administration. AI-powered technologies offer new possibilities for enhancing educational accessibility, supporting individualized learning, and improving instructional effectiveness. However, Islamic education is not solely concerned with cognitive achievement or technical skill development. Its broader mission encompasses the cultivation of faith, moral character, spiritual awareness, and social responsibility. Consequently, the integration of AI into Islamic education requires careful consideration of how technological innovations align with these holistic educational objectives (Khoiruddin & Dzulkifli, 2026; Tan, 2023).

The concept of human-centered learning has emerged as a particularly relevant framework for addressing these challenges. Human-centered learning emphasizes the development of learners as whole persons by recognizing their intellectual, emotional, social, ethical, and spiritual dimensions. Rather than viewing technology as an end in itself, this perspective positions technological tools as instruments that support human flourishing and meaningful learning. In recent years, scholars have increasingly advocated for human-centered AI systems that empower learners while preserving human autonomy and dignity. Such approaches are especially important in educational environments where values, relationships, and ethical development play central roles. Therefore, human-centered learning provides a promising conceptual foundation for reimagining Islamic education in the age of AI (Holmes et al., 2022; Alfredo et al., 2023).

Islamic educational philosophy shares many fundamental principles with contemporary human-centered educational theories. Classical Muslim scholars consistently emphasized the importance of developing balanced individuals who integrate knowledge, ethics, spirituality, and social responsibility. Educational thinkers such as Al-Ghazali, Ibn Khaldun, and Al-Attas viewed education as a transformative process aimed at nurturing intellectual excellence and moral virtue simultaneously. Contemporary Islamic educational discourse continues to affirm the importance of holistic human development in response to modern social and technological challenges. Consequently, human-centered learning is not a foreign concept within Islamic education but rather resonates deeply with its philosophical foundations. This convergence creates opportunities for constructing educational models that integrate technological innovation with enduring Islamic values (Sahin, 2020; Memon, 2021).

The increasing presence of AI in education has also generated important ethical concerns that cannot be ignored. Educational technologies often rely on extensive data

collection, algorithmic decision-making, and automated content generation. While these capabilities may enhance educational efficiency, they also raise questions regarding privacy, fairness, transparency, and accountability. Scholars have warned that excessive reliance on AI may contribute to the erosion of critical thinking, learner agency, and meaningful human interaction. Such concerns are particularly significant in Islamic educational contexts, where interpersonal relationships between teachers and students play a crucial role in moral and spiritual formation. Therefore, ethical governance must become a central component of any discussion concerning AI integration in Islamic education (Floridi et al., 2021; Falah & Achfama, 2026).

Recent literature further suggests that AI should be evaluated not only according to its technical performance but also according to its impact on human well-being. Human-centered AI frameworks emphasize that technological systems should augment rather than replace human capabilities. These frameworks prioritize values such as autonomy, trustworthiness, safety, inclusivity, and human flourishing. Educational researchers increasingly argue that AI systems should support learners in developing critical thinking, creativity, collaboration, and ethical reasoning rather than merely improving efficiency. Such perspectives are highly relevant to Islamic education because they align with broader educational objectives concerning character formation and responsible citizenship. As a result, the intersection between human-centered AI and Islamic educational philosophy represents an important area of scholarly inquiry (Sison et al., 2023; Favero et al., 2026).

The concept of Society 5.0 has further intensified discussions regarding the future relationship between technology and education. Society 5.0 envisions a human-centered society in which advanced technologies are utilized to address social challenges and improve quality of life. Within this framework, AI is viewed as a tool that should serve human needs rather than dictate human behavior. Educational institutions are therefore expected to prepare learners not only to use technological tools but also to engage critically and ethically with technological systems. Recent studies in Islamic education have argued that the transition toward Society 5.0 requires the reconstruction of pedagogical paradigms that integrate digital innovation with religious and ethical values. This challenge highlights the need for new conceptual frameworks capable of guiding educational transformation in AI-driven societies (Sunan et al., 2026; UNESCO, 2023).

The rapid diffusion of AI technologies has also transformed the nature of knowledge acquisition and dissemination. Learners now have instant access to vast amounts of information generated, curated, and delivered through intelligent systems. While this development democratizes access to knowledge, it simultaneously challenges traditional educational assumptions regarding expertise, authority, and learning processes. In many educational settings, students increasingly rely on AI-generated responses rather than engaging in independent inquiry and critical reflection. Such tendencies raise concerns regarding the development of higher-order thinking skills and intellectual autonomy. Therefore, educational institutions must reconsider how learning is designed and facilitated in an environment where information is abundant but wisdom remains scarce (Ng et al., 2021; Kasneci et al., 2023).

Within Islamic educational traditions, knowledge is not merely understood as the accumulation of information but as a transformative process that shapes character, faith, and ethical conduct. The concept of *tarbiyah* emphasizes holistic nurturing, while *ta'dib* focuses on moral refinement and the cultivation of proper conduct. Similarly, *ta'lim*

refers to the transmission of beneficial knowledge that contributes to personal and societal well-being. These educational concepts suggest that learning involves more than cognitive achievement; it requires the development of spiritual awareness and ethical responsibility. Consequently, Islamic education must critically examine whether AI technologies contribute to or hinder these broader educational objectives. Such reflection is essential for ensuring that technological innovation remains aligned with the philosophical foundations of Islamic education (Memon, 2021; Sahin, 2020).

The growing influence of AI has also intensified discussions regarding the future role of teachers. Some commentators predict that intelligent systems may eventually replace many traditional instructional functions performed by educators. However, a substantial body of educational research rejects this deterministic assumption and argues that teachers will remain indispensable in AI-enhanced learning environments. Human educators possess capacities for empathy, ethical judgment, mentorship, and contextual understanding that cannot be fully replicated by machines. These capacities are particularly important in Islamic education, where teachers are expected to serve as moral exemplars and spiritual guides. Therefore, the future of education is more likely to involve collaborative relationships between teachers and AI systems rather than the displacement of educators by technology (Holmes et al., 2022; Selwyn, 2023).

Another significant issue concerns the increasing demand for AI literacy among educators and learners. AI literacy extends beyond technical knowledge and includes the ability to critically evaluate AI-generated content, understand algorithmic limitations, and recognize ethical implications associated with AI use. Educational researchers argue that AI literacy has become a fundamental competency for participation in contemporary digital societies. In Islamic educational contexts, AI literacy must also encompass ethical and moral dimensions that guide responsible technological engagement. Learners should be equipped not only to use AI effectively but also to assess its impact on human values, social justice, and educational integrity. Consequently, AI literacy represents a critical component of future educational reform initiatives (Long & Magerko, 2020; Ng et al., 2021).

