



Integrating West Kalimantan Local Wisdom, Educational Games, and Artificial Intelligence for Pancasila Education in Elementary Schools

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Abstract

Digital transformation has created opportunities to develop more interactive and meaningful Pancasila Education; however, current digital learning practices still emphasize content delivery rather than integrating students' cultural contexts. West Kalimantan local wisdom contains values aligned with Pancasila, including mutual cooperation, deliberation, responsibility, tolerance, and social care, which can serve as contextual learning resources. This study aims to analyze the integration of West Kalimantan local wisdom into educational games supported by digital technology and Artificial Intelligence (AI) for elementary school Pancasila Education. Using a qualitative library research approach, this study analyzed relevant literature on Pancasila Education, local wisdom, educational games, digital learning, and AI through thematic classification and conceptual synthesis. The findings indicate that cultural practices such as the Saprahan tradition, Dayak Longhouse (Rumah Panjang), Customary Deliberation, Cap Go Meh Festival, and Dayak customary forests can be transformed into educational game content to strengthen students' understanding and practice of Pancasila values. The proposed conceptual model positions local wisdom as learning content, educational games as pedagogical strategies, and AI as adaptive technological support for creating contextual, engaging, and value-oriented learning experiences.

Keywords: Artificial Intelligence, Digital Technology, Educational Games, Local Wisdom, Pancasila Education.



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INTRODUCTION

Pancasila Education plays an important role in developing students' character, civic attitudes, and national values from the elementary school level because it serves as the primary educational foundation for nurturing learners who are capable of translating constitutional ideals into everyday social behavior rather than merely memorizing normative concepts (Ninawati et al., 2025). The contemporary orientation of Pancasila Education increasingly emphasizes meaningful learning experiences through which students internalize values such as mutual cooperation (gotong royong), responsibility, deliberation (musyawarah), tolerance, social solidarity, and respect for diversity as inseparable dimensions of holistic character formation. Recent educational reforms have also aligned Pancasila Education with the broader agenda of cultivating the Pancasila Student Profile, requiring instructional practices that integrate cognitive, affective, and behavioral competencies instead of prioritizing factual knowledge alone (Arifin, 2022). International developments in learning sciences simultaneously demonstrate that twenty-first-century citizenship education increasingly depends on contextual, learner-centered, and technology-supported pedagogies capable of fostering authentic value construction rather than passive knowledge acquisition (Yadav, 2024). The rapid expansion of Artificial Intelligence (AI), educational games, and adaptive digital environments has transformed educational practices by enabling personalized, interactive, and experience-based learning opportunities that better accommodate students' developmental characteristics (Fabunmi et al., 2025). Within this evolving educational landscape, the challenge is no longer limited to introducing digital innovation into classrooms but extends to ensuring that technological advancement strengthens rather than dilutes the cultivation of ethical values embedded in Pancasila Education.

Existing scholarship consistently demonstrates that effective Pancasila Education depends on active student engagement, contextual experiences, and sustained character habituation instead of

conventional teacher-centered instruction (Fathonah & Heriyanto, 2025). Studies investigating contextual learning further indicate that connecting instructional content with students' immediate social and cultural environments substantially strengthens character formation because values become observable, meaningful, and applicable in authentic situations rather than remaining abstract moral principles (Aminah et al., 2022). Research on educational games similarly reports improvements in learning motivation, classroom participation, collaboration, and conceptual understanding because game-based environments encourage experiential learning and decision-making processes that stimulate higher-order thinking (Agustina et al., 2025). Interactive educational games specifically designed for elementary learners have also demonstrated considerable potential to increase learner autonomy and sustained engagement throughout instructional activities (Azizatunnisa et al., 2022). Complementary evidence further suggests that AI-based educational media enhance instructional flexibility and support adaptive learning experiences by responding to diverse student needs, although their implementation has predominantly concentrated on academic achievement and learning efficiency rather than value internalization (Amalia et al., 2024). Collectively, these studies establish that contextual pedagogy, educational games, and AI each contribute positively to learning quality, yet they remain largely investigated as independent pedagogical innovations instead of interconnected components within a comprehensive character education framework.

