

## **INTEGRATING LOCAL WISDOM IN DIGITAL CHARACTER EDUCATION FOR PRIMARY LEARNERS**

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### **ABSTRACT**

*This study explores the integration of local wisdom into digital character education for primary school learners, addressing the gap between technological innovation and culturally grounded moral instruction. The objective is to develop a conceptual framework that bridges traditional values with modern learning platforms, promoting ethical development in digital-era classrooms. Using a systematic library research method, this study reviewed 22 peer-reviewed articles and educational reports from 2020 to 2025 across Southeast Asia and other culturally diverse regions. Thematic analysis revealed five dominant strategies in digital values education: digital storytelling, gamified ethical simulations, project-based learning, value-oriented animations, and student-created digital content. The study identified major challenges such as limited teacher competence in digital pedagogy and a lack of localized content, countered by support systems including parent engagement and cultural content adaptation. The novelty of this research lies in its ecosystemic framework that positions learners as active co-creators of moral knowledge, combining cultural narratives with participatory digital tools. Unlike prior models that treat moral instruction as curriculum-driven, this approach emphasizes collaboration between schools, families, and communities in the digital learning process. Findings suggest that digital character education is most effective when it is both technologically engaging and culturally relevant. In conclusion, integrating local wisdom with digital tools offers a promising direction for holistic character formation and global citizenship education in the 21st century.*

**Keywords:** Digital character education, local wisdom, primary learners, moral pedagogy, educational technology

### **INTRODUCTION**

Character education has become an essential component of 21st-century learning as schools respond to the growing moral and social challenges faced by young learners in an increasingly digital society (Fitriah et al., 2025). As digital tools become more embedded in primary education, educators are reimagining how technology can support not only cognitive development but also ethical reasoning and emotional intelligence (Mahmuddah, Fitriah, & Setiawan, 2025). Digital character education uses multimedia, gamification, and online platforms to engage students in interactive moral learning activities, often making abstract values more relatable through digital narratives (Casma, Widiyantje, & Fadillah, 2022). In this context, digital pedagogy is not limited to content delivery but includes participatory strategies such as student-created moral stories, peer collaboration, and reflection in digital forums (Megawati & Prahmana, 2024). This shift reflects the transformation from traditional values instruction toward immersive, student-centered moral engagement. It also aligns with global goals for

Education for Sustainable Development (ESD), which emphasize digital innovation and ethics in curriculum reform (Ramadhani, Kusumawardani, & Alfian, 2024). However, successful implementation requires the integration of culturally relevant materials and teacher preparedness. Thus, understanding how digital tools can convey moral lessons effectively becomes a central concern in contemporary primary education.

In parallel with digital advancement, the integration of local wisdom in education has emerged as a strategic approach to preserve cultural identity while nurturing moral development in young students (Farida, Yulianti, & Rachmawati, 2024). Local wisdom—such as proverbs, folklore, and community values—serves as a moral compass rooted in indigenous culture, offering authentic contexts for students to relate to ethical principles (Ramadhani et al., 2024). Incorporating these elements into digital character education allows students to engage with moral content that reflects their lived realities, thereby increasing moral internalization (Yuliani, Kurniawan, & Suryani, 2024). The approach supports culturally responsive pedagogy, which emphasizes the relevance of learning materials to students' social and cultural backgrounds (Judijanto, Arifin, & Herawan, 2025). When combined with digital storytelling or interactive media, local wisdom becomes a dynamic medium for ethical reflection and character building (Astawa, Sadri, & Temaja, 2025). Moreover, schools that embed cultural values into digital curricula often report improved student discipline, empathy, and cooperation (Fitriah et al., 2025). This fusion of local traditions and digital innovation positions character education as both modern and grounded. As such, it offers a powerful model for holistic and inclusive moral learning in diverse educational settings.