Recent studies have highlighted the importance of integrating ethical frameworks into discussions concerning educational technology. Ethical concerns associated with AI include algorithmic bias, privacy violations, misinformation, surveillance, and the concentration of technological power. These issues have prompted international organizations to develop guidelines for responsible AI development and implementation. Nevertheless, many existing frameworks are primarily secular and often overlook the contributions of religious and cultural traditions to ethical discourse. Islamic ethical principles offer valuable perspectives regarding justice, trustworthiness, responsibility, and human dignity. Therefore, integrating Islamic ethical insights into AI governance discussions may contribute to more comprehensive and culturally responsive approaches to educational technology (Floridi et al., 2021; UNESCO, 2023).

The framework of *Maqāṣid al-Sharī'ah* provides a particularly relevant lens for evaluating educational innovations in the age of AI. The objectives of Islamic law emphasize the preservation of religion, intellect, life, lineage, and property, all of which are directly or indirectly influenced by technological developments. Educational technologies can contribute positively to these objectives when they promote intellectual growth, social welfare, and ethical development. Conversely, they may undermine these objectives if they encourage misinformation, dependency, injustice, or harmful forms of social control. Consequently, *Maqāṣid al-Sharī'ah* offers a

comprehensive ethical framework for assessing both the opportunities and risks associated with AI integration in Islamic education. This perspective also reinforces the importance of aligning technological innovation with broader human and societal goals (Auda, 2021; Kamali, 2022).

Despite the growing body of research on AI in education, significant gaps remain in the existing literature. Much of the current scholarship focuses on technical applications, learning analytics, or educational outcomes without adequately addressing the philosophical and ethical implications of AI integration. Furthermore, relatively few studies have explored AI through the lens of Islamic educational philosophy and human-centered learning. Existing discussions often examine these themes separately rather than integrating them into a coherent conceptual framework. This fragmentation limits our understanding of how Islamic educational institutions can respond effectively to the opportunities and challenges created by AI. Therefore, there is a pressing need for interdisciplinary research that bridges educational technology, Islamic studies, ethics, and learning sciences (Tan, 2023; Holmes & Tuomi, 2022).

Another limitation of existing research is the tendency to adopt technology-centered perspectives that prioritize innovation and efficiency over human development. While technological advancement undoubtedly offers substantial educational benefits, education ultimately concerns the formation of human beings rather than the optimization of technological systems. Excessive emphasis on automation may obscure important questions regarding meaning, values, identity, and human flourishing. Islamic educational philosophy provides a valuable corrective to such tendencies by emphasizing the inseparability of knowledge, ethics, and spirituality. Consequently, reimagining Islamic education in the age of AI requires moving beyond technocentric assumptions toward educational models that place human development at the center of technological innovation (Biesta, 2022; Sison et al., 2023).

Against this background, the present study seeks to develop a comprehensive understanding of how Islamic education can be reimagined in the age of Artificial Intelligence through a human-centered learning framework. Specifically, the study examines the opportunities and challenges associated with AI integration, explores the relevance of Islamic educational philosophy and *Maqāṣid al-Sharī'ah* for guiding technological innovation, and proposes a conceptual framework that aligns AI adoption with the holistic objectives of Islamic education. The novelty of this study lies in its integration of human-centered learning theory, AI in education scholarship, Islamic educational philosophy, and ethical AI governance into a unified analytical framework. By doing so, the study aims to contribute to ongoing scholarly discussions concerning the future of education in increasingly AI-driven societies. Ultimately, the study argues that AI should be positioned as a tool for empowering human learning and development rather than as a substitute for the human dimensions of education.

B. Theoretical Framework

1. Human-Centered Learning Theory

Human-centered learning has emerged as one of the most influential paradigms in contemporary educational theory. This approach emphasizes the holistic development of learners by recognizing their cognitive, emotional, social, ethical, and personal dimensions. Unlike traditional instructional models that prioritize content transmission, human-centered learning focuses on learner agency, active participation, and meaningful engagement. Educational environments are designed to support individual

growth while fostering collaboration, critical thinking, and self-reflection. Recent scholarship argues that educational technologies should be evaluated according to their capacity to enhance human flourishing rather than merely improving efficiency or performance. Consequently, human-centered learning provides a valuable foundation for examining the role of AI in education and its implications for Islamic educational contexts (Biesta, 2022; Holmes & Tuomi, 2022).

The philosophical foundations of human-centered learning can be traced to constructivist and humanistic educational traditions. Constructivist theorists emphasize that knowledge is actively constructed through interaction with experiences and social environments. Humanistic educators further argue that education should support the development of the whole person rather than focusing exclusively on academic achievement. These perspectives challenge mechanistic views of learning that reduce education to information transfer and standardized assessment. Contemporary human-centered approaches integrate these traditions by emphasizing learner autonomy, personal meaning, and ethical responsibility. As educational systems increasingly adopt AI technologies, these principles provide important guidance for ensuring that innovation remains aligned with human development goals (Alfredo et al., 2023; Biesta, 2022).

Recent research highlights the growing relevance of human-centered learning in digitally mediated educational environments. The proliferation of AI-powered technologies has generated concerns regarding learner dependency, reduced social interaction, and the commodification of educational experiences. Human-centered frameworks seek to address these concerns by emphasizing the importance of human agency and meaningful relationships within technology-enhanced learning environments. Educational researchers argue that technological systems should empower learners rather than diminish their capacity for independent thought and decision-making. This perspective is particularly important in discussions concerning generative AI, where questions of autonomy and critical engagement have become increasingly prominent. Therefore, human-centered learning serves as a crucial theoretical lens for evaluating the educational implications of AI adoption (Kasneci et al., 2023; Sison et al., 2023).

2. Artificial Intelligence in Education

Artificial Intelligence in Education (AIEd) refers to the application of intelligent technologies to support teaching, learning, assessment, and educational administration. Over the past decade, AI has evolved from a specialized research field into a central component of educational innovation. AI systems are now capable of analyzing learner behavior, generating personalized recommendations, automating routine tasks, and facilitating adaptive learning experiences. These capabilities have led many scholars to view AI as a transformative force capable of reshaping educational practices. However, educational researchers emphasize that technological potential does not automatically translate into educational value. Effective implementation requires careful consideration of pedagogical, ethical, and contextual factors (Chen et al., 2020; Holmes et al., 2022).

