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The Role of Religious Ethics in Regulating the use of Artificial Intelligence on Education

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Abstract

This study aims to analyse how religious ethics, specifically Islamic ethics regulate the use of Artificial Intelligence (AI) in education. As educational institutions increasingly adopt AI for personalised learning, automated assessment, and adaptive learning systems, they face complex ethical challenges. These challenges include algorithmic bias, information hallucination, violations of academic integrity, and cognitive dependence on technology. We conducted a Systematic Literature Review (SLR) following the PRISMA protocol. Specifically, we examined English-language, Scopus-indexed articles published between 2025 and 2026, focusing on the intersection of AI, education, and ethical implications. From the initial 174 articles, we then analysed 10 of the most relevant publications in depth. The findings show that a technocratic perspective largely dominates AI applications in education, emphasising system efficiency and accuracy. However, educators and policymakers have yet to substantively integrate normative ethical dimensions and religious values. Addressing this gap, the study demonstrates that the core principles of Islamic ethics such as *amanah* (responsibility), *'adl* (justice), *maslahah* (public good), and *ḥifẓ al-'aql* (preservation of intellect) provide a highly relevant framework for governing AI in education equitably and human-centrically. This research integrates Islamic religious ethics as a complementary normative framework alongside modern AI ethics. This approach ensures that AI in education operates not only with technical effectiveness but also in alignment with the moral, spiritual, and higher purposes of education.

Keywords: *Artificial Intelligence, Religious Ethics, Education, Islamic Ethics, AI Governance*

Introduction

The rapid advancement of Artificial Intelligence (AI) has transformed the design, delivery, and evaluation of education. AI now enables personalised learning, learning analytics, administrative automation, and generative tools like chatbots and large language models that help students and educators compose materials, summarise readings, and provide feedback (Khanim, 2020). These benefits, however, bring challenges. Risks include plagiarism, algorithmic bias, data privacy breaches, inequitable access to technology, and changes to teachers' roles and authority.This issue's urgency is clear: students' adoption of generative AI has outpaced policy readiness. In higher education, 88% of students used generative AI for coursework and assessments, up from 53% the previous year (HEPI survey; Al Zuraib, 2025). The Digital Education Council, cited by *Campus Technology*, found 86% of students used AI in their studies, some using it daily (Simoni et al., 2025). Among U.S. teenagers, 26% used ChatGPT for schoolwork double the figure from 2023 (Pew Research Centre; Bond et al., 2024). AI is now an "everyday learning tool" for many students, increasing the risk of misuse if left unregulated (Khanim, 2020).

Academic integrity is a growing concern. According to Turnitin's July 16, 2024 release, of more than 200 million analysed papers since its AI detection tool launched, about 11% had at least 20% "AI writing present," and about 3% had 80% or more. These numbers show AI use is now systemic, not isolated. This calls for structured responses through