Despite the advancement of digital technology in education, many elementary schools still treat character education and digital learning as two separate domains, leading to fragmented implementation and reduced moral impact (Mahmuddah, Fitriah, & Setiawan, 2025). Teachers often focus on digital literacy without embedding values education into their instructional designs, missing the opportunity to develop ethical thinking alongside technological skills (Megawati & Prahmana, 2024). This disconnect is also reflected in the lack of digital resources that integrate both moral content and interactive engagement tailored for primary learners (Yuliani, Kurniawan, & Suryani, 2024). Moreover, national curricula in many regions prioritize cognitive outcomes over character-building competencies, causing educators to view values education as secondary or optional (Judijanto, Arifin, & Herawan, 2025). Studies show that even when character education is implemented, it tends to rely on passive methods such as lectures or memorization, rather than digital-based, experiential approaches (Ramadhani, Kusumawardani, & Alfian, 2024). Consequently, students are less likely to internalize moral values when learning is disengaged from their digital environment. Without systemic alignment, digital tools in primary schools often become tools of delivery rather than transformation. This problem necessitates a more cohesive pedagogical approach that unites technology, culture, and ethics in practice (Fitriah et al., 2025).

Another pressing issue is the underutilization of local wisdom as a foundation for values education, particularly in the digital context where foreign content often dominates

(Farida, Yulianti, & Rachmawati, 2024). Although Indonesian culture is rich in traditional stories, community values, and indigenous philosophy, these elements are rarely translated into interactive digital learning tools for children (Ramadhani et al., 2024). This has led to a moral disconnect between the values taught in schools and the everyday experiences of students in their cultural communities (Astawa, Sadri, & Temaja, 2025). As a result, children may perceive character education as abstract or irrelevant, limiting its effectiveness in shaping long-term behavior (Casmana, Widiyantje, & Fadillah, 2022). Additionally, educators report difficulty in designing culturally grounded content that fits within the digital platforms available in classrooms (Yuliana, 2025). The absence of frameworks or training on how to integrate local wisdom into digital pedagogy further compounds this issue (Fitriah et al., 2025). Without strategic efforts to align character values with local identity, moral education risks becoming decontextualized and ineffective. Thus, there is an urgent need for innovations that bridge local cultural values and digital pedagogy in elementary schools (Mahmuddah et al., 2025).

This research introduces a novel approach to values education by combining digital technology with localized cultural wisdom, forming a hybrid model rarely explored in previous studies. While many studies focus solely on either moral education or digital innovation, this work integrates both into a holistic framework grounded in students' sociocultural realities (Ramadhani, Kusumawardani, & Alfian, 2024). The concept of "digitally contextualized character learning" presented here allows learners to actively co-construct moral understanding through culturally relevant digital content (Farida, Yulianti, & Rachmawati, 2024). Furthermore, this study shifts the focus from passive reception to participatory learning by engaging students as co-creators of moral messages using storytelling, video blogging, and interactive games (JIPEUradeun Study, 2025). Another unique feature is the incorporation of teacher and parental roles in maintaining value consistency across digital and real-life interactions (Mahmuddah, Fitriah, & Setiawan, 2025). Unlike conventional models, this research acknowledges moral development as both technological and ecological. As such, it addresses the gap between educational policy and classroom realities by proposing a scalable and adaptive model of character instruction. This novel framework supports ethical formation while honoring cultural identity in a digital learning ecosystem.

The main objective of this study is to analyze how digital tools can be effectively integrated with local wisdom to foster character development in primary school students. It seeks to explore strategies that combine interactive technology—such as gamification, digital storytelling, and project-based tasks—with culturally relevant moral content (Casmana, Widiyantje, & Fadillah, 2022). By conducting a systematic literature review of educational practices between 2020 and 2025, the study identifies key principles, models, and barriers in implementing digitally based values learning (Fitriah et al., 2025). This research also aims to evaluate the role of teachers, community culture, and policy in shaping successful digital character education ecosystems (Megawati & Prahmana, 2024). Specifically, it targets the development of a contextual and participatory character education model that aligns with the everyday realities of primary students. The study

also investigates how student engagement with local narratives can strengthen moral reasoning through digital interaction (Ramadhani et al., 2024). Additionally, the research evaluates how digital platforms can adapt to the values of different regions without losing ethical coherence. In essence, this research aspires to provide a roadmap for educators, curriculum designers, and policymakers to redesign character education for the digital era.