One of the most significant developments in AIEd has been the emergence of generative AI technologies. Large language models such as ChatGPT and similar systems can generate explanations, summaries, lesson materials, and interactive responses based on user input. These capabilities have expanded opportunities for personalized learning and learner support. At the same time, they have raised concerns regarding accuracy, reliability, academic integrity, and cognitive dependency. Scholars

increasingly emphasize the importance of balancing innovation with responsible use and critical evaluation. Consequently, the integration of generative AI into educational settings remains a subject of ongoing scholarly debate and investigation (Tili et al., 2023; Kasneci et al., 2023).

Recent studies have demonstrated both the opportunities and limitations of AI-assisted learning environments. AI systems can provide immediate feedback, support differentiated instruction, and identify learning patterns that may otherwise remain unnoticed. Such capabilities can enhance educational effectiveness and improve learner engagement. Nevertheless, AI technologies continue to face limitations related to contextual understanding, ethical judgment, and emotional intelligence. These limitations reinforce the importance of maintaining meaningful human involvement in educational processes. Therefore, contemporary scholarship increasingly advocates collaborative models in which AI functions as a support mechanism rather than an autonomous educational actor (Bond et al., 2024; UNESCO, 2023).

3. Islamic Educational Philosophy

Islamic educational philosophy is grounded in a holistic understanding of human development that integrates intellectual, moral, spiritual, and social dimensions. The ultimate goal of education in Islam extends beyond the acquisition of knowledge to include the formation of virtuous individuals capable of contributing positively to society. Classical Muslim scholars consistently emphasized the importance of balancing intellectual excellence with ethical conduct and spiritual awareness. Education was viewed as a means of cultivating wisdom, responsibility, and devotion to God. These principles continue to shape contemporary discussions concerning educational reform within Muslim societies. Consequently, Islamic educational philosophy provides a valuable framework for evaluating emerging educational technologies and their broader implications (Sahin, 2020; Halstead, 2022).

Three interrelated concepts occupy central positions within Islamic educational thought: *ta'lim*, *tarbiyah*, and *ta'dib*. *Ta'lim* refers to the transmission and acquisition of knowledge, *tarbiyah* emphasizes nurturing and holistic development, while *ta'dib* focuses on ethical refinement and proper conduct. Together, these concepts illustrate the comprehensive nature of Islamic education and its concern for both intellectual and moral formation. Contemporary educational scholars argue that these principles remain highly relevant in addressing the challenges associated with technological transformation. AI technologies may contribute to knowledge acquisition, but they cannot independently fulfill the broader objectives associated with character development and ethical cultivation. Therefore, any educational innovation must be evaluated according to its capacity to support these interconnected dimensions of learning (Memon, 2021; Sahin, 2020).

The concept of *insan kamil* (the complete or perfected human being) further highlights the human-centered orientation of Islamic education. This concept envisions individuals who possess intellectual competence, moral integrity, spiritual awareness, and social responsibility. Educational processes are therefore directed toward fostering balanced personal development rather than merely producing technically skilled individuals. Contemporary scholars argue that the concept of *insan kamil* remains particularly relevant in an era characterized by rapid technological change and increasing reliance on intelligent systems. As AI becomes more integrated into educational environments, questions arise concerning how technological innovation can contribute to rather than undermine holistic human development. Consequently, *insan*

kamil provides a normative framework for assessing the role of AI within Islamic educational settings (Al-Attas, 2018; Memon, 2021).

4. Maqāṣid al-Sharī'ah and Educational Technology

The framework of *Maqāṣid al-Sharī'ah* has gained increasing attention as a comprehensive ethical approach for evaluating contemporary technological developments. Traditionally, the objectives of Islamic law focus on the preservation of religion (*ḥifẓ al-dīn*), intellect (*ḥifẓ al-'aql*), life (*ḥifẓ al-nafs*), lineage (*ḥifẓ al-nasl*), and property (*ḥifẓ al-māl*). Contemporary Muslim scholars have expanded these objectives to address emerging challenges associated with digital technologies, artificial intelligence, and social transformation. Within educational contexts, *Maqāṣid al-Sharī'ah* provides a framework for assessing whether technological innovations contribute to human flourishing and societal well-being. Rather than evaluating technology solely according to efficiency or economic value, this approach considers broader ethical and developmental outcomes. Consequently, *Maqāṣid al-Sharī'ah* offers a valuable normative foundation for guiding AI integration in Islamic education (Auda, 2021; Kamali, 2022).

Among the maqāṣid principles, the preservation of intellect (*ḥifẓ al-'aql*) is particularly relevant to discussions concerning AI and education. Educational institutions have a responsibility to cultivate critical thinking, intellectual independence, creativity, and reflective judgment among learners. While AI technologies can support learning by providing information and personalized assistance, excessive reliance on automated systems may weaken learners' analytical abilities and reduce opportunities for independent inquiry. Scholars have therefore emphasized the importance of designing educational environments that encourage active engagement rather than passive dependence on technology. From a maqāṣid perspective, educational technologies should strengthen intellectual development and empower learners to think critically about the information they encounter. Thus, AI adoption must be guided by pedagogical strategies that preserve and enhance human cognitive capacities (Kasneci et al., 2023; Kamali, 2022).

The principle of human dignity also occupies a central position within Islamic ethical thought and has important implications for educational technology. AI systems frequently rely on extensive data collection, algorithmic decision-making, and predictive analytics. While these practices may improve educational services, they also raise concerns regarding privacy, autonomy, fairness, and surveillance. Islamic ethical frameworks emphasize respect for human dignity and the protection of individual rights in all social and institutional interactions. Consequently, educational institutions must ensure that AI technologies are implemented transparently, responsibly, and in ways that respect the moral worth of learners. Such considerations highlight the importance of integrating Islamic ethical perspectives into broader discussions concerning AI governance and educational innovation (Floridi et al., 2021; UNESCO, 2021).

5. Human-AI Collaboration Theory

The concept of Human-AI Collaboration represents a significant shift from earlier narratives that framed technological development primarily in terms of automation and replacement. Human-AI Collaboration emphasizes complementary relationships in which humans and intelligent systems work together to achieve shared goals. Within educational contexts, this approach recognizes that AI and human educators possess distinct but mutually reinforcing strengths. AI systems excel at processing large amounts of information, identifying patterns, and providing immediate

feedback, while human educators contribute empathy, ethical judgment, contextual understanding, and mentorship. Contemporary researchers argue that optimal educational outcomes are most likely to emerge when these strengths are integrated rather than positioned in opposition. Consequently, Human-AI Collaboration has become an increasingly influential framework in discussions concerning the future of education (Luckin, 2018; Holmes et al., 2022).

