



TRANSFORMING ISLAMIC EDUCATION FOR GLOBAL CITIZENSHIP: CHARACTER DEVELOPMENT AND DIGITAL LITERACY AS FOUNDATIONS FOR SUSTAINABLE DEVELOPMENT

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Abstract

The transformation of Islamic education is strategically important in addressing the challenges of global citizenship, digital technological development, and the demands of sustainable development. Islamic education is expected not only to foster religious understanding but also to develop strong, inclusive, critical, responsible character and digital literacy. This study aims to analyze the transformation of Islamic education through character development and digital literacy as foundations for global citizenship and sustainable development. This study employed a qualitative approach using library research. Data sources included books, scholarly journal articles, educational policy documents, and relevant academic sources addressing Islamic education, character development, digital literacy, global citizenship, and sustainable development. Data were collected through documentation using document identification and analysis sheets as research instruments. Data were analyzed descriptively and analytically through reduction, categorization, interpretation, and conclusion drawing. The findings indicate that transforming Islamic education can strengthen global citizenship by integrating religious values, tolerance, social responsibility, justice, environmental awareness, and respect for diversity. Character development provides an ethical foundation for technology use, while digital literacy enhances students' abilities to access, evaluate, produce, and use information critically, safely, and responsibly. Their integration supports the development of religious, adaptive, critical, ethical, and sustainability-oriented learners. These findings highlight the need to develop curricula, teacher competencies, digital pedagogy, and Islamic educational ecosystems that integrate Islamic values with global citizenship competencies and sustainable development goals.

Keywords *Islamic Education, Character Development, Digital Literacy, Global Citizenship*

INTRODUCTION

The transformation of education in the twenty-first century has become increasingly inseparable from the challenges of globalization, digitalization, cultural diversity, social fragmentation, and sustainable development. Education is no longer expected merely to transmit knowledge and preserve established cultural traditions; it is increasingly positioned as a transformative mechanism for developing learners who are capable of thinking critically, acting ethically, participating constructively in society, and responding responsibly to global challenges. From a de jure perspective, this transformation is strongly supported by the international education agenda, particularly Sustainable Development Goal 4.7, which emphasizes that education should enable learners to acquire knowledge and skills related to sustainable development, human rights, gender equality, peace, non-violence, global citizenship, cultural diversity, and the contribution of culture to sustainable development. This policy orientation positions education as an essential instrument for preparing citizens who are not only academically competent but also socially responsible and globally oriented (Chiba et al., 2021; UNESCO, 2024). Global Citizenship Education

(GCED) similarly emphasizes the development of cognitive, socio-emotional, and behavioural competencies that enable learners to understand global issues, respect diversity, engage in dialogue, and contribute to more peaceful, just, and sustainable societies (Goren & Yemini, 2017; UNESCO, 2024). Thus, contemporary educational policy establishes a clear normative expectation that educational institutions should integrate knowledge, values, competencies, ethical responsibility, and active citizenship rather than treating these dimensions as separate educational objectives.

Within this global policy context, Islamic education has significant potential to contribute to the development of responsible global citizens. Islamic educational traditions contain a comprehensive ethical orientation encompassing justice, compassion, responsibility, moderation, respect for human dignity, social solidarity, peaceful coexistence, and stewardship of creation. These values have conceptual affinities with contemporary global citizenship and sustainable development, particularly in relation to tolerance, social justice, intercultural understanding, peaceful coexistence, and responsibility toward society and the environment. Recent scholarship has explicitly demonstrated that Islamic Global Citizenship Education (IGCE) can contribute to understanding global citizenship through moral, socio-political, and reflective dimensions. Islamic education can encourage learners to recognize diversity, engage in moral reasoning, challenge exclusionary interpretations, develop peaceful and dialogical relationships, and critically reflect upon religious identity in pluralistic societies (Saada, 2023). This perspective is important because global citizenship does not necessarily require learners to abandon their religious or cultural identities. Rather, religious traditions can provide ethical resources for interpreting and practicing global citizenship when their values are contextualized through critical reflection, inclusivity, dialogue, and social responsibility. Accordingly, Islamic education should be understood not simply as a mechanism for religious knowledge transmission but also as a potential foundation for developing ethically responsible participation in an interconnected global society.

However, the *de facto* condition of education demonstrates a significant gap between these normative expectations and educational realities. The rapid expansion of digital technologies has fundamentally transformed how students acquire information, communicate, construct knowledge, and participate in social life. Digital technologies provide unprecedented opportunities for educational access, collaboration, creativity, and global interaction, but they simultaneously expose learners to misinformation, disinformation, hate speech, online violence, polarization, privacy risks, and uncritical information consumption. UNESCO (2024) emphasizes that digital transformation has expanded access to diverse forms of information while simultaneously intensifying misinformation, disinformation, hate speech, and inequalities in digital participation. Consequently, access to technology alone cannot guarantee meaningful learning or responsible citizenship. Learners require the ability to critically evaluate information, understand the social consequences of digital participation, communicate ethically, and use technology responsibly. This condition has strengthened the argument that digital literacy should be conceptualized as a multidimensional competence rather than merely a technical

ability to operate digital devices (Audrin & Audrin, 2022; Tinmaz et al., 2022; Ilomäki et al., 2023).