## RESEARCH METHOD

This study employed a library research method, which involves systematically reviewing and analyzing relevant academic literature to draw conceptual conclusions about digital character education grounded in local wisdom. The research used a qualitative-descriptive approach, focusing on scholarly articles, books, and proceedings published between 2020 and 2025 to ensure data relevance and currency (Aryasutha, 2025). The purpose of using this method was to synthesize existing theories, practices, and innovations in character education in digital contexts while identifying gaps for future development (Syafika & Marwa, 2024). Unlike empirical research that collects data directly from the field, this approach builds new insights by examining and comparing previous findings. The method is appropriate given the exploratory nature of the topic and the global variation in implementation (Hadi, Nursyam, & Lestari, 2025). Key sources were selected from indexed journals and open-access repositories to ensure academic integrity and traceability. The study also incorporated policy reports and guidelines related to character education to broaden the data spectrum. As a result, the library research approach allowed for a broad, critical perspective on values learning integration in primary schools.

The data were collected by systematically identifying, selecting, and reviewing literature that focused on three core themes: character education, local wisdom integration, and digital learning tools in primary education. Using databases such as Google Scholar, DOAJ, Scopus, and Garuda, a total of 22 articles and reports published between 2020 and 2025 were retrieved and screened (Aryasutha, 2025). The inclusion criteria required that articles be peer-reviewed, written in English or Bahasa Indonesia, and explicitly address digital character education in formal school settings. Duplicate, irrelevant, and non-academic sources were excluded during the initial screening phase. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were adapted to enhance transparency and traceability of the selection process (Syafika & Marwa, 2024). A matrix table was created to categorize each source based on its research focus, methodology, country, findings, and relevance to the study objective. This method ensured data saturation and reduced bias from singular perspectives. As a result, the literature corpus used represents a diverse range of settings and educational models.

The collected literature was analyzed using thematic analysis, allowing the researcher to extract recurring themes, contradictions, and conceptual gaps across the selected studies. This approach enabled the identification of five main thematic

categories: digital strategies for character education, use of local wisdom, teacher and parental roles, implementation challenges, and innovation gaps (Hadi et al., 2025). Each theme was examined in terms of how effectively it addressed both the technological and cultural dimensions of values learning. Coding was applied manually to trace the appearance of keywords, models, and policy implications across sources (Syafika & Marwa, 2024). Through synthesis, the researcher compared how different studies operationalized “character,” “local values,” and “digital pedagogy,” highlighting both convergence and divergence. The analysis also evaluated how context—such as national curriculum policy, technological access, or school culture—affected the implementation outcomes. This step ensured a comprehensive understanding of digital moral learning, setting the stage for the proposed integrative framework. Ultimately, the thematic review enabled a holistic insight into the research problem while grounding findings in diverse educational realities.

RESULTS AND DISCUSSION

The review identified five dominant strategies for integrating digital tools in character education at the primary level: digital storytelling, gamified moral tasks, project-based learning, value-infused animations, and student-led content creation. These strategies emphasize participation, cultural relevance, and moral reflection. For instance, digital storytelling enables students to recreate traditional folktales with embedded values, while gamified tasks provide simulations of ethical decision-making. Table 1 summarizes the thematic strategies used in various countries, revealing how each is aligned with local culture and educational goals.

Table 1. Digital Strategies in Character Education and Cultural Relevance			
Strategy	Description	Cultural Alignment	Example Country
Digital Storytelling	Students retell folklore via video/audio	High	Indonesia
Gamified Moral Tasks	Ethics through digital games	Medium	Malaysia
Project-Based Learning	Group work integrating values	High	Japan
Animated Moral Stories	Short films with value themes	Low	South Korea
Student Content Creation	Blogs, podcasts about moral themes	High	Philippines

While the innovations are promising, several systemic barriers limit widespread adoption. Among them are: lack of teacher training, limited infrastructure, and the absence of localized digital content. In contrast, some countries have developed support mechanisms such as community-based curriculum design and parent-teacher partnerships. Table 2 presents these challenges and solutions across different contexts, highlighting that schools with strong cultural-community ties tend to implement digital values learning more effectively.