Local wisdom has increasingly been recognized as a strategic educational resource because it embodies cultural knowledge, ethical norms, and social practices that naturally reflect the philosophical principles of Pancasila while preserving community identity across generations (Adiwijaya et al., 2023). Research demonstrates that integrating local wisdom into elementary education strengthens students' cultural awareness, reinforces the Pancasila Student Profile, and facilitates more meaningful value internalization through culturally familiar learning experiences (Izzah et al., 2025). Traditional games and community-based cultural practices further contribute to character development by encouraging cooperation, empathy, responsibility, and respect among learners within authentic social interactions (Astuti & Apriliani, 2025). Studies on digital-era education likewise argue that preserving local wisdom requires innovative pedagogical strategies capable of harmonizing cultural heritage with contemporary digital learning environments instead of positioning tradition and technology as competing educational paradigms (Wahyudi et al., 2025). The management of digital media that integrates local wisdom has also been reported to increase students' cultural engagement while supporting more relevant instructional practices in elementary schools (Susanti & Rosa, 2026). Despite these promising developments, much of the existing literature continues to conceptualize local wisdom primarily as instructional content rather than as an integral design principle capable of shaping intelligent, technology-enhanced learning ecosystems.

This limitation becomes particularly evident in the context of West Kalimantan, whose multicultural traditions provide exceptionally rich representations of Pancasila values that remain insufficiently utilized within digitally mediated elementary education. The Saprahan tradition of the Sambas Malay community reflects equality, togetherness, and collective responsibility through communal dining practices that cultivate mutual respect among participants (Riansyah, 2023). Likewise, the Dayak Rumah Betang tradition represents relational cooperation, shared responsibility, and deliberative decision-making that closely correspond with democratic and humanitarian values promoted in Pancasila Education (Sakaria et al., 2025). The long-standing coexistence of diverse ethnic and religious communities in West Kalimantan further illustrates practical models of tolerance and peaceful social interaction that provide authentic contexts for value-based learning in multicultural societies (Nuryadi & Widiatmaka, 2022). Current literature has acknowledged the educational relevance of local cultural values, yet empirical studies rarely transform these traditions into interactive educational game narratives supported by AI technologies that enable adaptive, immersive, and personalized learning experiences. This conceptual separation between cultural knowledge, instructional design, and intelligent educational technology limits opportunities to create learning environments where students simultaneously experience cultural identity formation, ethical reasoning, and digital literacy.

Recent investigations have attempted to strengthen Pancasila Education through local wisdom-based electronic modules, culturally responsive instructional media, and school-based cultural programs, demonstrating encouraging improvements in students' engagement and character development (Suwartini et al., 2025). Programmatic initiatives integrating local wisdom into elementary

education have likewise shown positive contributions toward reinforcing the Pancasila Student Profile by embedding community values into everyday school activities (Diyah Rahmah et al., 2026). Educational board games have also proven effective in addressing diverse learning styles while improving students' understanding of Pancasila concepts through collaborative and problem-based gameplay (Ummah, 2026). Even so, the existing body of research has yet to establish an integrated pedagogical model that simultaneously positions West Kalimantan local wisdom as authentic learning content, educational games as experiential learning strategies, and Artificial Intelligence as an adaptive facilitator capable of personalizing value-oriented learning processes. Addressing this unresolved intersection is scientifically important because it expands current discussions beyond isolated technological innovation toward culturally grounded intelligent pedagogy that responds to the increasingly complex demands of elementary citizenship education in the digital era.

This study positions itself within the emerging intersection of culturally responsive pedagogy, game-based learning, and Artificial Intelligence by proposing an integrated conceptual framework for Pancasila Education in elementary schools that is grounded in the local wisdom of West Kalimantan. Rather than treating local wisdom, educational games, and AI as independent instructional components, this research conceptualizes them as mutually reinforcing dimensions that collectively support contextual value internalization, student engagement, adaptive learning, and cultural identity development. The study seeks to analyze how this multidimensional integration can strengthen elementary Pancasila Education by transforming authentic cultural practices into meaningful digital learning experiences. It further contributes theoretically by extending the discourse on culturally grounded intelligent pedagogy within contemporary learning sciences and offers a methodological contribution through an integrative instructional framework that combines contextual cultural resources, game-based learning principles, and AI-supported personalization for elementary education.