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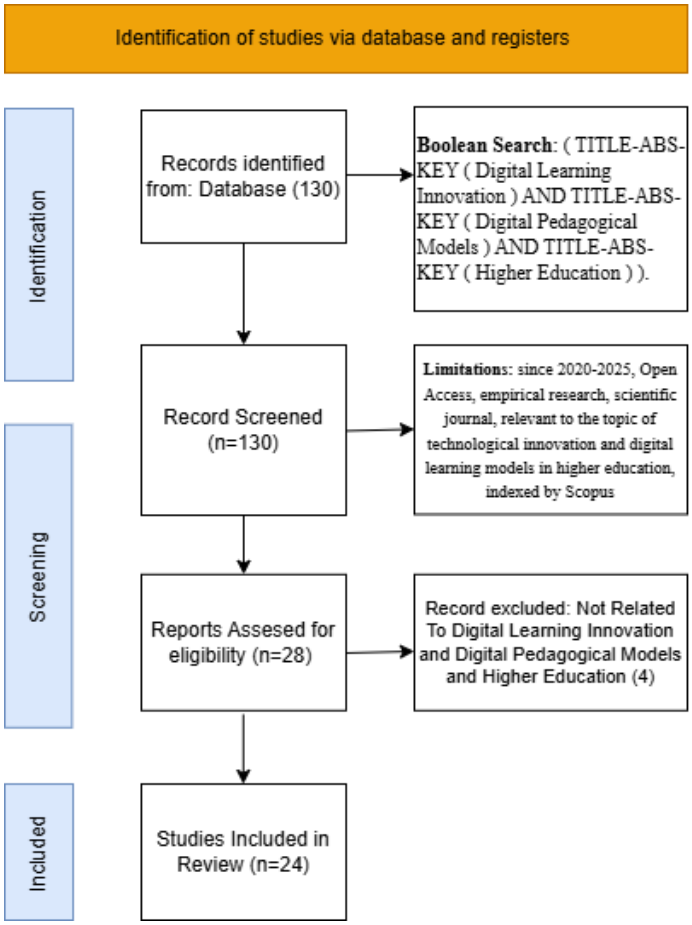
assessment design, AI literacy, and clear ethical guidelines (Varma et al., 2023). Policy preparedness has not kept pace. UNESCO's global survey found that fewer than 10% of schools and universities have formal AI guidelines (Syeda et al., 2025). This gap between "massive use" and "minimal guidance" creates serious uncertainty. Institutions face unclear standards, academic disputes, and unfair practices especially for students with limited access to technology (Jacobs et al., 2023).A comprehensive ethical and governance framework is vital. Institutional regulations alone are not enough. Education is also about moral formation, cultivating values, and social responsibility. In religious societies, including Muslim communities, religious ethics are crucial. They shape moral choices, set behavioural boundaries, and guide practices that aim to be fair, safe, and dignified.Ethics and behavioural regulation are deeply rooted in *Islamic studies. This field covers* principles such as *maqāṣid al-sharī'ah*, *fiqh*, and modern scholarly opinions (*fatāwā*). Foundational concepts include preserving intellect (*ḥifẓ al-'aql*), life (*ḥifẓ al-nafs*), wealth (*ḥifẓ al-māl*), and human dignity. These serve as benchmarks for judging whether AI use in education aligns with public benefit (*maslahah*) and avoids harm (*mafsadah*). Thus, Islamic ethics offer conceptual and practical tools for responsible AI policy in education (Tulgar et al., 2023).This study addresses the fragmented understanding of how Islamic ethics can govern AI in education. It aims to systematically review and synthesise the literature at the intersection of religious ethics, AI governance, and educational practice through the lens of Islamic studies. The objectives are to clarify normative frameworks, summarise policy recommendations, highlight research gaps, and, most importantly, build an evidence-based foundation for guidelines that make AI in education both effective and ethically aligned with Islamic moral principles. By doing so, this study underscores the necessity of a clear, ethically robust framework for the responsible use of AI in educational contexts.

Methodology

This study employs a Systematic Literature Review (SLR) approach to comprehensively analyse the role of religious ethics in regulating the use of Artificial Intelligence (AI) in education. The SLR method was selected because it enables researchers to systematically, transparently, and replicably search, select, and synthesise empirical findings relevant to the Research focus (Hernández Rincón et al., 2025). The data sources are limited to peer-reviewed journal articles indexed in Scopus, due to the database's academic credibility and its multidisciplinary coverage across technology, education, and social sciences. The literature search was conducted using the Title–Abstract–Keywords fields, applying the following Boolean search strategy: *(TITLE-ABS-KEY (Artificial Intelligence) AND TITLE-ABS-KEY (Education) AND TITLE-ABS-KEY (Ethical Implications)) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (OA , "all")) AND (LIMIT-TO (PUBYEAR , 2025) OR LIMIT-TO (PUBYEAR , 2026)) AND (LIMIT-TO (SUBJAREA , "COMP") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "MULT")) AND (LIMIT-TO (EXACTKEYWORD , "Artificial Intelligence") OR LIMIT-TO (EXACTKEYWORD , "Ethical Technology") OR LIMIT-TO (EXACTKEYWORD , "Higher Education")) AND (LIMIT-TO (SRCTYPE , "j")* with restrictions applied to journal article documents (article type), English-language publications, open access status, and a publication period between 2025 and 2026, focusing on the subject areas of Social Sciences, Arts and Humanities, and Multidisciplinary. In addition, the search was refined using specific keywords such as Artificial Intelligence, Ethical Technology, and Higher Education, and limited to journal sources (source type: journal) (Roy et al., 2023).