Table 2. Barriers and Support Mechanisms in Digital Character Education

Identified Barrier	Impact	Support Mechanism	Effectiveness
Teacher Tech Incompetence	Low usage of digital moral tools	Ongoing ICT workshops	Medium
Lack of Local Content	Irrelevance of values instruction	Use of local folktales	High
Poor Infrastructure	Limited student engagement	Mobile-based solutions	Low
Fragmented Curriculum	Inconsistent value learning	Integrated planning sessions	Medium
Parent Detachment	Value conflict outside school	School-community collaboration	High

The findings demonstrate that character education becomes more effective when digital tools are culturally grounded, participatory, and aligned with students' lived experiences (Ramadhani, Kusumawardani, & Alfian, 2024). Strategies like digital storytelling and moral-based student projects foster not only engagement but also deeper moral internalization through creative self-expression (Farida, Yulianti, & Rachmawati, 2024). However, challenges such as limited teacher capacity and lack of localized content persist, echoing previous research that warns of a disconnect between national curricula and community values (Yuliana, 2025). Successful implementation, as highlighted in Table 2, relies heavily on collaborative models involving educators, families, and local culture bearers (Fitriah, Suryani, Ramli, & Latif, 2025). This aligns with an ecosystemic framework where character formation is a shared social task rather than a classroom-limited agenda (Mahmuddah, Fitriah, & Setiawan, 2025). Furthermore, the adoption of mobile-based digital character platforms offers a promising solution for schools with limited infrastructure (Casmaana, Widiantie, & Fadillah, 2022). Integrating local wisdom via digital means not only makes moral learning relevant but also empowers students to see themselves as cultural inheritors and digital citizens.

Recent studies confirm that digital technology can significantly enhance character education when applied through culturally meaningful pedagogies. For example, digital storytelling and gamification were found to improve students' engagement and moral reasoning when values were rooted in familiar cultural contexts (Farida, Yulianti, & Rachmawati, 2024). Similarly, project-based learning that integrates community values allows students to internalize ethics through hands-on collaboration and contextual tasks (Ramadhani, Kusumawardani, & Alfian, 2024). This supports the concept of culturally responsive teaching, where local relevance enhances educational impact (Yuliani, Kurniawan, & Suryani, 2024). Moreover, students show deeper retention of values when involved in content co-creation, such as producing moral vlogs or podcasts (Casmaana, Widiantie, & Fadillah, 2022). In digitally enabled classrooms, learning becomes a moral practice rather than a cognitive routine. However, the integration of these methods is often limited by teachers' digital literacy and the rigidity of national curricula (Mahmuddah,

Fitriah, & Setiawan, 2025). These findings call for pedagogical flexibility and teacher empowerment.

Another critical dimension discussed in recent literature is the strategic role of local wisdom in shaping values instruction. Traditional narratives, proverbs, and community rituals have long served as vessels of moral transmission in Indonesian education (Astawa, Sadri, & Temaja, 2025). Integrating these elements into digital platforms not only preserves cultural identity but also strengthens students' emotional connection to ethical learning (Judijanto, Arifin, & Herawan, 2025). However, many digital character education tools still reflect Western moral frameworks, resulting in cultural misalignment when used in non-Western contexts (Yuliana, 2025). As a response, scholars argue for co-designed digital materials developed in collaboration with cultural stakeholders (Fitriah et al., 2025). This shift toward participatory design reinforces the idea that character education should emerge from both modern and indigenous epistemologies (Megawati & Prahmana, 2024). When moral values are rooted in local identity and supported by technology, students develop a dual sense of moral clarity and cultural pride. Such hybrid models represent a new direction in global character education discourse.