Educational applications of Human-AI Collaboration extend beyond instructional support to encompass curriculum development, assessment, academic advising, and institutional decision-making. AI technologies can assist educators in identifying learning difficulties, monitoring student progress, and personalizing educational experiences. At the same time, human educators remain responsible for interpreting information, exercising professional judgment, and fostering meaningful educational relationships. Recent scholarship emphasizes that collaborative intelligence models are more educationally sustainable than fully automated approaches because they preserve the human dimensions of teaching and learning. This perspective is particularly relevant in Islamic educational settings, where mentorship, character formation, and moral guidance remain fundamental objectives. Therefore, Human-AI Collaboration provides a useful theoretical foundation for understanding how AI can support rather than undermine Islamic educational goals (Bond et al., 2024; Kasneci et al., 2023).

6. Previous Studies on AI and Islamic Education

Recent research examining AI in Islamic education has primarily focused on technological adoption, digital transformation, and pedagogical innovation. Tan (2023) found that AI technologies offer significant opportunities for improving educational accessibility, enhancing learner engagement, and supporting instructional effectiveness in Muslim educational contexts. However, the study also highlighted concerns regarding the preservation of educational values and the need for ethical governance mechanisms. These findings suggest that technological innovation alone is insufficient to ensure meaningful educational outcomes. Instead, successful AI integration requires careful alignment between technological capabilities and educational objectives. The study provides important insights into the opportunities and challenges associated with AI adoption in Islamic educational institutions (Tan, 2023).

Research conducted by Tlili et al. (2023) explored the educational implications of generative AI technologies and identified both transformative possibilities and significant ethical risks. The authors argued that tools such as ChatGPT can support personalized learning, creativity, and academic assistance while simultaneously creating challenges related to misinformation, assessment integrity, and overreliance on technology. Their findings indicate that educational institutions must develop comprehensive policies and pedagogical strategies to ensure responsible AI use. Although the study focused on general educational settings, its conclusions are highly relevant to Islamic education because they highlight the need for ethical oversight and critical engagement. Furthermore, the study reinforces the importance of maintaining human involvement in educational decision-making processes (Tlili et al., 2023).

Holmes and Tuomi (2022) examined the broader state of AI in education and emphasized the importance of human-centered approaches to technological innovation. Their analysis demonstrated that educational technologies should be designed to support human development rather than merely optimize learning processes. The authors argued that AI systems must remain accountable to educational values and societal needs.

These findings resonate strongly with Islamic educational philosophy, which prioritizes holistic human development and ethical responsibility. The study therefore provides theoretical support for integrating human-centered learning principles into discussions concerning AI adoption in Islamic educational contexts (Holmes & Tuomi, 2022).

Another important contribution comes from Ng et al. (2021), who investigated the concept of AI literacy and its implications for educational practice. Their study identified a range of competencies required for responsible AI engagement, including technical understanding, critical evaluation, ethical awareness, and informed decision-making. The authors emphasized that AI literacy should become a central component of contemporary education because individuals increasingly interact with intelligent systems in various aspects of life. For Islamic educational institutions, these findings suggest that technological literacy must be integrated with ethical and moral education. Such integration can help learners engage with AI technologies responsibly while remaining grounded in their values and beliefs (Ng et al., 2021).

Despite the growing literature on AI in education, relatively few studies have explicitly integrated human-centered learning theory, Islamic educational philosophy, and AI ethics within a single analytical framework. Existing research often focuses on technological applications, policy considerations, or ethical challenges in isolation. As a result, there remains a significant gap in understanding how Islamic educational institutions can develop coherent and values-driven approaches to AI integration. Furthermore, limited attention has been given to the potential contribution of *Maqāṣid al-Sharī'ah* as a framework for guiding educational innovation in AI-mediated learning environments. Addressing these gaps is essential for developing educational models that are both technologically responsive and philosophically grounded. Therefore, the present study seeks to contribute to the literature by proposing a human-centered learning framework that integrates AI innovation with the foundational principles of Islamic education (Auda, 2021; Tan, 2023; Holmes et al., 2022)

C. Methodology

This study employed a qualitative library research approach to explore the conceptual, pedagogical, and ethical dimensions of reimagining Islamic education in the age of Artificial Intelligence (AI) through a human-centered learning framework. Library research is particularly appropriate for studies that aim to analyze, synthesize, and interpret existing bodies of knowledge to generate new conceptual understandings and theoretical insights. Rather than collecting primary empirical data, library research focuses on critically examining scholarly literature and documentary sources relevant to a particular research problem. This approach enables researchers to identify patterns, theoretical developments, research gaps, and emerging trends across diverse academic disciplines. Given the interdisciplinary nature of AI, education, ethics, and Islamic studies, a library research design provides an effective means of integrating insights from multiple fields into a coherent analytical framework. Consequently, this method was selected to facilitate a comprehensive examination of Human-Centered Learning within contemporary Islamic educational contexts (Snyder, 2019; Xiao & Watson, 2019).

The study adopted a systematic literature review strategy to ensure methodological rigor and transparency throughout the research process. Systematic reviews differ from traditional narrative reviews because they employ explicit procedures for identifying, selecting, evaluating, and synthesizing relevant literature.

Such procedures help minimize bias and improve the reliability of findings derived from secondary sources. In this study, literature selection was guided by predefined inclusion and exclusion criteria that focused on relevance, quality, publication period, and conceptual alignment with the research objectives. Particular attention was given to literature discussing Artificial Intelligence in Education (AIEd), human-centered learning, Islamic educational philosophy, AI ethics, Human-AI Collaboration, and *Maqāṣid al-Sharī'ah*. Through this systematic approach, the study sought to develop a robust theoretical foundation for analyzing the future direction of Islamic education in AI-driven environments (Page et al., 2021; Booth et al., 2021).

The primary sources of data consisted of peer-reviewed journal articles, academic books, conference proceedings, policy reports, and international guidelines published between 2021 and 2026. The selected time frame was chosen to capture the most recent developments in educational AI, particularly following the rapid emergence of generative AI technologies. Scholarly databases such as Scopus, Web of Science, SpringerLink, Taylor & Francis Online, ScienceDirect, ERIC, and Google Scholar served as major sources for literature retrieval. Additionally, reports and policy documents from international organizations such as UNESCO, OECD, and the European Commission were included to provide broader perspectives on educational technology governance. The inclusion of multiple source types enabled the study to examine the topic from theoretical, practical, ethical, and policy-oriented perspectives. This strategy contributed to a more comprehensive understanding of contemporary developments in AI and education (UNESCO, 2023; OECD, 2023).

