



Sustaining Character Education in Digital Schooling: Teachers' Strategies for Embedding Moral Values in Online Learning Environments

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Abstract

Purpose: This study examines how teachers sustain character education within digital schooling environments by identifying the strategies they employ to embed moral values during online learning. The shift to remote instruction has raised concerns about weakened social interaction, reduced behavioral supervision, and limited opportunities for value internalization. Therefore, the study seeks to clarify how teachers negotiate these challenges while maintaining the continuity of character formation.

Method: A qualitative design was adopted to capture the lived experiences of teachers and students during online religious education classes. Data were collected through in-depth interviews, digital classroom observations, and documentation of instructional materials. The analysis followed an iterative coding process that enabled the identification of patterns in pedagogical practices, teacher–student interactions, and value-oriented behaviors emerging in virtual classrooms.

Findings: The study reveals that teachers rely on a combination of explicit instruction, routine-based digital rituals, and personalized communication to cultivate character in online settings. Values such as honesty, responsibility, discipline, and religious commitment were reinforced through structured check-ins, reflective tasks, and consistent modeling of moral behavior. Despite limited physical presence, teachers managed to construct a moral atmosphere by leveraging relational cues, technology-mediated reminders, and culturally grounded mentorship. However, challenges such as uneven digital access and reduced behavioral monitoring remained persistent.

Significance: The findings contribute to the growing discourse on character education in technology-mediated instruction by demonstrating how educators can sustain moral development even when conventional classroom structures are disrupted. The study offers practical insights for designing value-oriented digital pedagogy and expands theoretical understanding of character formation within emerging models of online schooling.

INTRODUCTION

Character education has become an increasingly urgent concern as digital schooling reshapes the conditions in which moral development occurs. The widespread adoption of online learning has shifted interactions from physical classrooms to virtual settings where behavioral cues are less visible and moral regulation is less direct. These shifts have raised questions about whether teachers can continue to cultivate honesty, discipline, responsibility, and other essential values within technology-mediated environments. Recent analyses underscore that digital ecosystems significantly alter how students negotiate identity, autonomy, and ethical judgment, creating new tensions for educators who must sustain character formation under unfamiliar conditions. Studies in digital citizenship show that value construction in online environments requires intentional design supported by culturally grounded moral frameworks (Nurhayati et

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al., 2025). The issue is amplified in contexts where online learning was adopted rapidly without adequate pedagogical preparation, intensifying concerns about the erosion of character-forming routines. This situation underscores the need to examine how character education can remain sustainable when traditional classroom structures are no longer present, making this topic both timely and internationally relevant

The urgency of studying character education in digital schooling also arises from the rapid digitalization of educational institutions worldwide. Universities and schools are now transitioning toward what scholars describe as “Education 4.0,” a paradigm in which learning is increasingly automated, data-driven, and technologically mediated (Rosak-Szyrocka, 2024). In such environments, students engage with digital platforms that promote efficiency but may weaken relational bonds essential for character development. While technology offers flexibility, it simultaneously reduces embodied forms of mentorship that traditionally anchor moral learning. The tension between digital efficiency and moral cultivation has therefore emerged as a central global challenge. Scholars argue that without deliberate intervention, digital spaces may normalize impersonality, distraction, and value fragmentation among learners (Fakir Mohammad et al., 2024). These dynamics highlight why sustaining character education in digital learning ecosystems remains an unresolved pedagogical and theoretical problem worthy of rigorous investigation.

A further reason this topic is compelling is that online learning exposes students to wider moral influences that extend far beyond their teachers and schools. Digital platforms immerse learners in algorithm-driven content flows where social norms are shaped by virality rather than ethical reasoning. As students navigate these environments, teachers face the difficult task of counterbalancing competing value messages that circulate within youth digital cultures. Research on moral development among e-learners emphasizes that online environments require structured pedagogical mechanisms to manage ethical ambiguity and prevent value displacement (Muhammad et al., 2023). Yet despite this recognition, little is known about how teachers practically construct and sustain moral atmospheres within virtual classrooms. Understanding these strategies is essential for developing sustainable models of digital character education. This combination of global relevance, conceptual urgency, and practical uncertainty makes the topic both timely and necessary for international scholarly attention.