RESEARCH METHODS

This study employed a qualitative non-empirical design using a library research approach to develop a conceptual understanding of how the local wisdom of West Kalimantan can be integrated with educational games and Artificial Intelligence (AI) to strengthen Pancasila Education in elementary schools (Fathonah & Heriyanto, 2025). The study relied exclusively on secondary data derived from peer-reviewed journal articles, academic books, conference proceedings, government policy documents, and other scholarly publications concerning Pancasila Education, local wisdom, educational games, AI-assisted learning, and elementary education published primarily between 2022 and 2026 (Fabunmi et al., 2025). Literature sources were selected through purposive criteria that emphasized topical relevance, scholarly credibility, methodological transparency, and their contribution to current discussions on culturally responsive pedagogy and digital learning innovation (Yadav, 2024). Particular attention was given to studies discussing the educational values embedded in the cultural traditions of West Kalimantan, including Saprahan, Rumah Betang, multicultural coexistence, and other indigenous practices relevant to character education (Riansyah, 2023). The analytical framework was guided by an integrative perspective that positioned local wisdom as the contextual learning content, educational games as the pedagogical strategy, and Artificial Intelligence as an adaptive technological facilitator for value-oriented learning in elementary schools (Susanti & Rosa, 2026). This framework enabled the study to critically examine the relationships among culture, pedagogy, and intelligent educational technology while identifying conceptual opportunities for strengthening Pancasila Education.

The analysis followed a systematic qualitative content analysis procedure consisting of literature identification, critical reading, thematic coding, categorization, comparison across studies, and conceptual synthesis to construct an integrated pedagogical framework (Suwartini et al., 2025). Relevant findings from the selected literature were coded according to recurring themes, including Pancasila values, local wisdom, educational game design, Artificial Intelligence, contextual learning, and elementary character education, allowing similarities and conceptual differences across studies to be identified (Izzah et al., 2025). Cross-source comparisons were subsequently conducted to examine complementarities, inconsistencies, and unexplored intersections within the existing literature before developing an integrative conceptual interpretation of the proposed learning model (Wahyudi et al., 2025). The trustworthiness of the study was strengthened through source triangulation by comparing evidence from multiple scholarly publications representing different educational perspectives and research contexts (Adiwijaya et al., 2023). Analytical rigor was further maintained through iterative

interpretation, transparent documentation of the coding process, and continuous comparison between emerging themes and the conceptual objectives of the study to ensure coherence, credibility, and consistency throughout the synthesis (Diyah Rahmah et al., 2026).

RESULTS AND DISCUSSION

West Kalimantan Local Wisdom as a Contextual Foundation for Pancasila Education

The analysis of the selected literature reveals that West Kalimantan local wisdom possesses substantial pedagogical potential as a contextual foundation for strengthening Pancasila Education in elementary schools. Local wisdom should not be positioned merely as cultural knowledge that needs to be preserved, but rather as a dynamic educational resource containing ethical principles, social practices, and collective values that can support students' character development. In the context of elementary education, the internalization of Pancasila values requires learning experiences that enable students to understand the relationship between national principles and their surrounding social realities. Contextual learning theory emphasizes that students construct meaningful knowledge when learning materials are connected with their personal experiences, cultural backgrounds, and social environments (Aminah et al., 2022). This perspective is particularly relevant for Pancasila Education because values such as mutual cooperation (*gotong royong*), responsibility, tolerance, deliberation (*musyawarah*), and social care are not merely concepts to be memorized but principles that need to be practiced through authentic situations. Character education based on Pancasila values also emphasizes that continuous interaction between knowledge, habituation, and social practice is essential for developing students' moral character (Akhwani et al., 2021). Therefore, integrating local wisdom into Pancasila Education provides a pathway for transforming abstract civic values into meaningful learning experiences that are closer to students' everyday lives.