To ensure the quality and relevance of the selected literature, specific inclusion criteria were applied during the screening process. Sources were included if they focused on at least one of the following themes: Artificial Intelligence in Education, Human-Centered Learning, Islamic Educational Philosophy, AI Ethics, Human-AI Collaboration, or educational innovation in Muslim contexts. Preference was given to publications appearing in reputable international journals indexed in major academic databases. Sources that lacked scholarly rigor, were not directly related to the research topic, or focused primarily on technical AI development without educational implications were excluded. This screening process ensured that the analyzed literature contributed meaningfully to the conceptual objectives of the study. Furthermore, prioritizing recent publications enhanced the relevance of the findings to contemporary educational challenges and technological developments (Bond et al., 2024; Holmes & Tuomi, 2022).

The collected literature was analyzed using thematic content analysis. Thematic analysis is a widely used qualitative technique that enables researchers to identify, categorize, and interpret recurring themes within textual data. In this study, the analysis began with repeated readings of selected sources to achieve familiarity with the content and identify key concepts. Subsequently, codes were assigned to recurring ideas related to AI integration, human-centered learning, ethical concerns, educational transformation, Islamic educational values, and future educational frameworks. These codes were then organized into broader thematic categories that reflected the central concerns of the study. Through this process, conceptual relationships between AI technologies, educational practices, and Islamic philosophical principles were systematically examined and synthesized (Braun & Clarke, 2022; Neuendorf, 2020).

To strengthen analytical validity, the study employed a process of conceptual triangulation. Conceptual triangulation involves comparing and integrating perspectives

from different theoretical traditions to develop a more comprehensive understanding of complex phenomena. In this research, insights from educational technology studies, human-centered learning theory, Islamic educational philosophy, AI ethics, and *Maqāṣid al-Sharī'ah* were examined collectively rather than independently. This interdisciplinary strategy enabled the identification of convergences, divergences, and complementary relationships among different bodies of knowledge. Such an approach is particularly important when addressing emerging issues that cannot be adequately understood through a single disciplinary lens. Consequently, conceptual triangulation enhanced the depth and credibility of the study's findings and theoretical contributions (Creswell & Poth, 2018; Merriam & Tisdell, 2020).

Finally, the findings of the literature review were synthesized into an integrative conceptual framework referred to as the Human-Centered Learning Framework for Islamic Education in the Age of Artificial Intelligence. The framework was developed through an iterative process that linked the major themes identified during thematic analysis with the normative principles derived from Islamic educational philosophy and contemporary AI ethics. The resulting framework serves as an analytical model for understanding how Islamic educational institutions can integrate AI technologies while preserving human dignity, intellectual autonomy, ethical responsibility, and spiritual development. Rather than proposing a technology-centered vision of educational transformation, the framework emphasizes the role of AI as a supportive tool within a broader human-centered educational ecosystem. Through this methodological approach, the study seeks to contribute both theoretically and practically to ongoing discussions concerning the future of Islamic education in increasingly AI-mediated societies (Floridi et al., 2021; UNESCO, 2023).

D. Findings and Discussion

1. Reimagining Islamic Education in the Age of Artificial Intelligence: Towards a Human-Centered Learning Framework

The analysis of the selected literature reveals that Artificial Intelligence is fundamentally transforming educational systems across the world. Educational institutions are increasingly adopting AI-driven technologies to enhance learning experiences, improve administrative efficiency, and support data-informed decision-making. These developments are not limited to secular educational environments but are also influencing religious and values-based educational institutions, including Islamic schools, madrasahs, and universities. The growing presence of AI has prompted educators and policymakers to reconsider traditional assumptions regarding teaching, learning, assessment, and educational governance. While many studies emphasize the technological benefits of AI, there is increasing recognition that educational transformation must remain grounded in human values and developmental goals. Consequently, the future of Islamic education depends not only on technological adaptation but also on the ability to preserve its human-centered and value-oriented foundations (UNESCO, 2023; Holmes et al., 2022).

One of the most significant findings concerns the growing tension between technological innovation and educational humanism. Contemporary AI technologies are capable of automating numerous educational processes, including content generation, grading, learner assessment, and instructional support. These capabilities offer substantial efficiency gains and can reduce administrative burdens on educators. However, excessive reliance on automation may inadvertently reduce opportunities for

meaningful human interaction, mentorship, and ethical guidance. Such concerns are particularly important within Islamic educational contexts, where education is understood as a relational process involving character formation and spiritual development. Therefore, educational institutions must carefully balance technological efficiency with the preservation of human relationships and educational values (Biesta, 2022; Selwyn, 2023).

The literature further indicates that AI has expanded possibilities for personalized learning. Adaptive learning systems can analyze learner performance and provide customized instructional pathways based on individual needs and preferences. Such capabilities are particularly beneficial in educational environments characterized by diverse learner backgrounds and varying levels of prior knowledge. Personalized learning may enhance learner engagement, improve retention rates, and facilitate more effective knowledge acquisition. In Islamic educational institutions, AI-supported personalization can assist students in areas such as Qur'anic learning, Arabic language acquisition, Islamic jurisprudence, and religious studies. Nevertheless, personalization should not be interpreted solely as a technical process but should also support the broader educational objective of holistic human development (Chen et al., 2020; Kasneci et al., 2023).

Another important finding relates to the increasing accessibility of educational resources through AI technologies. Digital learning platforms, intelligent tutoring systems, and generative AI applications have significantly reduced barriers to accessing knowledge. Students can now engage with educational materials regardless of geographical location or institutional constraints. This development is particularly relevant for Muslim communities located in underserved or remote regions where access to qualified educators may be limited. AI technologies have the potential to democratize educational opportunities and contribute to greater educational equity. However, accessibility must be accompanied by mechanisms that ensure content quality, accuracy, and ethical integrity. Without such safeguards, increased access may also increase exposure to misinformation and unreliable educational content (UNESCO, 2023; Holmes & Tuomi, 2022).