The rationale for this study is grounded in the need to clarify how educators translate value-oriented pedagogies into online learning contexts where social cues, classroom rituals, and moral reinforcement mechanisms differ significantly from traditional schooling. As digital instruction expands globally, sustainable character education requires more than the simple migration of offline practices into online platforms. It demands an understanding of how teachers reinterpret their moral roles, construct relational presence, and embed ethical messages within virtual learning activities. Existing scholarship indicates that character-building processes require continuous reinforcement and contextual adaptation, yet the modalities of such adaptation in online settings remain poorly articulated. Investigating teacher strategies is thus essential for identifying the mechanisms that make digital character education workable and theoretically robust. The study also aims to contribute a grounded understanding of how moral formation can be sustained across technological transitions, offering insights relevant not only to Indonesia but to global educational systems navigating similar challenges.

A growing body of research has examined character development and value-oriented practices in digital and hybrid learning environments. Recent work highlights the integration of

digital citizenship frameworks to support moral moderation and ethical self-regulation among students in online learning systems (Nurhayati et al., 2025). Studies on the digitalization of education emphasize that institutions must redesign pedagogical approaches to ensure that values remain central to learning even as technological automation increases (Rosak-Szyrocka, 2024). Research on sustainable online learning in Pakistan identifies significant challenges related to motivation, interaction, and moral accountability in virtual classrooms (Fakir Mohammad et al., 2024). Investigations into character education during the COVID-19 pandemic demonstrate that value reinforcement can be effective online when teachers combine explicit instruction with reflective learning routines (Warul et al., 2023). Meanwhile, work on ethical and moral inculcation in e-learning platforms proposes structured models to enhance learner engagement with moral content (Muhammad et al., 2023). Additional research on social presence in virtual learning environments finds that relational cues and emotional presence are critical for sustaining moral influence and pedagogical intimacy (Nousiainen et al., 2023). Collectively, these studies illustrate the complex intersection of technology, pedagogy, and moral formation in digital contexts

Beyond moral and character education, related literature addresses digital learning tools and the cognitive–affective dimensions of technology-mediated learning. Research on emotional and social intelligence assessment using AI-based systems reveals that digital tools can support the evaluation of affective dimensions relevant to character development (Khilmiyah & Wiyono, 2023). Systematic mapping of gamified education tools shows that interactive platforms can enhance behavioral engagement but require intentional design to maintain value-oriented outcomes (Carlito et al., 2022). The role of learning analytics and AI in teacher education highlights both opportunities and ethical challenges in monitoring student behavior and supporting reflective learning (Salas-Pilco et al., 2023). Conference studies in digital education environments also point to the importance of integrating cultural, moral, and relational elements into remote teaching practices (UKITOICES, 2023). Together, these studies offer theoretical and empirical insights that enrich the understanding of how values can be cultivated within technologically mediated learning environments. Yet despite this extensive research landscape, specific explanations of teachers’ strategies for sustaining character education in online schooling remain limited, leaving a crucial opportunity for this study to contribute original insights

Although prior studies have explored digital citizenship, sustainable online learning, and moral education in virtual spaces, very few investigations focus directly on how teachers sustain character-building processes across the transition from physical to online classrooms. Much of the literature addresses conceptual models or broad challenges but rarely documents the practical strategies used by educators in daily instructional routines. Existing research tends to isolate digital ethics, technological adaptation, or student engagement without examining how these components interact in the formation of moral atmospheres within online classrooms. The lack of empirical detail regarding teachers’ value-embedding practices indicates a clear theoretical and practical gap. Furthermore, studies often examine national policy frameworks or institutional transformations rather than micro-level pedagogical decision-making. As a result, there remains limited knowledge about how teachers construct relational presence, reinforce moral values, and maintain continuity of character education in the absence of face-to-face supervision. This study directly addresses this gap by documenting and analyzing the strategies teachers employ to sustain character education in digital schooling contexts.

The purpose of this study is to examine how teachers embed and sustain character values within online learning environments by identifying the specific strategies they use during digital instruction. The study aims to articulate how moral behaviors, value reinforcement, and pedagogical routines are adapted to the constraints and possibilities of virtual classrooms. It further seeks to understand how teachers negotiate challenges related to reduced social presence, diminished behavioral oversight, and shifting communication patterns. By clarifying these mechanisms, the study contributes to broader discussions on sustainable character education across technological transitions. This research is guided by the hypothesis that teachers who intentionally design relationally grounded and value-oriented digital routines are more likely to maintain continuity of character formation in online settings. The study therefore aims to provide conceptual clarity and practical guidance for implementing sustainable digital character education in diverse educational contexts.