Table 1. Reporting Items for Systematic Reviews and Meta-Analyses Flow



The initial search yielded 174 articles. These were screened according to the inclusion criteria, which covered only empirical Research articles, open access, relevance to educational contexts, and explicit discussion of the ethical implications of AI use. After the initial screening, the number of articles was reduced to 30. The next phase involved title and abstract screening to assess each study's alignment with the Research focus, followed by a full-text evaluation to ensure substantive relevance to the topic *"The Role of Religious Ethics in Regulating the Use of Artificial Intelligence On Education."* Through this process, a final set of 10 highly relevant articles was selected as the basis for the SLR analysis (Roy et al., 2023).Data from the selected articles were systematically extracted, including information on authors, year of publication, journal source, educational context and level, types of AI-based digital learning tools, and identified ethical issues and challenges. Data analysis was conducted using a combination of descriptive analysis to map Research characteristics and trends, and thematic analysis to identify recurring patterns of ethical concerns related to AI in education. The empirical findings were then normatively synthesized by linking them to key principles of Islamic religious ethics, such as *amanah* (responsibility), *'adl* (justice), *maslahah* (public good), and *ḥifẓ al-'aql* (preservation of intellect), to construct a conceptual framework explaining the role of Islamic ethics in the governance of AI in education (Syeda et al., 2025). All Research procedures adhered to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure transparency, consistency, and reliability of the review findings (Bond et al., 2024).

Discussion

Table 2. collection of inclusion journals

No	Title	Authors	Year	Journal	Country	Author Affiliation
1	Towards contextual-based AI: A scoping review of artificial intelligence in X reality for personalized learning	Zifeng Liu; Serene Cheon; Austin Stanbury; Xinyue Jiao; Wanli Xing; Hyo Kang	2026	Computers and Education: Artificial Intelligence	USA	University of Florida; UC Berkeley; New York University
2	From knowledge gaps to learning opportunities: Leveraging student questions and dual use of generative AI to support student learning at scale	Stanislav Pozdniakov et al.	2026	Computers and Education: Artificial Intelligence	Australia; Germany	University of Queensland; Technical University of Munich
3	Towards reliable generative AI-driven scaffolding: Reducing hallucinations and enhancing quality in self-regulated learning support	Keyang Qian et al.	2026	Computers & Education	Australia; China; Netherlands	Monash University; Hunan Normal University; Radboud University; Tsinghua University
4	LLM-based pedagogical agent for ICU simulation instructor training: A quasi-experimental study	Jingbang Liu et al.	2026	Nurse Education Today	China	Zhejiang University School of Medicine (Sir Run Run Shaw Hospital)
5	Development and evaluation of AI chatbot tool for written communication training in self-care: Experiences of pharmacy students and faculty	S. Bakhaya et al.	2026	Currents in Pharmacy Teaching and Learning	Sweden; Netherlands	Uppsala University; University of Groningen
6	Incorporating information retrieval into AI chatbots for patient education on thyroid eye disease	Kameel Khabaz et al.	2026	International Journal of Medical Informatics	USA	UCLA; University of Chicago; UC Irvine; Temple University
7	Evaluating ChatGPT-generated psychoeducation for mood disorders: comparative insights from patients and mental health professionals	Francesco Attanasio et al.	2026	Journal of Psychiatric Research	Italy	Vita-Salute San Raffaele University; Sapienza University of Rome; IRCCS San Raffaele
8	Evaluating ASCERT: generative AI for cyber-range scenario generation	M. Palumickas et al.	2026	International Journal of Information Security	Norway	Norwegian University of Science and Technology (NTNU), Gjøvik
9	Leveraging large language models for enhanced process model comprehension	Humam Kourani et al.	2026	Decision Support Systems	Germany	Fraunhofer FIT; RWTH Aachen University
10	Hierarchical RAG enhances a pharmacogenomic AI assistant in guideline related queries	Yaejin Jeon et al.	2026	Computers in Biology and Medicine	Republic of Korea	Seoul National University (SNUBI); Meninblox Inc.