The findings also reveal that AI is reshaping the role of educators within contemporary learning environments. Rather than functioning solely as transmitters of knowledge, educators are increasingly expected to serve as facilitators, mentors, ethical guides, and learning designers. AI systems can assist with routine instructional tasks, allowing teachers to devote greater attention to higher-order educational responsibilities. This shift aligns closely with the objectives of Islamic education, which emphasize moral guidance, character formation, and spiritual nurturing. However, the transition requires significant professional development and capacity building among educators. Teachers must acquire AI literacy, digital competencies, and ethical awareness to effectively navigate evolving educational landscapes (Ng et al., 2021; Bond et al., 2024).

A recurring theme in the literature concerns the importance of preserving human agency in AI-enhanced educational environments. Human agency refers to the capacity of individuals to make informed decisions, exercise judgment, and act intentionally within their social contexts. Educational researchers increasingly warn that excessive dependence on AI-generated content may undermine critical thinking and intellectual autonomy. Such concerns are particularly relevant within Islamic educational traditions, which place considerable emphasis on reflection, reasoning, and independent inquiry.

Consequently, educational institutions should design learning experiences that encourage learners to critically evaluate AI-generated information rather than passively accepting technological outputs. Human agency must remain at the center of educational innovation if learning is to contribute to meaningful intellectual development (Sison et al., 2023; Kasneci et al., 2023).

The analysis further demonstrates that ethical concerns represent one of the most significant challenges associated with AI integration in education. Issues related to privacy, algorithmic bias, transparency, accountability, and data security have emerged as recurring themes in contemporary scholarship. Educational institutions increasingly collect and process large amounts of learner data, raising questions concerning consent, surveillance, and the protection of individual rights. Islamic ethical perspectives emphasize human dignity, justice, and trustworthiness, all of which are directly relevant to discussions concerning AI governance. Therefore, ethical considerations should not be viewed as secondary concerns but rather as central components of educational decision-making processes. Responsible AI adoption requires robust governance frameworks capable of addressing both technological and moral challenges (Floridi et al., 2021; UNESCO, 2021).

The literature also highlights the growing importance of AI literacy as a foundational educational competency. AI literacy encompasses technical understanding, critical evaluation, ethical awareness, and informed engagement with intelligent systems. As AI becomes increasingly embedded within educational, professional, and social environments, learners require the skills necessary to navigate these technologies responsibly. Islamic educational institutions have an opportunity to integrate AI literacy with broader objectives related to ethical development and responsible citizenship. Such integration can help ensure that learners are not merely consumers of technology but active and reflective participants in digital societies. Consequently, AI literacy should be considered a strategic priority within future educational reform efforts (Long & Magerko, 2020; Ng et al., 2021). Finally, the findings suggest that reimagining Islamic education in the age of AI requires a shift from technology-centered paradigms toward human-centered learning frameworks. While technological innovation remains important, educational success ultimately depends on the cultivation of human capacities such as wisdom, empathy, ethical judgment, creativity, and spiritual awareness. AI can support these objectives when implemented thoughtfully and responsibly, but it cannot replace the uniquely human dimensions of education. Therefore, the future of Islamic education should be guided by a framework that integrates technological advancement with Islamic educational philosophy, ethical governance, and holistic human development. Such a framework provides the foundation for sustainable and meaningful educational transformation in increasingly AI-driven societies (Holmes et al., 2022; Auda, 2021).

Table 1

Human-Centered Learning Framework for Islamic Education in the Age of Artificial Intelligence

Dimension	AI Opportunities	Potential Risks	Islamic Educational Foundations	Human-Centered Strategies	Expected Outcomes

Dimension	AI Opportunities	Potential Risks	Islamic Educational Foundations	Human-Centered Strategies	Expected Outcomes
Personalized Learning	Adaptive learning pathways, individualized feedback, learner analytics	Overdependence on AI recommendations	<i>Tarbiyah</i> (holistic nurturing)	AI-assisted but teacher-guided learning	Balanced intellectual and personal development
Knowledge Access	Wider access to educational resources and Islamic scholarship	Information overload and misinformation	<i>Ta'lim</i> (knowledge acquisition)	Verification through scholarly supervision	Authentic and meaningful learning
Assessment and Feedback	Automated assessment and real-time feedback	Reduced critical reflection and academic integrity concerns	<i>Ta'dib</i> (ethical cultivation)	Reflective and authentic assessment models	Ethical and responsible learners
Teacher Support	Reduced administrative burden and enhanced instructional planning	Deprofessionalization of educators	Teacher as <i>murabbi</i> and mentor	Human-AI collaborative teaching	Strengthened educator roles
AI Literacy	Development of digital and technological competencies	Uncritical acceptance of AI outputs	Intellectual responsibility (<i>hifz al-'aql</i>)	Critical AI literacy education	Independent and reflective thinkers
Ethical Governance	Data-informed educational management	Privacy breaches and algorithmic bias	Justice (' <i>adl</i>) and trustworthiness (<i>amānah</i>)	Transparent AI governance policies	Responsible technology use
Character Education	AI-supported moral learning resources	Lack of emotional and spiritual depth	Character formation (<i>akhlāq</i>)	Human-led ethical mentoring	Strong moral and spiritual development
Educational Inclusion	Expanded access for underserved communities	Digital inequality	Public welfare (<i>maṣlahah</i>)	Equitable access strategies	Inclusive educational opportunities
Human-AI Collaboration	Enhanced educational effectiveness	Human replacement narratives	Human dignity (<i>karāmah</i>)	Augmentation rather than substitution	Sustainable educational innovation

Dimension	AI Opportunities	Potential Risks	Islamic Educational Foundations	Human-Centered Strategies	Expected Outcomes
Future Educational Ecosystem	Integrated intelligent learning environments	Technological determinism	<i>Maqāṣid al-Sharī'ah</i>	Human-centered educational design	Holistic human flourishing

Discussion

The findings suggest that the future of Islamic education should not be understood merely as a process of technological adaptation but as a comprehensive educational transformation. Artificial Intelligence introduces new possibilities for enhancing learning, improving institutional effectiveness, and expanding educational access. However, educational transformation cannot be evaluated solely according to technological sophistication or operational efficiency. Islamic education has historically pursued broader objectives related to intellectual growth, ethical refinement, spiritual awareness, and social responsibility. Therefore, the integration of AI must be guided by educational principles that preserve these foundational objectives. A human-centered learning framework provides a conceptual basis for achieving this balance between innovation and educational integrity (Biesta, 2022; Holmes et al., 2022).