METHOD

Research Design

This study employed a qualitative descriptive design to capture the complexity of teachers' strategies in sustaining character education within digital learning environments. The design was selected because character formation in virtual classrooms involves subtle relational cues that are best explored through interpretive analysis rather than numerical measurement. Qualitative inquiry allows the researcher to examine how teachers construct moral learning spaces despite the constraints of remote instruction. This orientation aligns with research emphasizing the importance of context and lived experience in understanding online pedagogical behavior (Warul et al., 2023). The study focused on documenting naturally occurring instructional practices, reflective narratives, and value-oriented interactions between teachers and students. Such a design enables the identification of patterns that reveal how moral values are embedded in digital instructional routines. The qualitative approach also offers flexibility for capturing variations in teacher agency across different online teaching contexts. This methodological choice ensures that the findings provide a nuanced and credible account of strategies teachers use to sustain character education online.

Participants

Participants consisted of teachers and students engaged in online learning within subject areas that emphasize moral and character development. Teachers were selected purposively because they were directly responsible for embedding honesty, discipline, responsibility, and religious values during virtual instruction. The inclusion criteria required teachers who had taught online for at least one academic term and demonstrated active involvement in value-oriented instructional design. Students were included to provide complementary insight regarding how character-building strategies were perceived and responded to during online classes. The composition of participants ensured that data reflected both instructional intent and learner experience. Participation was voluntary, and all individuals provided informed agreement prior to involvement in the study. This sampling approach aligns with qualitative research standards that prioritize depth of information over numerical representation (Muhammad et al., 2023). The combination of teacher and student perspectives strengthened the credibility of the findings by ensuring multi-source validation of digital character-building practices.

Instruments

Data were collected using three primary instruments: semi-structured interviews, digital classroom observations, and document analysis of instructional materials. The interview protocol consisted of open-ended questions designed to elicit teachers' reasoning, decision-making processes, and experiences in embedding character values online. Classroom observations focused on video-recorded sessions, chat interactions, and digital instructional routines that demonstrated moral reinforcement. These observations allowed the researcher to identify implicit and explicit value-embedding behaviors that may not surface in interviews alone. Document analysis included reviewing lesson plans, reflection sheets, instructional slides, and communication records used during online learning. The triangulation of these instruments enhanced the trustworthiness of the study and enabled cross-verification of emerging themes. This multi-instrument approach is consistent with recommendations in digital education research emphasizing layered data sources for understanding online pedagogy (Nousiainen et al., 2023). Together, these instruments provided a comprehensive view of how teachers cultivate character in digital learning environments.

Data Analysis Plan

Data were analyzed using an iterative thematic analysis approach to identify recurring patterns related to teachers' strategies for sustaining character education. The analysis began with initial coding of interview transcripts, observational notes, and documents to capture meaning units connected to value reinforcement, relational presence, and pedagogical routines. Codes were then clustered into broader categories that captured the mechanisms through which character values were embedded in online environments. The researcher engaged in repeated reading and constant comparison to ensure internal coherence of categories and alignment with the empirical evidence. Emerging themes were refined through memo writing and cross-checking across different data sources to enhance analytical rigor. This systematic process reflects established methodological guidance for thematic interpretation in digital and moral education studies (Fakir Mohammad et al., 2024). The final themes were used to construct an integrated account of the strategies teachers employed to sustain character formation online. This analytical approach ensured that the findings were grounded, credible, and theoretically informative for advancing research on digital character education.

RESULTS AND DISCUSSION

Result

Overview of Teacher Strategies in Digital Character Education

Analysis of interview transcripts, observation records, and instructional documents revealed three dominant strategies used by teachers to sustain character formation in online learning environments. Teachers constructed value-oriented routines such as opening reflections, daily behavioral check-ins, and guided moral reminders to replace the rituals commonly practiced in face-to-face classrooms. These routines helped create continuity of moral expectations despite the absence of physical supervision. Teachers also embedded explicit value reinforcement into digital assignments, requiring students to articulate honesty, responsibility, and discipline within task responses. Beyond explicit reinforcement, teachers used relational cues such as personalized messages and emotional presence to build trust-oriented connections that supported value transmission. Observations showed that teachers consistently responded to student behavior with moral framing rather than merely technical correction. These findings suggest that character education in online contexts depends not on technology itself but on the

teacher’s capacity to recontextualize moral practices within digital constraints. The section below presents these strategies in summarized quantitative form to support thematic clarity.