West Kalimantan represents a strategic cultural context for this integration because the province demonstrates a long history of multicultural interaction among diverse ethnic and cultural communities. The coexistence of Malay, Dayak, Chinese, Madurese, Javanese, Bugis, and other communities reflects social practices based on mutual respect, cooperation, and tolerance, which correspond with the values emphasized in Pancasila Education (Nuryadi & Widiatmaka, 2022). Such diversity provides authentic examples for elementary students to understand that unity does not require eliminating differences but rather developing the ability to live harmoniously within diversity. The utilization of local cultural resources in education has been increasingly recognized as an important approach for strengthening cultural identity while simultaneously preparing students to participate in broader social environments characterized by pluralism and global interaction (Wahyudi et al., 2025). The preservation of local wisdom within contemporary education also requires reinterpretation through innovative pedagogical approaches so that cultural values remain relevant in the digital era rather than becoming disconnected from students' learning experiences (Adiwijaya et al., 2023). The findings from the literature synthesis indicate that West Kalimantan local wisdom provides not only cultural representation but also a meaningful educational context for developing students' understanding of Pancasila values through real social practices.

The thematic analysis identified several cultural traditions in West Kalimantan that demonstrate strong relevance to Pancasila Education, including the Saprahan tradition, Rumah Betang, Musyawarah Adat, Cap Go Meh Festival, and Dayak Customary Forest practices. The Saprahan tradition reflects principles of equality, togetherness, and cooperation because communal dining activities require collective participation, shared responsibility, and mutual respect among community members (Riansyah, 2023). These characteristics correspond with the value of *gotong royong* in Pancasila Education because students can learn cooperation through examples of collective action rather than through theoretical explanations alone. Rumah Betang represents another important cultural resource because its communal living system emphasizes solidarity, responsibility, and harmonious relationships among individuals within a shared social environment (Sakaria et al., 2025). These values are closely related to the development of social awareness and unity, which are essential dimensions of elementary character education. Meanwhile, Musyawarah Adat illustrates democratic practices through dialogue, consideration of different perspectives, and collective decision-making, providing relevant examples for teaching deliberation and respect for others' opinions. The cultural values embedded in these traditions demonstrate that local wisdom can function as a contextual medium for connecting students' cultural experiences with the objectives of Pancasila Education.

The integration of West Kalimantan local wisdom into Pancasila Education also contributes to the development of the Pancasila Student Profile because the cultural practices contain competencies related to cooperation, global diversity, critical thinking, creativity, independence, and moral responsibility. The Saprahan tradition encourages students to recognize the importance of collective participation, while Rumah Betang provides an understanding of how communities maintain social relationships through shared responsibilities and mutual support. The Cap Go Meh Festival offers opportunities for students to appreciate cultural and religious diversity, whereas Dayak Customary Forest practices introduce ecological responsibility and awareness of human relationships with nature. These cultural elements demonstrate that local wisdom can support multidimensional character development because it integrates social, ethical, cultural, and environmental values within a single learning context (Arifin, 2022). Previous studies on local wisdom integration in elementary education have also shown that culturally based learning approaches strengthen students' appreciation of local identity while supporting the achievement of national educational goals (Izzah et al., 2025). The findings suggest that local wisdom-based Pancasila Education should be designed not only to transmit cultural information but also to encourage students to interpret and practice values through contextual learning activities.

Based on the conceptual synthesis, the relationship between West Kalimantan local wisdom and Pancasila Education can be understood through a progressive learning pathway in which cultural practices serve as the initial source of meaning, contextual learning functions as the pedagogical process, and character development becomes the expected educational outcome. This framework positions local wisdom as the foundation that enables students to encounter Pancasila values through authentic cultural experiences before transforming those experiences into personal attitudes and social behaviors. Such an approach is consistent with value-based learning perspectives that emphasize the importance of integrating knowledge, attitudes, and actions in character education (Fathonah & Heriyanto, 2025). The conceptual relationship among these components is illustrated in Figure 1, which presents the role of West Kalimantan local wisdom as a contextual foundation for developing Pancasila-oriented learning experiences.