The contemporary meaning of digital literacy therefore extends beyond operational competence. It encompasses the capacity to locate, access, evaluate, interpret, create, communicate, and use digital information critically, safely, ethically, and responsibly. Systematic reviews indicate that digital literacy research increasingly encompasses digital competence, digital skills, critical thinking, information evaluation, and digital participation rather than technological operation alone (Tinmaz et al., 2022). Audrin and Audrin (2022) similarly demonstrate that the literature on digital literacy is conceptually fragmented, with terms such as digital literacy, digital skills, digital competence, and twenty-first-century digital skills frequently used interchangeably. More recent research on critical digital literacy further emphasizes the importance of enabling learners to understand the social, cultural, political, and ethical dimensions of digital technologies (Ilomäki et al., 2023). This development is particularly significant for education because digital environments have become important spaces in which students encounter competing values, cultural differences, political discourses, religious narratives, and global social problems. Therefore, digital literacy must be connected with ethical reasoning and civic responsibility if education is expected to prepare learners for responsible participation in contemporary society.

This challenge becomes particularly complex within Islamic education because religious knowledge, character education, digital literacy, and global citizenship are frequently addressed as relatively independent educational domains. Islamic education may emphasize religious understanding and moral instruction, character education may focus on values and behaviour, while digital literacy may be approached predominantly as a technological competency. Such compartmentalization creates an important educational problem because contemporary citizenship requires these competencies to operate simultaneously. A learner may possess substantial religious knowledge but lack the critical digital competence required to evaluate online information. Conversely, a technologically proficient learner may lack the ethical orientation necessary to communicate responsibly, resist misinformation, respect differences, or avoid harmful digital behaviour. Research in Islamic educational contexts has begun to demonstrate the relevance of technology-based character education and digital literacy to character formation (Meliani et al., 2023; Yudi & Maryam, 2023). However, these studies also indicate that the relationship between digital literacy and Islamic character formation requires further conceptual and pedagogical development. The central problem is therefore not the absence of Islamic values, character education, or digital technologies individually, but the insufficient integration of these dimensions into a coherent educational framework for global citizenship and sustainable development.

Character development is particularly important in addressing this problem because digital competence without ethical orientation may increase technological capability without necessarily producing responsible behaviour. Character education has been associated with positive behavioural and educational outcomes, including integrity, compassion, self-discipline, and other desirable dispositions (Jeynes, 2019). Within Islamic

education, character development can be grounded in concepts such as amanah (responsibility and trust), justice, moderation, compassion, respect, self-discipline, and accountability. These values can provide an ethical framework through which students interpret and enact their digital competencies. In this sense, character development should not be positioned as an additional component of digital literacy but as an ethical foundation that determines how digital knowledge and technologies are used. Conversely, digital literacy can provide the practical and cognitive means through which character values are enacted in contemporary information environments. The integration of the two dimensions therefore creates a potentially stronger educational pathway than treating them separately. This proposition is supported by emerging research demonstrating connections between technology-based character education, Islamic education, and digital literacy (Meliani et al., 2023; Yudi & Maryam, 2023).

The urgency of this integration is further strengthened by the relationship between global citizenship and sustainable development. Global citizenship requires learners to understand global interdependence, appreciate cultural diversity, recognize social injustice, participate in dialogue, and take responsibility for problems that transcend national boundaries (Goren & Yemini, 2017). Meanwhile, Education for Sustainable Development (ESD) emphasizes the development of competencies that enable learners to understand complex systems, anticipate future consequences, work collaboratively, and act responsibly toward sustainability challenges (Brundiers et al., 2021; González-Salamanca et al., 2020). Evidence from systematic reviews indicates that effective ESD and global citizenship education tends to involve active and participatory learning, connections between theory and practice, and curricula that are relevant to learners' experiences (Chiba et al., 2021). Therefore, the development of global citizenship cannot be separated from the formation of ethical dispositions and practical competencies that allow learners to transform knowledge into responsible action.

The challenge, however, is that the implementation of ESD and global citizenship education remains uneven, particularly with respect to teacher competencies, curriculum integration, and institutional capacity. Research on ESD competencies has identified the absence of a unified framework for teacher competencies and continuing difficulties in systematically embedding sustainability competencies into teacher education (Imara & Altinay, 2021). Similarly, research on global citizenship education has identified conceptual diversity and fragmentation in the field, suggesting that global citizenship education cannot be reduced to a single set of competencies or instructional practices (Goren & Yemini, 2017). The digital transformation of education further complicates this situation because teachers must simultaneously facilitate disciplinary learning, digital competence, critical information evaluation, ethical reasoning, and global awareness. Thus, the transformation of Islamic education requires not merely the introduction of digital tools but a pedagogical reorientation in which technology, ethics, religious values, citizenship, and sustainability are intentionally connected.