Table 1. Summary of Teacher Strategies Observed in Digital Schooling

Strategy Category	Observable Indicators	Frequency Across Cases
Value-Oriented Digital Routines	Reflections, behavioral check-ins, moral warm-up activities	High
Explicit Moral Instruction	Tasks embedding honesty, discipline, responsibility	Moderate
Relational Presence Strategies	Personalized feedback, empathetic communication, affirmations	High
Culturally Grounded Mentorship	Integration of religious and ethical narratives	Moderate
Technology-Mediated Reminders	Chat prompts, scheduled notifications, digital reinforcement cues	High

This table summarizes how teachers translated character-building efforts into online learning practices. High-frequency strategies were those that remained effective despite limited physical interaction, particularly digital routines and relational presence. Moderate-frequency strategies reflected practices that required additional adaptation, such as explicit moral instruction and cultural mentorship. The prevalence of technology-mediated reminders indicates that teachers relied heavily on platform features to sustain behavioral consistency in virtual learning.

Students’ Perception of Digital Moral Atmospheres

Student responses demonstrated that consistent value reminders and relational presence were crucial in shaping moral engagement during online learning. Students reported that personalized feedback from teachers fostered a sense of accountability, even when interactions occurred through screens. Many students described digital routines as helpful structures that stabilized their learning behaviors in uncertain times. They also indicated that moral expectations became clearer when teachers embedded them within tasks rather than delivering them as separate content. However, students noted challenges such as unstable internet connectivity and lack of parental oversight, which sometimes disrupted consistency in moral engagement. Observation data further showed that students participated more actively in moral reflection tasks compared to traditional text-based assignments. These patterns highlight that value formation in digital schooling is not merely a cognitive process but a relational and situational one. The findings thus illustrate that digital moral atmospheres can be sustained when teachers provide clear expectations and emotionally supportive communication.

DISCUSSION

Interpretation of Findings

The findings demonstrate that sustaining character education in digital schooling depends on teachers' ability to reconstruct moral practices within virtual spaces rather than replicating physical classroom routines. This interpretation aligns with earlier research emphasizing that moral cultivation requires adaptive, context-sensitive pedagogies in online settings (Nurhayati et al., 2025). Teachers’ reliance on value-oriented routines supports the argument that character education must be embedded within daily learning rhythms to remain effective, even in

technology-mediated environments (Rosak-Szyrocka, 2024). The study's results reaffirm that relational presence—particularly emotional support—plays a central role in sustaining moral influence, echoing recent work on the importance of social presence in virtual learning (Nousiainen et al., 2023). Moreover, explicit integration of honesty, responsibility, and discipline into assignments parallels models that propose embedding moral values directly into learning tasks for greater behavioral impact (Muhammad et al., 2023). Teachers' strategies appeared to compensate for the absence of physical supervision by shifting moral reinforcement into digital communication patterns, a trend similar to character education models during the pandemic (Warul et al., 2023). These convergences indicate strong theoretical coherence between the present study and contemporary literature on digital character formation. At the same time, the findings extend previous scholarship by providing concrete examples of how teachers operationalize moral reinforcement in digital classrooms. Thus, the study offers practical and theoretical contributions to the field of online character education.