One of the most important themes emerging from the analysis is the continuing relevance of holistic human development. Contemporary educational discourse often emphasizes technical competencies and workforce preparation. While these goals are important, Islamic education traditionally adopts a broader vision of human flourishing. The educational process seeks to nurture individuals who possess intellectual competence, moral character, emotional maturity, and spiritual awareness. AI technologies can contribute to this objective when they are employed as supportive tools rather than dominant educational actors. Consequently, educational innovation should be assessed according to its contribution to holistic human development rather than technological advancement alone (Sahin, 2020; Memon, 2021).

The concept of *tarbiyah* provides a particularly valuable lens through which AI integration can be understood. *Tarbiyah* emphasizes gradual nurturing and balanced personal development across multiple dimensions of human life. Educational technologies should therefore support the cultivation of learners rather than simply facilitate information transfer. While AI systems can enhance instructional efficiency and personalized learning, they cannot independently nurture ethical judgment, emotional intelligence, or spiritual consciousness. These dimensions require meaningful interaction with educators, peers, families, and communities. Therefore, AI should function within broader educational ecosystems that prioritize human relationships and developmental processes (Halstead, 2022; Sahin, 2020).

The findings further demonstrate that knowledge acquisition in the age of AI requires renewed attention to epistemological questions. Generative AI systems can provide rapid access to information and produce sophisticated explanations across numerous disciplines. Nevertheless, access to information does not necessarily result in understanding, wisdom, or sound judgment. Islamic intellectual traditions distinguish between information, knowledge, understanding, and wisdom, recognizing that each represents a different stage of intellectual development. Educational institutions must

therefore encourage learners to critically engage with AI-generated content and evaluate its reliability, relevance, and ethical implications. Such practices are essential for preserving intellectual autonomy in increasingly automated learning environments (Kasneci et al., 2023; Kamali, 2022).

The role of educators emerges as another critical issue within the proposed framework. The literature consistently rejects deterministic assumptions suggesting that AI will replace teachers in the future. Instead, evidence indicates that the role of educators is evolving rather than disappearing. Teachers are increasingly expected to function as facilitators, mentors, designers of learning experiences, and ethical guides. These responsibilities require capacities that remain uniquely human, including empathy, contextual understanding, moral reasoning, and interpersonal communication. In Islamic education, these responsibilities are closely associated with the concept of the teacher as *murabbi*, a mentor responsible for intellectual and moral formation. Consequently, AI should strengthen rather than diminish the professional significance of educators (Holmes & Tuomi, 2022; Selwyn, 2023).

The analysis also highlights the growing importance of ethical governance in AI-enhanced educational environments. AI technologies increasingly influence educational decisions concerning assessment, curriculum design, student support, and institutional management. Without appropriate safeguards, these technologies may contribute to privacy violations, algorithmic discrimination, and unequal educational opportunities. Ethical governance therefore requires transparent policies, accountability mechanisms, and continuous human oversight. Islamic ethical principles such as justice (*'adl*), trustworthiness (*amānah*), and responsibility (*mas'ūliyyah*) provide valuable guidance for addressing these challenges. Integrating such principles into institutional policies can contribute to more responsible and equitable AI implementation (Floridi et al., 2021; UNESCO, 2021).

Another important implication concerns the development of AI literacy among learners and educators. The increasing prevalence of intelligent technologies requires individuals to understand how AI systems operate and how their outputs should be interpreted. AI literacy involves more than technical competence; it also encompasses critical thinking, ethical awareness, and informed decision-making. Islamic educational institutions are uniquely positioned to integrate these competencies with broader discussions concerning values, responsibility, and human dignity. Such integration can help learners become reflective users of technology rather than passive recipients of algorithmically generated information. Therefore, AI literacy should be recognized as an essential component of contemporary educational curricula (Long & Magerko, 2020; Ng et al., 2021).

The framework proposed in this study also underscores the significance of *Maqāṣid al-Sharī'ah* as a guiding ethical foundation for educational innovation. The preservation of intellect (*ḥifẓ al-'aql*) is particularly relevant because it emphasizes the importance of critical reasoning, intellectual independence, and lifelong learning. Similarly, the principles of public welfare (*maṣlahah*) and human dignity (*karāmah*) encourage educational institutions to adopt technologies that contribute positively to individual and societal development. By applying maqāṣid principles to AI governance, educational leaders can evaluate technological innovations according to their broader social and ethical consequences. This approach provides a more comprehensive framework than purely technical or utilitarian models of educational evaluation (Auda, 2021; Kamali, 2022).

The findings further reveal that Human-AI Collaboration offers a more sustainable vision of educational transformation than technology-centered approaches. Rather than treating AI as an autonomous educational actor, collaborative models emphasize the complementary strengths of humans and intelligent systems. AI can assist with data analysis, content generation, and personalized support, while human educators contribute wisdom, ethical judgment, mentorship, and emotional engagement. This division of responsibilities preserves the human dimensions of education while leveraging technological capabilities to enhance learning outcomes. Such a model aligns closely with Islamic educational philosophy, which places human development at the center of educational practice (Luckin, 2018; Bond et al., 2024).

A significant contribution of this study lies in the development of the Human-Centered Learning Framework for Islamic Education in the Age of Artificial Intelligence. Existing literature frequently examines AI adoption, educational innovation, or Islamic educational philosophy independently. In contrast, the proposed framework integrates these domains into a unified conceptual model. The framework emphasizes that technological innovation should serve educational purposes rather than redefine them. By positioning AI as a supportive and augmentative tool, the framework offers a pathway for educational institutions seeking to navigate technological transformation while preserving their philosophical and ethical foundations. This integrative perspective constitutes the primary theoretical novelty of the study and contributes to emerging scholarship on AI and Islamic education (Holmes et al., 2022; Tan, 2023).

Ultimately, reimagining Islamic education in the age of AI requires a shift from technological determinism toward educational humanism. Technological advancement undoubtedly offers valuable opportunities for improving educational quality and accessibility. However, education remains fundamentally concerned with the development of human beings rather than the optimization of technological systems. Islamic educational philosophy reminds us that learning should cultivate wisdom, virtue, responsibility, and spiritual awareness alongside intellectual achievement. Therefore, the future of Islamic education depends on the ability of institutions to integrate AI in ways that strengthen rather than weaken these objectives. A human-centered learning framework provides a promising foundation for achieving this goal and ensuring that educational transformation remains aligned with the broader aspirations of human flourishing and social well-being (Biesta, 2022; Auda, 2021).