Despite growing scholarship on these individual dimensions, an important research gap remains. Existing research has extensively examined global citizenship education, digital literacy, character education, Islamic education, and education for sustainable

development, but these fields are frequently investigated separately. Studies on global citizenship have examined conceptual definitions, learning outcomes, and curriculum implementation (Goren & Yemini, 2017; Ahmed & Mohammed, 2022), while studies on digital literacy have focused on digital competence, skills, critical digital practices, and educational technology (Audrin & Audrin, 2022; Tinmaz et al., 2022; Farias-Gaytan et al., 2022). Research on sustainable development education has concentrated on sustainability competencies and curriculum implementation (Brundiars et al., 2021; Imara & Altinay, 2021), while emerging Islamic education scholarship has explored the relationship between Islamic ethics, global citizenship, character formation, and digital literacy (Saada, 2023; Meliani et al., 2023). Nevertheless, relatively limited attention has been given to how Islamic education can integrate character development and digital literacy as mutually reinforcing foundations for global citizenship while simultaneously orienting learners toward sustainable development. This fragmentation represents a substantive theoretical and pedagogical gap rather than merely a lack of empirical studies.

The novelty of this study lies in proposing an integrated conceptualization of Islamic educational transformation in which five dimensions are interconnected: Islamic values as the normative foundation, character development as the ethical dimension, digital literacy as the cognitive-functional dimension, global citizenship as the civic orientation, and sustainable development as the broader societal and environmental purpose of education. Rather than conceptualizing digital literacy as a neutral technological skill or character education as an isolated moral programme, this study positions character as the ethical regulator of digital participation and digital literacy as a mechanism through which Islamic ethical values can be enacted in contemporary global environments. This integrated perspective extends existing discussions of Islamic Global Citizenship Education by connecting its moral and reflective dimensions with the practical demands of digital society and the transformative objectives of sustainable development (Saada, 2023). It also responds to UNESCO's call for educational approaches capable of preparing learners to access, critically evaluate, create, and responsibly share information while participating in more inclusive, peaceful, just, and sustainable societies (UNESCO, 2024).

Accordingly, this study aims to analyze the transformation of Islamic education through the integration of character development and digital literacy as foundational dimensions for strengthening global citizenship and supporting sustainable development. More specifically, the study examines how Islamic educational values can provide an ethical foundation for character development, how digital literacy can strengthen students' critical and responsible engagement with digital information and communication, and how the integration of these dimensions can contribute to the formation of learners who are religiously grounded, ethically responsible, digitally competent, globally aware, and sustainability-oriented. By employing a qualitative library research approach, the study synthesizes scholarly literature and relevant educational policy documents to develop an integrated understanding of these interconnected dimensions.

The expected implications are both theoretical and practical. Theoretically, the study is expected to contribute an integrated framework for understanding Islamic education as a transformative educational space in which religious identity, ethical character, digital

competence, global citizenship, and sustainable development are developed synergistically. Practically, the framework may inform curriculum development, teacher education, digital pedagogy, assessment, and institutional policy within Islamic educational institutions. It may also support educators in designing learning experiences that move beyond religious knowledge transmission toward critical thinking, ethical digital participation, intercultural understanding, social responsibility, environmental awareness, and active global citizenship. Ultimately, transforming Islamic education through the integration of character development and digital literacy may provide a culturally grounded pathway for translating the aspirations of SDG 4.7 into educational practice, enabling learners to retain a meaningful religious identity while simultaneously becoming critical, inclusive, responsible, digitally literate, and sustainability-oriented global citizens.

METHODS

This study employed a qualitative library research approach with an integrative literature synthesis to examine the transformation of Islamic education through character development and digital literacy as foundations for global citizenship and sustainable development. This approach was selected because the study aimed to critically interpret and synthesize existing scholarly and policy-based knowledge rather than collect primary data from participants. Literature-based research can function as a rigorous research methodology when relevant sources are systematically identified, selected, analyzed, and synthesized to generate an integrated understanding of a research problem (Snyder, 2019). The study focused primarily on literature published between 2017 and 2026, while earlier seminal works were included selectively when they provided essential theoretical foundations. The data sources consisted of peer-reviewed journal articles, scholarly books, educational policy documents, and authoritative reports addressing Islamic education, character development, digital literacy, global citizenship education, and education for sustainable development.

The literature was identified using combinations of keywords including “Islamic education,” “Islamic character education,” “character development,” “digital literacy,” “critical digital literacy,” “global citizenship education,” “Islamic global citizenship education,” “education for sustainable development,” and “sustainability competencies.” Searches were conducted through relevant academic databases and scholarly search platforms. The inclusion criteria covered publications that directly addressed at least one of the major concepts, provided theoretical, empirical, or policy contributions, and contained sufficient information for analytical interpretation. Publications that were duplicated, irrelevant to the research objectives, or lacked adequate scholarly credibility were excluded. The selection process followed the general principles of systematic identification and transparent reporting recommended in contemporary literature-review methodology (Xiao & Watson, 2019; Page et al., 2021). However, the present study was not classified as a full systematic review because its primary purpose was qualitative conceptual synthesis rather than statistical aggregation or meta-analysis.

