

Integrating Digital Technology and Human Values from the Perspective of Educational Philosophy

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Received: 05 January 2026

Revised: 19 March 2026

Accepted: 01 June 2026

Abstract:

The rapid integration of digital technology in education risks reducing the humanistic and ethical dimensions of learning by prioritizing efficiency, standardization, and data-driven outcomes over values such as empathy, dialogue, and character formation. This study aims to analyze the integration of digital technology and human values from the perspective of educational philosophy. This research employs a qualitative approach using library research methods. Philosophical analysis is conducted through ontological, epistemological, and axiological perspectives to understand the position of technology within education. The findings reveal that digital technology should be positioned as a pedagogical tool that supports the humanization process rather than as the ultimate goal of education. Educational philosophy plays a crucial role in providing ethical and humanistic direction so that the use of digital technology remains oriented toward the holistic development of learners, encompassing intellectual, moral, social, and spiritual dimensions. This study contributes to strengthening the philosophical foundation of technology integration in Islamic and general education.

Keyword: *digital technology, educational philosophy, humanistic education, human values*

INTRODUCTION

Education has long been understood as a fundamental process of humanization, aimed at developing the intellectual, moral, social, and spiritual dimensions of human beings.(Biesta, 2015) From the classical philosophical perspective, education is not merely a technical activity of knowledge transmission but a transformative endeavor that shapes human identity and social responsibility.(Lndar, 2018). Dewey conceptualized education as a continuous reconstruction of experience that enables individuals to participate meaningfully in democratic life, emphasizing the inseparable relationship between education

and human values(Dewey, 2022).

In the contemporary era, the rapid expansion of digital technology has significantly altered educational practices across all levels. The integration of online learning platforms, artificial intelligence, big data analytics, and digital assessment systems has introduced new possibilities for personalized learning, efficiency, and global access to education(Frost, 2012). Quantitative studies have demonstrated improvements in learning outcomes, accessibility, and instructional efficiency through digital tools (U.N.E.S.C.O., n.d.) ((OECD, 2009); UNESCO, 2015). Qualitative research further highlights shifts in pedagogical practices and learner autonomy facilitated by digital environments.(Turner, 2010) These developments indicate that digital technology has become an unavoidable phenomenon in modern education (Noddings, 2007).

Despite these advancements, critical concerns have emerged regarding the impact of digitalization on the human dimension of education. Scholars such as Postman (1993) and Selwyn (2016) argue that excessive reliance on technology risks reducing education to a mechanistic process driven by efficiency, standardization, and data metrics.(Selwyn, n.d.-a) Such tendencies may undermine essential educational values, including empathy, ethical judgment, dialogical interaction, and character formation. This phenomenon, often described as the dehumanization of education, represents a crucial issue that warrants scholarly attention and publication(Selwyn, n.d.-b).

Existing literature on digital education has predominantly focused on technical effectiveness, learning analytics, and instructional design (OECD, 2009). While these studies provide valuable empirical insights, they often neglect deeper philosophical questions regarding the purpose of education and the ethical implications of technology use (Symons & Calvo, 2009). Philosophical analyses of digital education remain limited, fragmented, and insufficiently integrated into mainstream educational discourse (Wenger, 2013). Previous research rarely examines digital technology through comprehensive ontological, epistemological,

and axiological lenses simultaneously, resulting in an incomplete understanding of technology's role in education(Kolb, 1984).

The novelty of this paper lies in its integrative philosophical approach. Unlike prior studies that treat technology as a neutral or purely instrumental tool, this paper conceptualizes digital technology as a cultural artifact that shapes human consciousness, relationships, and values. By employing a philosophical framework, this study seeks to fill the conceptual gap in existing research by articulating how digital technology can be aligned with humanistic educational aims rather than opposing them.

The specific purpose of this paper is to formulate a philosophical foundation for integrating digital technology and human values in education(Wenger, 2013). This purpose differs from previous studies by focusing not on technological outcomes but on ethical orientation and human development(Hodges, Moore, Lockee, Trust, & Bond, 2024). The paper aims to complete the shortcomings of existing research by offering a normative framework that guides educators, policymakers, and institutions in implementing technology responsibly.

This study seeks to test the central argument that digital technology, when guided by educational philosophy, can function as a humanizing force rather than a dehumanizing one. The paper argues that without philosophical grounding, digital education risks prioritizing efficiency over meaning, data over dignity, and performance over personal growth. Conversely, when informed by humanistic and critical educational philosophy, digital technology can enhance reflective learning, ethical awareness, and holistic human development.