Based on the analyzed data, Research on Artificial Intelligence (AI) in education shows a significant, increasingly complex upward trend, particularly in publications from 2026. This trend indicates that AI is no longer regarded merely as a technical learning aid but has evolved into a pedagogical agent, a decision-support system, and a framework for adaptive and personalized learning across multiple educational levels and disciplines. Most studies focus on the use of generative AI and Large Language Models (LLMs) to support personalized learning, self-regulated learning scaffolding, and professional training in fields such as health sciences, pharmacy, nursing, and cybersecurity. For instance, integrating AI-powered XR-based learning environments for contextual and personalized learning reflects a shift toward education tailored to individual needs and real-world contexts. However, these advancements also highlight serious ethical challenges, including the risks of AI hallucination, issues of information reliability, and questions regarding moral responsibility in knowledge dissemination.Regarding educational levels, the majority of studies wereconducted in higher

education and professional education, particularly within STEM, health, and information technology domains. This pattern suggests that AI integration is currently most prominent in advanced learning contexts areas where information accuracy and ethical implications are critically important, such as intensive care training, mental health psychoeducation, and patient education. These contexts underscore the urgent need for a normative ethical framework to ensure that AI use in education is not only technically efficient but also morally accountable.

Geographically, Research contributions span diverse regions, including the United States, Australia, China, Germany, Italy, South Korea, and other European countries. This global distribution reflects the widespread adoption of AI in education, yet the prevailing ethical approaches in these studies remain largely secular and technocratic, emphasizing accuracy, transparency, safety, and risk mitigation. The dimension of religious ethics, particularly Islamic ethics, remains largely absent from these discourses, revealing a significant gap and promising avenue for future inquiry.Furthermore, several studies underscore the importance of AI governance and moral control mechanisms, including reducing hallucinations through Retrieval-Augmented Generation (RAG), implementing content safety evaluation, and strengthening model accountability. These discussions implicitly resonate with key principles of Islamic ethics, such as *amanah* (responsibility), *'adl* (justice), *maslahah* (public good), and *ḥifẓ al-'aql* (preservation of intellect). Accordingly, Islamic religious ethics possess considerable potential to serve as a complementary normative framework for AI governance in education particularly in addressing concerns of epistemic validity, intentionality in technology use, and the long-term moral and cognitive impacts on learners.In sum, the interpretation of findings reveals that the development of AI in education is rapid and innovative, yet insufficiently grounded in normative and transcendental ethical foundations. Therefore, integrating Islamic religious ethics into educational AI scholarship is both relevant and strategically essential not only to address technical and regulatory challenges but also to construct an AI governance model that is human-centered, just, and oriented toward the enduring welfare of education.

AI-Based Digital Learning Tools: Characteristics, Trends, and Ethical Challenges

The synthesis of the reviewed literature indicates that the development of Artificial Intelligence (AI) in education is marked by the emergence of increasingly sophisticated, adaptive, and context-aware AI-based digital learning tools. Recent scientific publications, particularly in 2026, show a significant rise in the development and application of generative AI and Large Language Models (LLMs) as central components in the digital learning ecosystem (Janumpally et al., 2025). These tools are no longer confined to administrative or supportive functions; rather, they act as pedagogical agents, learning scaffolding systems, intelligent assessment tools, and assistive platforms for professional and clinical training (Varma et al., 2023).In terms of characteristics, the dominant categories of AI-based digital learning tools identified in the literature include AI-driven pedagogical agents, educational chatbots, self-regulated learning scaffolding systems, and context-based simulations and training environments (Simoni et al., 2025). Several studies highlight the application of AI in X-Reality (XR)-based learning to create personalized, contextually relevant learning experiences.

In contrast, others emphasize the use of LLMs to support large-scale learning through student question analysis, automated feedback, and learning analytics (Khanim, 2020). In addition, AI has been applied within professional education contexts, including ICU simulation training, pharmacy students' written communication, patient education, mental healthpsychoeducation, and cybersecurity or process-based decision-making training (Tulgar et al., 2023).In response to these challenges, several studies propose technical approaches to enhance the reliability of digital learning tools, such as implementing Retrieval-Augmented Generation (RAG), conducting AI output reliability testing, establishing safety-check mechanisms, and performing comparative evaluations of various AI models (Gordon et al., 2024). While these efforts