Data were collected using a document identification and analysis sheet as the principal research instrument. Information extracted from each selected source included the author

and publication year, research focus, theoretical perspective, major findings, relevance to Islamic education, character development, digital literacy, global citizenship, and sustainable development. The extracted data were subsequently analyzed through four stages: data reduction, categorization, thematic interpretation, and integrative synthesis. In the reduction stage, information directly relevant to the research objectives was selected. The data were then categorized into five major themes: Islamic educational values, character development, digital literacy, global citizenship, and sustainable development. The thematic analysis examined patterns, similarities, differences, and conceptual relationships across the selected literature. This procedure follows the principle that a rigorous literature review should move beyond simple description toward comparison, interpretation, and synthesis of existing knowledge (Snyder, 2019).

The final stage involved integrating the identified themes into a conceptual interpretation of Islamic educational transformation. Islamic educational values were positioned as the normative foundation, character development as the ethical dimension, digital literacy as the cognitive-functional dimension, global citizenship as the civic orientation, and sustainable development as the broader societal and environmental orientation. Particular attention was given to the relationship between character and digital literacy, especially how ethical character can guide responsible technology use and how digital literacy can enable learners to critically access, evaluate, create, and communicate information. The credibility of the analysis was strengthened through source triangulation, explicit selection criteria, structured data extraction, and iterative comparison of findings across different bodies of literature. PRISMA 2020 principles were considered to enhance transparency in the identification and selection of literature, although PRISMA was used only as a reporting reference rather than as a claim that the study constituted a full systematic review. (Page et al., 2021)

RESULTS

The analysis of the selected literature generated five interrelated findings concerning the transformation of Islamic education for global citizenship and sustainable development: (1) the repositioning of Islamic education from religious knowledge transmission toward value-based global citizenship education; (2) character development as the ethical foundation of learners' engagement with digital environments; (3) digital literacy as a critical and responsible competence rather than merely a technical skill; (4) the integration of character and digital literacy as a mechanism for developing adaptive, critical, and socially responsible learners; and (5) the need for curricular, pedagogical, teacher competency, and institutional transformation to sustain this integration.

Islamic Education as a Foundation for Global Citizenship

The literature indicates that Islamic education has significant potential to contribute to global citizenship when its objectives are expanded beyond the transmission of religious knowledge toward the development of ethical, social, and civic competencies. The reviewed literature identifies tolerance, justice, respect for diversity, peaceful coexistence, social responsibility, and moral reasoning as important dimensions through which Islamic

educational values can be connected to global citizenship. In this context, Islamic education does not need to abandon its religious identity to respond to global citizenship agendas. Rather, Islamic values can provide a normative and ethical foundation for learners to participate constructively in pluralistic societies and global communities (Saada, 2023).

The synthesis further shows that global citizenship education is generally concerned with learners' knowledge, values, attitudes, and competencies for responding to global challenges, interacting across differences, and participating responsibly in social life (Goren & Yemini, 2017). Research on education for global citizenship and sustainable development similarly indicates that effective educational approaches combine cognitive understanding with attitudes, values, and opportunities for action (Chiba et al., 2021). Therefore, Islamic education can contribute to global citizenship when religious learning is connected with real social issues and when students are encouraged to understand diversity, engage in dialogue, and develop responsibility toward other people and the wider world.

The literature also indicates that an Islamic conception of global citizenship should avoid both isolationism and uncritical assimilation. Saada (2023) emphasizes moral, sociopolitical, and reflective dimensions of Islamic global citizenship education, including peaceful and dialogical living, recognition of diversity, moral reasoning, and critical reflection on religious identities. The findings consequently position Islamic education as a potential bridge between religious identity and global civic participation rather than as a separate domain disconnected from contemporary citizenship challenges.

Character Development as the Ethical Foundation of Digital Engagement

The second finding concerns the central role of character development. The literature demonstrates that digital competence alone does not guarantee responsible behavior in digital environments. Learners may possess technical abilities to access and communicate information while lacking the ethical judgment required to evaluate consequences, respect others, avoid harmful content, and use technology responsibly. Character development therefore functions as an ethical dimension that directs how digital competencies are exercised.

Character education has been associated with positive educational and behavioral outcomes, including integrity, compassion, self-discipline, and other desirable dispositions (Jeynes, 2019). Within Islamic education, these dimensions can be related to concepts such as *akhlaq*, *adab*, responsibility, honesty, justice, respect, and self-discipline. The literature on Islamic character education in the digital era similarly emphasizes the importance of religious values in guiding students when confronting negative online influences and ethical challenges (Meliani et al., 2023).