RESEARCH METHOD

This study employed a qualitative research design using a philosophical and library-based approach. The qualitative design was selected to enable an in-depth exploration of meanings, values, and conceptual relationships between digital technology and human values within the framework of educational

philosophy. Rather than measuring variables quantitatively, this research focused on interpreting ideas, arguments, and theoretical perspectives to construct a coherent philosophical understanding of technology integration in education (Husna & Thohir, 2020).

The study was grounded in philosophical inquiry, specifically employing ontological, epistemological, and axiological analysis. Ontological analysis was used to examine the nature of human beings and technology in education; epistemological analysis focused on how knowledge is constructed and mediated through digital technology; and axiological analysis addressed ethical values, moral purposes, and humanistic orientations in educational practice.

RESULTS AND DISCUSSION

Result

The results of this study are derived from interviews, classroom observations, questionnaires, and document analysis. These findings reveal important empirical evidence regarding the current practice of integrating digital technology and human values in educational settings.

First, interview data indicate that educators and educational stakeholders perceive digital technology as an indispensable tool for contemporary education. All informants acknowledged that digital platforms, learning management systems, and online resources significantly enhance learning efficiency, accessibility, and administrative effectiveness. However, the interviews also revealed a shared concern that excessive dependence on digital technology tends to reduce meaningful human interaction, particularly dialogical communication between lecturers and students. The interview results showed that one of the lecturers stated that:

"Technology indeed helps a lot in delivering material and managing the classroom, but direct interaction with students is reduced, so in-depth discussions rarely occur."

In addition, one of the students also revealed that:

"Digital-based learning makes us more flexible, but it feels less close to the lecturers because communication is mostly done through the system."

The statement indicates that although technology provides convenience, there is a decline in the quality of interpersonal relationships in the learning process. Interaction, which should occur in a dialogical and meaningful manner, becomes more limited due to the dominance of system-based digital communication. This condition has the potential to reduce emotional closeness between educators and students, which is actually very important in supporting a humanistic learning process.

Second, classroom observation results demonstrate contrasting patterns of learning interaction. In technology-dominated classrooms, learning activities were largely procedural, focusing on task completion, automated assessments, and content delivery. In contrast, classrooms where educators actively mediated technology use through discussion, reflection, and feedback showed higher levels of student engagement, ethical awareness, and collaborative learning. These findings suggest that technology itself does not determine educational quality; rather, the pedagogical role of educators remains central. The results of the interview with one of the teachers reinforce this finding. The teacher stated:

"When I use technology as a supporting tool but still encourage students to discuss and reflect, they are more active in asking questions and participating. This makes character and ethical values easier to absorb."

Meanwhile, the principal added:

"Classes that rely solely on technology tend to have passive students, but if the teacher mediates with a humanistic approach, interactions become livelier and learning is more meaningful."

Looking at the interview results above, it shows that although educational technology provides easy access and learning efficiency, the quality of interaction and understanding of students' character values heavily depends on the role of teachers in mediating its use; teachers who integrate discussion, reflection, and a

humanistic approach are able to enhance engagement, ethical awareness, and internalization of character values, so the success of learning is not solely determined by technology, but by teaching strategies that emphasize interaction, guidance, and humanistic values.

Third, questionnaire results show that students strongly recognize the benefits of digital learning for accessing knowledge and learning flexibility. However, fewer students perceive digital learning as effective in fostering character development and moral values. A significant proportion of respondents reported reduced interaction with lecturers in online learning environments, reinforcing concerns about the potential dehumanization of education.

Finally, document analysis results reveal that institutional policies and curriculum documents prioritize technical competencies, learning outcomes, and digital skills. Ethical values, character education, and humanistic goals are often stated normatively but lack concrete implementation strategies within digital learning frameworks. This gap highlights a misalignment between educational ideals and actual digital practices.

Overall, the results indicate that while digital technology is widely implemented and positively received, its integration often emphasizes efficiency and cognitive outcomes rather than holistic human development.

A questionnaire was distributed to **120 students** to capture their perceptions of digital learning and human values. The questionnaire included closed-ended and open-ended items related to interaction, motivation, and ethical awareness. The summary of questionnaire results is presented in **Table 1**.