represent progress in the technical and performance dimensions of AI systems, they remain largely technocratic in orientation, emphasizing efficiency, accuracy, and output consistency without adequately incorporating deeper moral, ethical, or value-based considerations (Simoni & Mengual et al., 2025).In summary, the reviewed literature demonstrates that AI-based digital learning tools are innovative, progressive, and personalization-oriented, yet they continue to face significant ethical challenges. The recent body of Research reveals a gap between technological advancement and the availability of comprehensive normative ethical frameworks, particularly those grounded in religious or transcendent philosophical values. This underscores the necessity of developing ethical approaches that transcend procedural and technical dimensions rooted in moral responsibility and humanistic values to ensure that the use of AI-based digital learning tools genuinely supports just, accountable, and socially beneficial educational outcomes.

Principles of Islamic Religious Ethics in the Use of AI-Based Digital Learning Tools

The synthesis of the reviewed literature reveals that although most studies on AI-based digital learning tools in education are developed within secular and technocratic ethical frameworks, the ethical concerns they raise strongly correspond with principles of Islamic religious ethics. AI-based digital learning tools—such as pedagogical agents, educational chatbots, learning scaffolding systems, and professional simulations—directly Influence the processes of knowledge transmission, cognitive formation, and learner decision-making (Pozdniakov et al., 2026). Therefore, Islamic ethics provides a relevant and comprehensive normative foundation for guiding the responsible use of such technologies.
The principle of amanah (trustworthiness and responsibility) occupies a central position in the ethical use of AI-based digital learning tools. *Amanah* demands moral accountability from system developers, educators, and educational institutions to ensure that AI is utilized accurately, truthfully, and without deception. The reviewed studies consistently highlight issues such as AI hallucination, misinformation, and uncertainty in output reliability, particularly in the use of LLMs as sources of knowledge and feedback for learning (Z. Liu et al., 2026). From a normative standpoint, these phenomena contradict the principles of *amanah* and *ṣidq* (truthfulness), as they may undermine the integrity of knowledge and learners' trust in the educational process.Beyond *amanah*, the principle of *'adl* (justice) holds strong relevance in the governance of AI-based learning tools (Khabaz et al., 2026). Multiple studies identify risks of algorithmic bias, unequal access to technology, and systemic discrimination in the implementation of AI in education. Learning tools that fail to incorporate considerations of social justice risk widening educational disparities and reinforcing exclusionary practices. From the Islamic ethical perspective, *'adl* represents a fundamental moral requirement mandating the equitable distribution of technological benefits and fair treatment of all learners. Hence, the principle of justice serves as a key normative foundation in developing ethical AI governance in education (Palumickas et al., 2025).

The principle of *ḥifẓ al-'aql* (preservation of intellect) is particularly relevant to AI-based digital learning tools that act as sources of information, learning recommendations, and decision-support systems (Attanasio et al., 2026). The literature warns of the growing risk of overreliance on AI, which may weaken learners' critical thinking, reflection, and intellectual autonomy. Within Islamic ethics, *ḥifẓ al-'aql* requires that educational technologies support rather than replace human cognitive functions, serving as instruments to enhance rather than diminish learners' intellectual and moral capacities (J. Liu et al., 2026).Accordingly, Islamic ethical principles such as *amanah* (responsibility), *'adl* (justice), *maslahah* (public good), *dar' al-mafāsid* (prevention of harm), and *ḥifẓ al-'aql* (preservation of intellect) collectively offer a comprehensive moral framework for evaluating, directing, and regulating the use of AI-based digital learning tools in education. Integrating these principles into the governance of educational AI represents a paradigm shift, from a purely technical approach toward

a normative ethical model that centers on educational purpose, human dignity, and the collective good as the ultimate orientation of technology use.

Islamic Religious Ethics as an Integrated Normative Framework for the Governance of AI-Based Digital Learning Tools

Islamic religious ethics not only address the question of *how* AI-based learning tools should be designed and operated but also engage with the more fundamental questions of *why* and *for what purpose* AI should be used in education. The principle of maqāṣid al-sharī‘ah offers a conceptual foundation for AI governance in education by positioning the core objectives of education, such as the preservation of intellect (ḥifẓ al-‘aql), social justice (‘adl), and human well-being (maslahah) as the primary normative orientation. Through this lens, the evaluation of AI-based learning tools extends beyond criteria of learning effectiveness and system efficiency to include their contribution to learners' intellectual, moral, and social development.Furthermore, integrating Islamic ethics with modern AI ethics expands the conception of accountability—from purely technical responsibility to moral and social responsibility. The literature underscores that the use of AI in education can have profound long-term effects on thought processes, learning autonomy, and the educator–learner relationship. From an Islamic ethical perspective, accountability is not merely institutional or legal, but also moral and spiritual. Hence, the governance of AI-based digital learning tools must account for ethical consequences that transcend procedural compliance and encompass moral integrity and spiritual responsibility.