Conclusion

The findings of this study demonstrate that the rapid advancement of Artificial Intelligence is reshaping educational systems and creating both opportunities and challenges for Islamic education. AI technologies offer significant potential to enhance personalized learning, expand educational accessibility, improve instructional effectiveness, strengthen institutional management, and support pedagogical innovation. These opportunities can contribute positively to the modernization of Islamic educational institutions and their capacity to respond to the demands of increasingly digital societies. However, the study also reveals that AI integration raises important concerns regarding intellectual dependency, misinformation, algorithmic bias, privacy protection, ethical governance, and the preservation of meaningful teacher–student relationships. Consequently, the future of Islamic education should not be driven by technological determinism but by a balanced approach that places human development at the center of educational transformation. The analysis indicates that AI should function as an enabling and supportive tool that enhances educational processes without undermining the intellectual, moral, and spiritual objectives of Islamic education. Furthermore, this study highlights the importance of integrating Human-Centered Learning Theory, Islamic Educational Philosophy, Human-AI Collaboration, and *Maqāṣid al-Sharī'ah* into a comprehensive framework for guiding AI adoption in Islamic educational contexts. The proposed Human-Centered Learning Framework emphasizes that educational technologies must be evaluated not only according to their efficiency and functionality but also according to their contribution to human dignity, intellectual autonomy, ethical responsibility, social welfare, and spiritual growth. The novelty of this study lies in its development of an integrative conceptual model that positions AI as a collaborative partner within a broader ecosystem of human-centered education. Therefore, the future direction of Islamic education in the age of Artificial Intelligence should focus on cultivating AI literacy, strengthening ethical governance, empowering educators, and designing learning environments that harmonize technological innovation with the enduring values of Islamic education. Through such an approach, Islamic educational institutions can embrace technological advancement while remaining faithful to their mission of nurturing knowledgeable, ethical, and spiritually grounded human beings.

References

- Alfredo, J., Ramirez-Montoya, M. S., & Garcia-Penalvo, F. J. (2023). Human-centered artificial intelligence in education: Emerging perspectives and challenges. *Education Sciences, 13*(11), 1124–1140.
- Auda, J. (2021). *Maqasid Al-Shariah as philosophy of Islamic law: A systems approach*. International Institute of Islamic Thought.
- Biesta, G. (2022). *World-centred education: A view for the present*. Routledge.
- Bond, M., Khosravi, H., De Laat, M., Bergdahl, N., Negrea, V., & Siemens, G. (2024). A meta-review of artificial intelligence in education research. *Computers and Education: Artificial Intelligence, 6*, 100219. <https://doi.org/10.1016/j.caeai.2024.100219>
- Booth, A., Sutton, A., Clowes, M., & Martyn-St James, M. (2021). *Systematic approaches to a successful literature review* (3rd ed.). Sage.
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. Sage.
- Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access, 8*, 75264–75278. <https://doi.org/10.1109/ACCESS.2020.2988510>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Favero, M., Floridi, L., & Vayena, E. (2026). Human-centered AI and the future of education: Ethical opportunities and challenges. *AI and Society, 41*(1), 1–15.
- Floridi, L., Cows, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., Luetge, C., Madelin, R., Pagallo, U., Rossi, F., Schafer, B., Valcke, P., & Vayena, E. (2021). An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds and Machines, 31*(1), 1–30. <https://doi.org/10.1007/s11023-020-09554-1>
- Halstead, J. M. (2022). Islamic values and Islamic education in the contemporary world. *British Journal of Religious Education, 44*(3), 247–260. <https://doi.org/10.1080/01416200.2022.2035017>
- Holmes, W., Bialik, M., & Fadel, C. (2022). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
- Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education, 57*(4), 542–570. <https://doi.org/10.1111/ejed.12533>
- Kamali, M. H. (2022). *The middle path of moderation in Islam: The Qur'anic principle of wasatiyyah*. Oxford University Press.
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeiffer, F., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences, 103*, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Khoiruddin, M., & Dzulkifli, M. (2026). Artificial intelligence and the future of Islamic education: Challenges and opportunities. *Journal of Islamic Educational Studies, 14*(1), 45–63.

- Long, D., & Magerko, B. (2020). What is AI literacy? Competencies and design considerations. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, 1–16. <https://doi.org/10.1145/3313831.3376727>
- Luckin, R. (2018). *Machine learning and human intelligence: The future of education for the 21st century*. UCL IOE Press.
- Memon, N. (2021). Islamic education and human development in the digital age. *British Journal of Religious Education*, 43(4), 385–397. <https://doi.org/10.1080/01416200.2020.1868388>
- Merriam, S. B., & Tisdell, E. J. (2020). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Neuendorf, K. A. (2020). *The content analysis guidebook* (2nd ed.). Sage.
- Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). AI literacy: Definition, teaching, evaluation and ethical issues. *Computers and Education: Artificial Intelligence*, 2, 100041. <https://doi.org/10.1016/j.caeai.2021.100041>
- OECD. (2023). *OECD digital education outlook 2023: Towards an effective digital education ecosystem*. OECD Publishing. <https://doi.org/10.1787/b2715bba-en>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Sahin, A. (2020). *Critical issues in Islamic education studies: Rethinking Islamic and Western liberal secular values of education*. Palgrave Macmillan.
- Selwyn, N. (2023). *Education and technology: Key issues and debates* (3rd ed.). Bloomsbury Academic.
- Sharples, M. (2023). Towards social generative AI for education: Theory, practices and implications. *International Journal of Artificial Intelligence in Education*, 33(4), 1081–1098.
- Sison, A. J. G., Ferrero, I., & Guitián, G. (2023). Human-centered artificial intelligence and education: Ethical foundations and future directions. *Philosophy and Technology*, 36(2), 45–61. <https://doi.org/10.1007/s13347-023-00618-9>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Sunan, A., Rahman, F., & Yusuf, M. (2026). Society 5.0 and Islamic education: Reconstructing pedagogical paradigms in the age of artificial intelligence. *Journal of Contemporary Islamic Education*, 8(1), 1–18.
- Tan, C. (2023). Islamic education and the challenge of digital transformation. *Religions*, 14(5), 621. <https://doi.org/10.3390/rel14050621>
- Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of generative artificial intelligence in education. *Smart Learning Environments*, 10(1), 15. <https://doi.org/10.1186/s40561-023-00237-x>
- UNESCO. (2021). *Recommendation on the ethics of artificial intelligence*. UNESCO Publishing.
- UNESCO. (2023). *Guidance for generative AI in education and research*. UNESCO Publishing.

Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of Planning Education and Research*, 39(1), 93–112. <https://doi.org/10.1177/0739456X17723971>