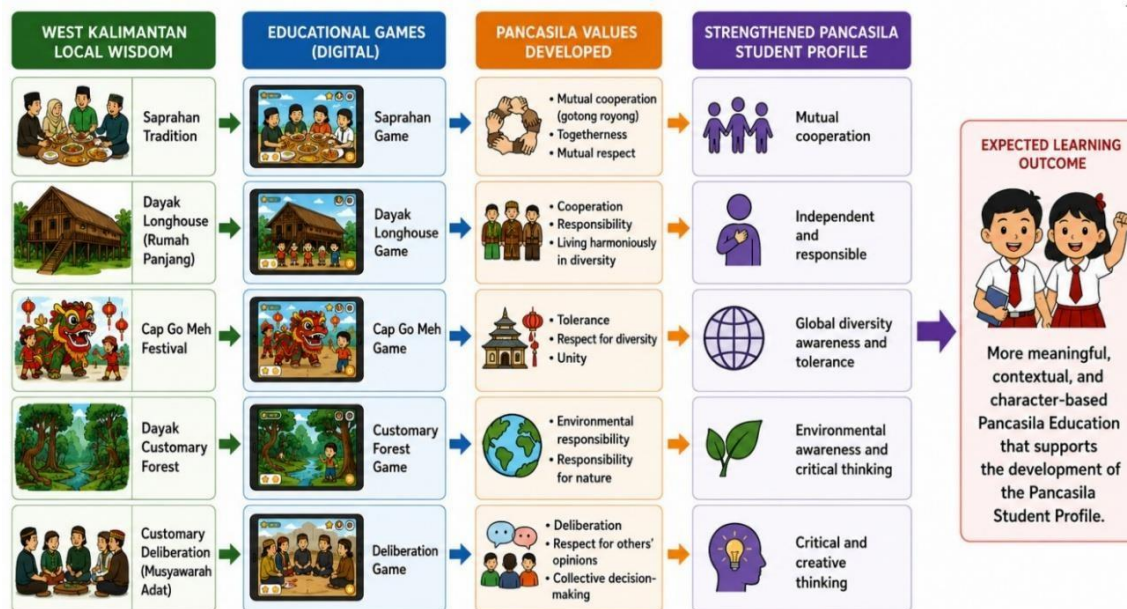


Figure 1. Conceptual Relationship between West Kalimantan Local Wisdom and Pancasila Education

Source: Developed by the authors (2026)

Figure 1 illustrates that local wisdom operates as the cultural foundation for creating contextual learning experiences that facilitate the internalization of Pancasila values among elementary school students. The model emphasizes that cultural traditions are not treated as additional materials separated from curriculum objectives, but as meaningful sources of knowledge that support students in

understanding the practical application of national values. Through contextual learning processes, students are encouraged to recognize the relationship between cultural practices and civic principles, allowing Pancasila values to develop through reflection and participation. This perspective aligns with research emphasizing that local wisdom-based education contributes to character formation by connecting cultural identity with social responsibility and ethical behavior (Diyah Rahmah et al., 2026). The framework also provides the conceptual basis for integrating educational games and Artificial Intelligence in subsequent learning development because technology can function as a facilitator for presenting local wisdom through interactive and adaptive learning environments. The findings of this section establish that West Kalimantan local wisdom represents a valuable pedagogical foundation for innovative Pancasila Education models that combine cultural relevance with contemporary educational approaches.

The findings from this conceptual analysis indicate that the educational potential of West Kalimantan local wisdom lies in its capacity to transform cultural practices into meaningful learning resources that support both cognitive understanding and character development. The integration of local traditions into Pancasila Education provides opportunities for students to interpret national values through cultural experiences that are familiar, relevant, and socially meaningful. This approach strengthens the position of local wisdom as a dynamic pedagogical resource that can respond to contemporary educational demands while maintaining cultural authenticity. The utilization of local cultural contexts also creates a foundation for developing innovative learning strategies that encourage active participation, collaboration, and reflection among elementary school students. Within the broader landscape of contemporary pedagogy, the connection between culture and technology becomes increasingly important because culturally meaningful content requires appropriate learning approaches to maximize its educational impact. Therefore, the next discussion focuses on the development of local wisdom-based educational games and the role of Artificial Intelligence in enhancing interactive, adaptive, and contextual Pancasila learning experiences.