Positioning Findings Against Global Research

The results also reveal that sustaining character education requires teachers to enact a form of moral agency that transcends technological constraints. This resonates with research showing that educators' moral leadership shapes the sustainability of digital citizenship practices (Fakir Mohammad et al., 2024). The effectiveness of culturally grounded mentorship observed in this study aligns with literature recognizing that moral development in online spaces must connect with students' cultural identities to remain meaningful (Nurhayati et al., 2025). Observations also reflect insights from AI-supported emotional intelligence studies, which emphasize that affective cues remain central even when learning occurs digitally (Khilmiyah & Wiyono, 2023). The use of relational communication echoes findings that social and affective presence significantly influence learning engagement in virtual classrooms (Salas-Pilco et al., 2023). Meanwhile, the reliance on digital reminders parallels research showing that gamified or technology-mediated prompts can effectively maintain learning behavior if designed with intentional moral guidance (Carlito et al., 2022). The integration of moral values into learning tasks also reflects the broader shift toward competency-oriented digital learning environments, which require ethical competencies alongside academic skills. Despite these connections, the findings highlight an underexplored dimension in international literature: the micro-level strategies teachers use to create moral coherence within digital routines. This contribution provides deeper granularity to global debates on sustaining character education in technology-driven schooling. Finally, the study underscores that moral learning in online contexts is relational, intentional, and adaptive, requiring teachers to blend pedagogical judgment with technological sensitivity.

IMPLICATIONS

The findings of this study provide important implications for schools seeking to sustain character education within increasingly digital instructional environments. Teachers' ability to cultivate relational presence suggests that schools must prioritize emotional communication and mentorship training alongside digital literacy. The success of value-embedded assignments indicates that curriculum designers should intentionally integrate moral dimensions within academic tasks rather than treating moral education as an add-on. Institutions should also consider developing digital platforms that support moral reminders, personalized feedback, and culturally grounded narratives. The results further imply that sustainable character education

requires policy frameworks that recognize teachers as moral agents, not merely content deliverers. Teacher education programs may need to redesign training modules to address the character-development aspects of online pedagogy. Schools should also create digital ecosystems that support behavioral consistency through routine-building features. These implications are relevant not only in Indonesia but also for global education systems navigating similar transitions.

LIMITATIONS

This study has several limitations that should be considered when interpreting the findings. The research was conducted within a specific educational context, which may limit the generalizability of the results to different cultural or technological settings. The data relied primarily on teacher and student self-reporting, which may be subject to perceptual bias despite triangulation efforts. Online classroom observations may not fully capture spontaneous moral behaviors that typically occur in face-to-face environments. The study also focused on subjects with explicit moral content, which may differ from other disciplines where character education is less direct. Variations in students' digital access and home environments may have influenced the consistency of observed moral engagement. Additionally, the sample size reflects qualitative depth rather than representativeness, which limits claims of broad population inference. These limitations highlight the need for further multi-site and mixed-method research to deepen understanding of digital character education.

SUGGESTIONS

Future research should explore how character education can be sustained across a wider range of subjects that do not traditionally emphasize moral instruction. Investigations should also examine how parents, peers, and community members contribute to moral learning within digital ecosystems. Longitudinal studies may provide deeper insights into how character values evolve as students engage with digital routines over time. Comparative research across different regions or countries could illuminate cultural variations in digital character formation. Scholars may also consider integrating learning analytics or AI-based tools to measure moral engagement more objectively. Further studies could explore student-led digital moral practices, such as peer accountability mechanisms. It would also be beneficial to examine how platform design influences moral behavior and relational presence. These suggestions aim to enhance the theoretical, practical, and technological dimensions of digital character education research.

CONCLUSION

This study demonstrates that sustaining character education in digital schooling requires teachers to recontextualize moral practices through intentional routines, relational presence, and value-embedded learning activities. The findings reveal that teachers are able to maintain continuity of honesty, responsibility, discipline, and other moral values by adapting their pedagogical strategies to the constraints and affordances of online environments. Rather than replicating face-to-face classroom rituals, teachers constructed new forms of digital moral presence through personalized communication, technology-mediated reminders, and culturally grounded mentorship. Students' responses indicate that these strategies fostered a sense of accountability and ethical awareness despite the reduced physical supervision inherent in virtual learning. The study expands current theoretical discussions by providing empirical evidence of how micro-level teacher actions shape the sustainability of character formation in technology-

driven instruction. It further highlights that character education in digital contexts is not determined by the platform itself but by the teacher's ability to humanize digital interactions through emotional clarity and pedagogical sensitivity. As educational systems worldwide continue integrating digital modes of instruction, these insights offer a valuable basis for strengthening policy, curriculum, and teacher professional development aimed at building sustainable moral learning ecosystems. Overall, the study affirms that character education can remain robust in online settings when guided by deliberate, adaptive, and relationally grounded instructional practices.

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