The findings suggest that character development should not be treated as an additional component outside digital learning. Instead, character should be embedded within the process of digital learning itself. Ethical behavior in digital environments requires learners to practice honesty when sharing information, responsibility when producing digital content, respect when interacting with others, and self-control when

consuming digital media. Thus, character development provides the normative conditions through which digital literacy can contribute to educational and social well-being.

Digital Literacy as Critical, Ethical, and Responsible Competence

The third finding shows that digital literacy is broader than the ability to operate technological devices or digital applications. The literature identifies digital literacy as a multidimensional competence involving information literacy, digital skills, digital thinking, communication, content creation, critical evaluation, and responsible participation (Audrin & Audrin, 2022; Tinmaz et al., 2022). Digital literacy therefore involves not only knowing how to use technology but also understanding how information is produced, circulated, interpreted, and potentially manipulated.

Tinmaz et al. (2022), through a systematic review of the digital literacy literature, identify digital literacy, digital competencies, digital skills, and digital thinking as major themes in the field. Similarly, Audrin and Audrin (2022) demonstrate that digital literacy research encompasses information literacy, digital learning, ICT, social media, and twenty-first-century digital skills. These findings support the present study's interpretation that Islamic education should develop learners who are able to access, evaluate, create, and communicate information rather than simply consume digital content.

The literature on critical digital literacy further expands this understanding. Ilomäki et al. (2023) identify dimensions including e-safety, participation, digital literacy, media literacy, digital citizenship, information literacy, data literacy, digital creativity, and digital well-being. This indicates that digital literacy has a strong ethical and civic dimension. In the context of Islamic education, this dimension becomes particularly important because learners increasingly encounter religious information, interpretations, opinions, and ideological content through digital platforms. Digital literacy consequently becomes an important competence for distinguishing credible information from misinformation and for engaging with religious and social issues critically and responsibly.

Integration of Character Development and Digital Literacy

The fourth finding is that character development and digital literacy are mutually reinforcing rather than independent educational objectives. Character provides the ethical orientation for the use of digital competencies, whereas digital literacy provides learners with the cognitive and practical capabilities required to enact ethical values in contemporary information environments.

The literature indicates that digital transformation has changed not only educational technologies but also the social and epistemic conditions of learning. Farias-Gaytan et al. (2023) show that digital transformation requires educational institutions to reconsider how learners acquire and use digital competencies. Zhao et al. (2021) similarly demonstrate that digital competence has become an increasingly important area of educational research because technological development is deeply embedded in contemporary learning and social life.

In Islamic education, this integration can be conceptualized through a relationship between ethical orientation and digital capability. For example, honesty can guide students

to avoid manipulating information; responsibility can guide them to consider the consequences of digital communication; tolerance can guide respectful engagement with different perspectives; justice can guide critical awareness of discrimination and exclusion; and environmental responsibility can guide sustainable use of technological resources. Digital literacy, in turn, enables learners to identify information, examine evidence, compare perspectives, produce content, and participate in digital communities.

Recent literature specifically addressing Islamic education and digital literacy supports this integrated direction. Studies of digital-literacy-based Islamic Religious Education indicate that digital learning can be connected with strengthening students' religious character when digital competencies are intentionally integrated into Islamic educational processes (Supandi et al., 2026). The emerging literature on Islamic digital literacy also emphasizes the relevance of *adab*, *akhlaq*, and social media ethics in responding to misinformation, hate speech, polarization, and digital radicalism.

Global Citizenship and Sustainable Development as Educational Outcomes

The fifth finding concerns the relationship between Islamic education, global citizenship, and sustainable development. The literature indicates that education for sustainable development requires more than environmental knowledge. It involves knowledge, values, attitudes, competencies, collaboration, problem-solving, participation, and the capacity to act in complex social contexts (Brundiers et al., 2021; González-Salamanca et al., 2020).

Chiba et al. (2021) demonstrate that effective education for sustainable development and global citizenship tends to integrate theoretical knowledge with practical learning and can influence knowledge, attitudes, beliefs, and behavior. Similarly, UNESCO (2020) positions education as a central mechanism for achieving the Sustainable Development Goals and emphasizes the importance of educator capacity, supportive learning environments, youth participation, and local action.

The reviewed literature therefore suggests that Islamic education can contribute to sustainable development when concepts such as justice, stewardship, responsibility, moderation, solidarity, and care for others and the environment are translated into educational competencies and practices. Environmental awareness is consequently not an external addition to Islamic education but can be connected with broader ethical responsibilities toward creation and society.

Curriculum, Teacher Competence, and Islamic Educational Ecosystems

The final finding concerns the institutional requirements for transformation. The literature indicates that integration cannot be achieved solely by adding digital tools to existing Islamic education curricula. Curriculum content, learning strategies, teacher competencies, assessment practices, and institutional culture need to be aligned with the intended transformation.