Developing Local Wisdom-Based Educational Games and Artificial Intelligence Integration in Pancasila Education

The literature synthesis indicates that educational games provide a strategic pedagogical approach for transforming West Kalimantan local wisdom into interactive learning experiences that are relevant to elementary school students. Game-based learning differs from conventional instructional approaches because it positions students as active participants who engage in exploration, collaboration, problem-solving, and decision-making activities during the learning process. In Pancasila Education, this approach is particularly valuable because the development of character values requires opportunities for students to practice social behaviors rather than merely understand moral concepts theoretically. Educational games have been shown to increase students' motivation and learning engagement because game mechanisms create challenging yet enjoyable environments that encourage active involvement in achieving learning objectives (Agustina et al., 2025). Interactive game-based learning media also support conceptual understanding by combining instructional content with activities that stimulate students' curiosity and participation (Azizatunnisa et al., 2022). These findings suggest that educational games can function as pedagogical environments where Pancasila values are experienced through meaningful activities rather than delivered as abstract information.

The integration of West Kalimantan local wisdom into educational games provides an opportunity to develop learning media that combines cultural relevance with digital innovation. Previous digital learning practices have often emphasized technological functions, such as accessibility and content delivery, while paying less attention to the cultural contexts that influence students' understanding and engagement. A local wisdom-based educational game addresses this limitation by placing cultural experiences as the core learning content while utilizing digital features to create interactive representations of traditional practices. Research on digital learning emphasizes that technology becomes more educationally meaningful when it supports active learning processes and connects learning materials with students' social realities (Yadav, 2024). In the context of Pancasila Education, digital games based on West Kalimantan culture allow students to explore values such as cooperation, tolerance, responsibility, and deliberation through scenarios derived from their cultural environment. This integration reflects the principles of culturally responsive pedagogy, where students' cultural backgrounds are recognized as valuable sources for constructing knowledge and developing

identity (Safitri, 2025). The findings indicate that educational games based on local wisdom have the potential to bridge cultural preservation and contemporary learning innovation.

The conceptual analysis further demonstrates that West Kalimantan cultural traditions can be transformed into various educational game activities designed to support the internalization of Pancasila values. The Saprahan tradition can be represented through collaborative missions that require students to distribute tasks, assist peers, and achieve shared goals, reflecting the principles of *gotong royong* and social responsibility. The Rumah Betang tradition can be developed into simulation-based activities where students manage communal responsibilities and understand the importance of cooperation within diverse communities. Musyawarah Adat can be adapted into decision-making scenarios that encourage students to express opinions, listen to different perspectives, and reach collective agreements through dialogue. Cap Go Meh Festival-based games can introduce students to multicultural awareness by presenting challenges related to respect and appreciation of cultural diversity, while Dayak Customary Forest activities can promote environmental responsibility through conservation-oriented missions. Such designs demonstrate that educational games can transform cultural values into experiential learning processes that encourage students to practice Pancasila principles within simulated social contexts (Ummah, 2026).

The effectiveness of local wisdom-based educational games depends on the extent to which game design maintains the authenticity of cultural meanings while adapting them to students' developmental needs. Cultural integration should not be limited to incorporating traditional images, symbols, or narratives into digital applications because superficial representation may reduce local wisdom into decorative elements rather than meaningful learning resources. Previous research on local wisdom-based learning emphasizes that cultural content must be connected with learning objectives and student activities to ensure that values are internalized through meaningful experiences (Izzah et al., 2025). Educational games provide this opportunity because they allow students to encounter cultural situations through interactive narratives, problem-solving tasks, and collaborative challenges. The relationship between local wisdom and educational game design also supports the development of the Pancasila Student Profile because students engage directly with activities that promote cooperation, creativity, critical thinking, independence, and social awareness (Arifin, 2022). Therefore, the transformation of West Kalimantan local wisdom into educational games represents not only a technological innovation but also a pedagogical strategy for strengthening character-oriented learning.