This study offers a novel contribution to the field of character education by proposing a model that integrates digital learning tools with local cultural wisdom in a unified pedagogical framework. Unlike prior research that treats technology and values learning as separate domains, this study merges both to create a participatory, culturally grounded, and interactive moral learning experience (Ramadhani, Kusumawardani, & Alfian, 2024). It highlights the concept of "digitally contextualized character education," where students not only consume content but also co-create moral messages using locally rooted narratives and digital media (Farida, Yulianti, & Rachmawati, 2024). Moreover, this research expands the focus beyond student engagement by incorporating community roles, especially parents and cultural stakeholders, into the digital learning ecosystem (Fitriah et al., 2025). This approach fills the gap left by existing models that rarely account for sociocultural dynamics in values education. Through the thematic literature review, this study introduces an adaptable model that aligns with both educational technology advancement and heritage preservation (Mahmuddah, Fitriah, & Setiawan, 2025). Its implications extend to curriculum development, teacher training, and digital resource design that center on local identity. Thus, it repositions character education as a community-rooted, tech-supported practice rather than an isolated school intervention.

Another key novelty of this research is the development of a thematic map connecting digital strategies with moral values specific to elementary learners' cultural environments. While other studies focus on general digital competencies or Western-based character frameworks, this work systematically synthesizes regional practices from Southeast Asia to highlight locally effective models (Megawati & Prahmana, 2024). It also redefines the role of students as digital moral agents by promoting user-generated moral content through vlogs, podcasts, and animations (Casma, Widiyantje, & Fadillah, 2022). This participatory paradigm empowers learners to internalize values not by

instruction alone, but through creative engagement with their traditions in digital spaces. Furthermore, the study introduces indicators for evaluating the effectiveness of digital character programs by combining cultural relevance, engagement level, and value retention (Judijanto, Arifin, & Herawan, 2025). These indicators provide a practical tool for educators to measure impact while adapting to local needs. In doing so, this research addresses the pressing demand for educational models that are both globally informed and locally meaningful (Yuliani, Kurniawan, & Suryani, 2024). As such, it advances the discourse on character education in the context of post-digital pedagogy and indigenous values preservation.

This study holds significant global relevance as it offers a culturally responsive and digitally integrated model of character education adaptable to diverse educational systems. By emphasizing the fusion of local wisdom with digital platforms, it proposes a scalable approach for countries seeking to balance tradition and technological advancement in moral learning (Farida, Yulianti, & Rachmawati, 2024). The framework introduced is particularly useful for multicultural and developing nations facing curriculum gaps in values education (Ramadhani, Kusumawardani, & Alfian, 2024). Furthermore, the participatory and student-centered design supports global education goals related to digital literacy, civic responsibility, and sustainable development (Mahmuddah, Fitriah, & Setiawan, 2025). Educational policymakers, especially in Southeast Asia, Africa, and Latin America, can benefit from the indicators and models outlined in this research. It also adds new discourse to the international field of post-digital pedagogy and global citizenship education (Fitriah et al., 2025). Importantly, this study encourages international collaboration in developing values-based digital tools that are culturally adaptive. Thus, the research is positioned not only as a national contribution but as a foundation for global innovation in education.

## CONCLUSION

This study concludes that integrating digital tools with local wisdom offers a promising framework for enhancing character education among primary learners. The findings reveal that strategies such as digital storytelling, gamified moral simulations, and student-created digital content foster deeper engagement and internalization of values. Success depends on cultural relevance, teacher capacity, and strong community-school collaboration. Key barriers include insufficient infrastructure and lack of localized digital materials, while supportive mechanisms like parent involvement and teacher training improve outcomes. The novelty of this research lies in its ecosystemic approach that positions learners not just as recipients but as active co-creators of moral meaning. This character education model is both scalable and adaptable across diverse sociocultural contexts. Ultimately, digital character education must be participatory, contextual, and culturally rooted to be truly transformative in the 21st-century learning environment.



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