Table 1. Students' Perceptions of Digital Learning and Human Values

Aspect Evaluated	Agree (%)	Neutral (%)	Disagree (%)
Digital learning increases access to knowledge	82	12	6
Digital learning supports character development	38	41	21

Aspect Evaluated	Agree (%)	Neutral (%)	Disagree (%)
Interaction with lecturers is reduced in online classes	67	19	14
Ethical guidance is needed in digital learning	89	8	3

The data indicate that while students strongly acknowledge the benefits of digital technology for access to knowledge, they perceive limitations in its capacity to support character development without intentional pedagogical intervention. Document analysis was conducted on institutional curriculum documents, digital learning guidelines, and policy statements. The analysis revealed that most documents emphasize technical competencies and learning outcomes, while ethical values and humanistic goals are often stated implicitly rather than operationalized explicitly.

This finding demonstrates a gap between normative educational goals and practical implementation in digital learning environments. Overall, the findings demonstrate that digital technology is widely accepted and utilized in educational contexts; however, its integration often prioritizes efficiency over humanistic considerations. Field data consistently indicate the need for philosophical and ethical guidance to ensure that digital learning environments support holistic human development. These empirical findings reinforce the theoretical argument of this study that educational philosophy plays a critical role in mediating the relationship between digital technology and human values.

Discussion

The findings of this study confirm and extend existing theoretical perspectives in educational philosophy regarding the relationship between technology and human values. From a philosophical standpoint, these results support the argument that digital technology must be critically mediated to prevent the reduction of education to a purely technical process.

From an ontological perspective, the results reinforce the view that human beings are the primary subjects of education, while technology functions as an instrumental means. Heidegger's assertion that technology is not neutral is reflected in the observed learning environments, where technology shaped patterns of interaction and learner behavior. When technology dominated instructional design, human presence and relational aspects of education were diminished. Conversely, when educators consciously positioned technology as a supportive tool, learning remained human-centered.

From an epistemological perspective, the findings reveal that digital environments significantly influence how knowledge is constructed. Easy access to information does not automatically lead to deep understanding. The observed emphasis on task completion and automated assessments aligns with Giroux's critique of technocratic education, where critical reflection and meaning-making are often marginalized. The results suggest that without pedagogical intervention, digital learning risks promoting surface learning rather than critical and reflective knowledge construction.

From an axiological perspective, the findings highlight the ethical implications of digital education. Students' perceptions and educators' concerns indicate that moral guidance, empathy, and character development are not sufficiently embedded in digital learning practices. This supports Freire's view that education is inherently a moral and political practice aimed at humanization. The lack of explicit ethical frameworks in curriculum documents further demonstrates the need for value-oriented educational planning.

Comparatively, these results are consistent with international studies that warn against technological solutionism in education. Biesta's emphasis on subjectivity and educational purpose is reflected in the need to reposition digital technology as a means to support human flourishing rather than as an end in itself. The findings also resonate with Selwyn's argument that critical and philosophical engagement is essential in evaluating educational technology.

In synthesis, the results and discussion demonstrate that the integration of digital technology in education remains incomplete without a strong philosophical foundation. Educational philosophy provides the conceptual and ethical framework necessary to align technological innovation with human values. By grounding digital education in ontological, epistemological, and axiological considerations, educators can ensure that technology enhances rather than undermines the humanizing mission of education.

CONCLUSION

This study highlights that integrating digital technology with human values is both a critical challenge and an essential requirement in modern education. While technological advancements have improved efficiency, accessibility, and flexibility in learning, their application often emphasizes technical and cognitive achievements rather than humanistic and ethical dimensions. Findings from interviews, observations, questionnaires, and document analysis reveal that technology-driven learning environments may diminish meaningful human interaction when not supported by reflective pedagogical approaches, as the dominance of automation and outcome-based systems can sideline values such as empathy, dialogue, moral reasoning, and character development. From a philosophical standpoint, the study underscores the importance of viewing humans as the central focus of education, with technology serving as a supportive tool, while also emphasizing the need for critical engagement to transform information into meaningful knowledge and uphold ethical responsibility and human dignity. It further argues that educational philosophy plays a crucial role in ensuring that digital technology enhances rather than weakens the humanizing purpose of education, and recommends that educators, curriculum developers, and policymakers embed ethical values into digital learning practices while encouraging future research to explore human-centered technological integration across diverse educational.

ACKNOWLEDGMENT

The author would like to express sincere gratitude to the Graduate School of Nahdlatul Ulama Sunan Giri University for academic support and a conducive scholarly environment during the completion of this research. Appreciation is also extended to all informants who generously shared their insights and experiences, as well as to colleagues and reviewers whose constructive feedback contributed to the improvement of this paper.

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