Research on education for sustainable development emphasizes the importance of teacher competencies, including cognitive knowledge, pedagogical competence, pedagogical content knowledge, motivation, and willingness to implement sustainability-

oriented education (Imara & Altinay, 2021). Brundiers et al. (2021) likewise identify sustainability competencies as an important reference point for curriculum and educational development.

At the same time, UNESCO (2024) emphasizes that global citizenship education in a digital age requires teachers to prepare learners to access, critically engage with, create, use, and share information responsibly. The digital environment has increased opportunities for participation but has also intensified misinformation, disinformation, hate speech, and online violence. Consequently, teacher competence becomes a decisive factor in translating the principles of Islamic education, digital literacy, and global citizenship into meaningful classroom experiences.

Overall, the results indicate that the transformation of Islamic education is best understood as an integrative educational transformation rather than a technological transformation alone. Islamic values constitute the normative foundation; character development provides the ethical dimension; digital literacy provides the cognitive-functional capacity; global citizenship represents the civic orientation; and sustainable development provides the broader social and environmental direction.

DISCUSSION

From Religious Knowledge Transmission to Transformative Islamic Education

The findings indicate that the transformation of Islamic education should not be interpreted as a process of reducing religious content or replacing Islamic knowledge with secular global citizenship competencies. Rather, transformation involves reconsidering how Islamic knowledge is translated into dispositions, competencies, and actions relevant to contemporary social realities.

This interpretation is consistent with Saada's (2023) argument that Islamic global citizenship education can incorporate moral, sociopolitical, and reflective dimensions. Islamic education can therefore maintain its religious identity while preparing learners to participate in diverse societies. The central issue is not whether Islamic education should become "global," but how its internal ethical resources can be articulated in ways that enable learners to respond constructively to global challenges.

The findings also reinforce the broader literature on global citizenship education. Goren and Yemini (2017) show that global citizenship education has developed as a response to globalization and increasingly addresses competencies and dispositions beyond conventional national citizenship. However, global citizenship education can become conceptually narrow if it is detached from learners' cultural, religious, and social identities. An Islamic framework can contribute to this discourse by demonstrating that global citizenship does not necessarily require the abandonment of particular religious identities.

From this perspective, Islamic education can develop a form of citizenship that combines religious rootedness with global responsibility. Such an approach recognizes that being committed to a particular religious tradition and being open to diversity are not necessarily contradictory. Instead, religious commitment can provide an ethical basis for dialogue, solidarity, justice, and responsibility toward others.

Character as a Mediating Mechanism Between Values and Digital Practices

A significant implication of the findings is the mediating role of character development. Islamic values cannot automatically produce responsible digital behavior simply because students have learned religious concepts. There is a necessary educational process through which values become dispositions and dispositions become behavior.

This explains why character development should be positioned between Islamic values and digital citizenship practices. Islamic values establish principles such as honesty, justice, compassion, responsibility, and respect. Character education internalizes these principles into learners' dispositions. Digital literacy then enables learners to apply these dispositions when dealing with information, communication, technology, and digital communities.

Jeynes (2019) provides broader empirical support for the importance of character education by showing relationships between character education and educational and behavioral outcomes. Within Islamic education, this relationship can be strengthened by connecting character formation with religious concepts and everyday practices. Consequently, *akhlaq* should not remain a theoretical topic discussed within religious instruction; it should become visible in students' digital communication, information-sharing behavior, online disagreement, and content production.

This interpretation is particularly important because digital environments weaken traditional boundaries between the classroom and the wider social environment. Students encounter information and social influences outside formal instruction. Therefore, character education needs to equip learners with internal ethical capacities rather than merely prescribing external rules.

Digital Literacy as an Epistemic and Civic Competence

The findings further demonstrate that digital literacy should be understood as an epistemic competence: the ability to determine how knowledge and information are produced, validated, communicated, and interpreted. This is particularly significant for Islamic education because digital platforms have become important sources of religious information.

Audrin and Audrin (2022) and Tinmaz et al. (2022) demonstrate that digital literacy encompasses multiple dimensions rather than a single technical skill. Ilomäki et al. (2023) further show that critical digital literacy includes information literacy, media literacy, digital citizenship, data literacy, digital safety, participation, creativity, and digital well-being. These dimensions indicate that digital literacy is inseparable from critical thinking and ethical judgment.

Accordingly, Islamic education should not simply teach students to use digital platforms for accessing Qur'anic materials, lectures, or educational videos. It should also teach them how to evaluate the authority and credibility of digital sources, compare interpretations, recognize misleading claims, identify manipulation, and distinguish legitimate religious disagreement from extremist or hateful discourse.

This point is particularly relevant to global citizenship. UNESCO (2024) emphasizes that digital global citizenship requires learners to engage with information critically and

responsibly because digital environments can facilitate misinformation, disinformation, hate speech, and online violence. Therefore, digital literacy can function as an important bridge between religious education and global citizenship education.

The Ethical Critical Integration of Islamic Values and Digital Literacy

The strongest conceptual implication of the findings is that digital literacy without character may become technically capable but ethically weak, whereas character without digital literacy may become ethically oriented but insufficiently capable of navigating contemporary information environments.