This integrated normative framework also provides a conceptual foundation for value-based educational policy, ensuring that technological innovation in education is aligned with ethical, humanistic, and spiritual principles. Such policies enable educational institutions to design AI usage guidelines that are not only safe and effective, but also just, responsible, and oriented toward long-term human welfare (Jeon et al., 2026).In conclusion, Islamic religious ethics plays a strategic role as an integrative normative framework in the governance of AI-based digital learning tools within education. The synthesis of Islamic and modern AI ethics strengthens the moral dimension of technology use while fostering educational practices that are just, accountable, and sustainable amid the accelerating pace of digital transformation.

Conclusion

Based on the analysis and synthesis of recent scholarly literature, it can be concluded that the development of Artificial Intelligence (AI) in education exhibits a significant, complex, and multidimensional upward trend, particularly in publications from 2026. AI is no longer positioned merely as a technical learning aid but has evolved into a pedagogical agent, a decision-support system, and a framework for adaptive and personalized learning that actively contributes to the construction of knowledge across educational levels and disciplines.The dominant types of AI-based digital learning tools identified in the literature include LLM-driven pedagogical agents, educational chatbots, self-regulated learning scaffolding systems, X-Reality (XR)-based simulations, and AI-assisted systems for professional learning and training in fields such as healthcare, pharmacy, nursing, STEM, and cybersecurity. The concentration of AI adoption in higher and professional education suggests that integration occurs more rapidly in learning environments demanding high accuracy, complex decision-making, and scenario-based instruction. However, these contexts also entail elevated ethical risks, particularly concerning misinformation and the long-term cognitive and moral impacts on learners.

Across the reviewed studies, a consistent set of ethical issues and challenges emerges, including AI hallucination, algorithmic bias, lack of transparency, unclear accountability, misuse of information, and overdependence on AI. Although several technical mitigation strategies, such as Retrieval-Augmented Generation (RAG), output reliability evaluation, and

safety-check mechanisms have been proposed, prevailing approaches remain technocratic and procedural, emphasizing system performance, efficiency, and technical safety, while insufficiently integrating moral, value-based, and educational dimensions.Within this context, Islamic religious ethics emerges as a relevant and strategic normative source for regulating the use of AI-based digital learning tools in education. Core Islamic ethical principles, such as *amanah* (responsibility), *'adl* (justice), *maslahah* (public good), *dar' al-mafāsid* (prevention of harm), and *ḥifẓ al-'aql* (preservation of intellect) strongly correspond with the ethical issues identified in the AI and education literature. These principles provide a comprehensive moral framework for evaluating, guiding, and constraining AI use to ensure it is not only technically effective but also morally responsible and oriented toward learners' well-being.Furthermore, integrating Islamic religious ethics with modern AI ethics enables the formation of an integrated normative framework for AI governance in education. This approach expands the concept of AI ethics beyond compliance with transparency, accountability, and safety principles toward a model emphasizing long-term moral and social responsibility. The maqāṣid al-sharī'ah framework offers a conceptual foundation that situates the preservation of intellect, social justice, and human welfare as central objectives of AI in education, thereby reframing the question from merely *how* AI operates to *why* and *for what purpose* it is employed.In conclusion, the integration of Islamic religious ethics into AI governance in education represents a relevant, strategic, and urgent step amid the accelerating digital transformation. This integration not only enriches the theoretical discourse on AI ethics but also provides a normative foundation for value-based educational policies and practices that are just, accountable, and oriented toward long-term human welfare. The study reaffirms that the development and implementation of AI-based digital learning tools should be guided not solely by technological innovation but by enduring humanistic, ethical, and spiritual values as the essential foundation of sustainable education.

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