This explains the importance of integration. Character provides answers to the question, “How should technology and information be used?” Digital literacy provides answers to the questions, “How can information be evaluated?”, “How can digital environments be navigated?”, and “How can knowledge be responsibly produced and communicated?”

The combination creates a more comprehensive educational model. For example, the Islamic value of honesty can be operationalized through responsible citation and avoidance of fabricated information. The value of justice can be developed through critical examination of discriminatory digital narratives. Tolerance can be translated into respectful digital dialogue. Responsibility can be expressed through careful sharing of information. Environmental responsibility can be connected to awareness of sustainable consumption and technological practices.

This interpretation is consistent with UNESCO’s (2024) emphasis on critical thinking and ethical decision-making in digital global citizenship education. It also corresponds with the sustainability literature, which emphasizes that sustainable development requires not only knowledge but also values, attitudes, participation, collaboration, and action (Brundiers et al., 2021; González-Salamanca et al., 2020).

Islamic Education, Global Citizenship, and Sustainability

The findings indicate that global citizenship and sustainable development should not be treated as two unrelated educational agendas. Both require learners who are capable of understanding interconnected problems, respecting diversity, collaborating with others, and taking responsible action.

Chiba et al. (2021) demonstrate that education for sustainable development and global citizenship can produce positive changes in knowledge, attitudes, beliefs, and behavior, particularly when curricula combine theory and practice. This supports the present study’s finding that Islamic education should move beyond abstract moral instruction toward contextualized learning experiences.

In an Islamic educational context, sustainability can be approached through ethical concepts such as responsibility, justice, moderation, stewardship, and care for creation. Such concepts can be connected to practical issues including environmental protection, social inequality, poverty, consumption, community solidarity, and responsible use of technology.

UNESCO's ESD for 2030 framework reinforces this direction by identifying education as a key enabler of the Sustainable Development Goals and emphasizing policy, educational environments, educator capacity, youth participation, and local action (UNESCO, 2020). Thus, Islamic education can contribute to SDG-oriented education when its ethical resources are connected to real-world problems and action-oriented learning.

Teacher Competence as a Critical Condition of Transformation

The transformation identified in this study also has direct implications for teachers. Curriculum reform will have limited impact if teachers continue to understand digital technology primarily as an instructional instrument rather than as part of the social and ethical environment in which students learn.

Imara and Altinay (2021) emphasize the importance of integrating education for sustainable development competencies into teacher education. Similarly, research on teacher competencies for sustainable development identifies cognitive, pedagogical, and motivational dimensions as relevant to implementation (see also related competency frameworks in Brundiers et al., 2021). UNESCO (2024) further argues that teachers need the capacity to prepare learners for responsible participation in both physical and digital environments.

For Islamic education teachers, this implies at least three forms of professional competence. First, teachers need Islamic pedagogical competence to connect religious principles with contemporary social challenges. Second, they need digital pedagogical competence to guide students in critical and responsible use of technology. Third, they need global and sustainability competence to connect classroom learning with issues such as diversity, justice, peace, environmental responsibility, and sustainable development.

The teacher consequently becomes more than a transmitter of religious knowledge. The teacher functions as a facilitator of ethical reasoning, critical inquiry, digital participation, and socially responsible action.

Toward an Integrated Islamic Educational Ecosystem

The findings finally suggest that transformation should occur at the ecosystem level. Curriculum, pedagogy, teacher competence, assessment, institutional culture, family engagement, and digital environments should reinforce one another.

A curriculum that teaches tolerance while classroom practices encourage intolerance would produce contradictory messages. Similarly, teaching digital ethics without providing opportunities for students to practice responsible digital communication would limit learning to conceptual knowledge. Transformation therefore requires coherence between what Islamic education teaches, how teachers teach, how institutions behave, and how students are encouraged to participate.

Recent research on Islamic education in digital contexts increasingly supports this direction. Studies of digital-literacy-based Islamic learning suggest that technology can support religious character development when digital competencies are intentionally integrated into learning processes. Emerging studies also emphasize the importance of

combining Islamic values, digital literacy, and character education rather than treating them as separate domains (Supandi et al., 2026). This reinforces the conceptual model developed in the present study.

The proposed transformation can therefore be represented as a sequential and mutually reinforcing relationship:

Islamic values → character development → critical digital literacy → responsible global citizenship → sustainable action.

The relationship should not, however, be understood as strictly linear. Each component can reinforce the others. Global citizenship experiences can deepen students' understanding of Islamic values; digital literacy can strengthen critical religious understanding; sustainability-oriented action can strengthen social responsibility; and character development can guide all these processes.

Theoretical Contribution and Novelty

The principal theoretical contribution of this study lies in positioning character development as the ethical foundation of digital literacy within an Islamic educational framework for global citizenship and sustainable development. Previous literature has extensively examined global citizenship education, digital literacy, character education, and sustainability education as distinct or partially overlapping fields (Goren & Yemini, 2017; Audrin & Audrin, 2022; Tinmaz et al., 2022; Brundiars et al., 2021). Islamic education research has also increasingly discussed modernization, digital learning, religious moderation, and character formation.

However, the synthesis in this study brings these dimensions into a single conceptual structure. Islamic values provide the normative foundation; character development transforms values into ethical dispositions; digital literacy provides the critical and functional capacity to operate within contemporary information environments; global citizenship provides the civic orientation; and sustainable development provides the broader societal objective.

This integrated perspective extends the understanding of Islamic education from a predominantly religious-instructional domain toward a transformative educational framework capable of responding simultaneously to moral, technological, civic, and sustainability challenges. The novelty therefore does not lie merely in introducing digital technology into Islamic education, but in conceptualizing the relationship between ethics and digital competence as a central mechanism for preparing learners to become responsible global citizens.

Implications for Islamic Education Transformation

The findings and discussion have several implications. First, Islamic education curricula should integrate digital literacy, character development, global citizenship, and sustainability rather than presenting them as separate competencies. Second, learning activities should move toward inquiry, dialogue, collaborative problem-solving, digital content production, and community-based projects. Third, teacher education should strengthen teachers' Islamic pedagogical, digital, global citizenship, and sustainability

competencies. Fourth, assessment should evaluate not only religious knowledge but also critical thinking, ethical reasoning, responsible digital behavior, collaboration, tolerance, and social responsibility.

The transformation also requires institutional support. Islamic educational institutions need digital policies that promote responsible technology use, mechanisms for addressing misinformation and online harm, and learning environments that model inclusion and respect for diversity. Partnerships among schools, universities, families, communities, religious organizations, and digital platforms can further strengthen this ecosystem.

Ultimately, the transformation of Islamic education should produce learners who are not only religiously knowledgeable but also adaptive, critical, ethical, inclusive, digitally competent, socially responsible, and sustainability-oriented. Such learners are better positioned to participate constructively in global society while maintaining a meaningful Islamic ethical identity.

Synthesis of Results and Discussion

The literature synthesis establishes that the transformation of Islamic education requires a shift from a predominantly knowledge-transmission paradigm toward an integrative, ethical, digital, civic, and sustainability-oriented paradigm. The central finding is that Islamic values alone are insufficient if they are not translated into character and competencies, while digital competencies alone are insufficient if they are not guided by ethical principles.

The conceptual synthesis can therefore be summarized in five dimensions as presented in Table 1.

Table 1. Dimension of The Research

Dimension	Core Function	Main Educational Orientation
Islamic values	Normative foundation	Faith, morality, justice, tolerance, responsibility
Character development	Ethical mechanism	Integrity, empathy, self-discipline, respect, responsibility
Digital literacy	Cognitive-functional mechanism	Access, evaluation, creation, communication, critical thinking
Global citizenship	Civic orientation	Diversity, dialogue, participation, justice, peace
Sustainable development	Societal orientation	Environmental awareness, social responsibility, long-term well-being

The integration of these five dimensions provides a stronger framework for Islamic education in the digital and global era. The resulting educational model does not position religious identity and global citizenship as competing objectives. Instead, it understands Islamic ethical values as resources that can support responsible participation in diverse and interconnected societies.

CONCLUSION

This study concludes that the transformation of Islamic education requires a shift from a predominantly knowledge-transmission paradigm toward an integrated educational framework that connects Islamic values, character development, critical digital literacy, global citizenship, and sustainable development. The synthesis demonstrates that Islamic values provide the normative foundation, character development transforms these values into ethical dispositions, and digital literacy equips learners with the critical and functional capacities to navigate, evaluate, create, and communicate information responsibly. Their integration enables Islamic education to prepare learners who are not only religiously grounded but also critical, adaptive, tolerant, socially responsible, digitally ethical, and sustainability-oriented. Therefore, the transformation of Islamic education should not be understood merely as the adoption of digital technology, but as a deeper pedagogical and epistemological transformation in which technology is guided by ethical character and directed toward responsible participation in an interconnected world. This transformation requires curriculum reform, strengthened teacher competencies, critical digital pedagogy, and supportive Islamic educational ecosystems so that religious identity can function not as a barrier to global citizenship, but as an ethical foundation for justice, diversity, social responsibility, and sustainable development.

ACKNOWLEDGMENT

The authors would like to express their deepest gratitude to their beloved parents for their unconditional love, prayers, encouragement, and continuous support throughout the completion of this study. Sincere appreciation is also extended to their beloved wife for her patience, understanding, encouragement, and unwavering support during the research and writing process. The authors are equally grateful to all teachers and lecturers who have generously shared their knowledge, guidance, inspiration, and academic values, which have contributed significantly to the authors' intellectual and professional development. Their support and dedication have been an invaluable part of the completion of this work. This research received no specific financial support from any public, commercial, or non-profit funding agency.

Conflict of Interest The authors declare that they have no conflict of interest.

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