Artificial Intelligence (AI) expands the potential of local wisdom-based educational games by providing adaptive learning support that responds to students' individual needs. Within this learning model, AI can assist students by providing feedback, identifying learning difficulties, adjusting task complexity, and supporting personalized learning pathways based on students' interactions with the game environment. Research on AI in education highlights that intelligent technologies can enhance learning personalization by enabling educational systems to respond dynamically to differences in students' abilities and learning progress (Fabunmi et al., 2025). The implementation of AI-based learning media also provides opportunities for teachers to obtain information regarding student performance and utilize learning data to improve instructional decisions (Amalia et al., 2024). However, AI should be positioned as a supporting tool rather than a replacement for teachers because character education requires human interaction, ethical guidance, and social engagement. The combination of AI with culturally meaningful educational games therefore creates a balanced learning environment that integrates technological innovation with the human and cultural dimensions of Pancasila Education.

The integration model of West Kalimantan local wisdom, educational games, and Artificial Intelligence demonstrates a potential pathway for developing contemporary Pancasila Education that responds to both cultural and technological transformations. In this model, local wisdom functions as the source of learning content, educational games operate as the experiential learning strategy, and Artificial Intelligence provides adaptive technological support that enhances interaction and personalization. This combination enables students to learn Pancasila values through contextual situations while engaging with digital environments that correspond with current educational developments. Studies on digital media management in elementary education suggest that technology-based learning can contribute to cultural sustainability when digital platforms are designed around meaningful cultural content and appropriate pedagogical objectives (Susanti & Rosa, 2026). The integration of these three components also supports the development of students' cultural identity, digital competence, and character formation within a unified learning framework. The conceptual

relationship among local wisdom, educational games, AI, and Pancasila Education is presented in Figure 2.



Figure 2. Conceptual Framework of Local Wisdom-Based Educational Games Supported by Artificial Intelligence for Pancasila Education
Source: Developed by the authors (2026)

Figure 2 illustrates that the integration of local wisdom, educational games, and Artificial Intelligence forms a complementary learning ecosystem in which cultural content, pedagogical strategies, and technological support interact to strengthen Pancasila Education. Local wisdom provides meaningful contexts that ensure learning activities remain connected with students' cultural realities, while educational games transform these contexts into interactive experiences that encourage participation and reflection. Artificial Intelligence enhances this process by enabling adaptive responses and individualized support based on students' learning interactions. This framework reflects the perspective that educational technology achieves greater educational value when it is integrated with appropriate pedagogical objectives and culturally meaningful content rather than applied solely for technological advancement. The findings suggest that the combination of cultural authenticity and digital innovation can contribute to the development of elementary learning environments that are engaging, adaptive, and oriented toward character formation. This conceptual model provides a foundation for further discussion regarding the theoretical and pedagogical implications of integrating local wisdom, educational games, and Artificial Intelligence within contemporary Pancasila Education.

The integration framework presented in Figure 2 highlights that the development of Pancasila Education in the digital era requires a balanced relationship between cultural preservation, pedagogical innovation, and technological advancement. The incorporation of West Kalimantan local wisdom ensures that digital learning experiences remain rooted in students' cultural identities, while educational games and Artificial Intelligence expand the possibilities for creating more interactive and personalized learning environments. This approach demonstrates that technology does not replace the cultural and social dimensions of education but strengthens their accessibility, representation, and application within contemporary classrooms. The conceptual findings emphasize that meaningful digital learning should be designed through the integration of culturally relevant content, active learning strategies, and adaptive technological support. Such an integration provides opportunities for elementary students to develop not only an understanding of Pancasila values but also the ability to apply these values through collaborative, reflective, and socially responsible actions. This perspective establishes the basis for examining the broader theoretical contributions and practical implications of the proposed learning model in strengthening contemporary pedagogy and learning science.

Theoretical and Pedagogical Implications of Integrating Local Wisdom, Educational Games, and Artificial Intelligence in Pancasila Education

The synthesis of the reviewed literature indicates that the integration of West Kalimantan local wisdom, educational games, and Artificial Intelligence (AI) contributes to the development of a more comprehensive framework for contemporary Pancasila Education. This integration expands the understanding of learning innovation beyond the adoption of digital tools by emphasizing the interaction between cultural relevance, pedagogical strategies, and technological adaptability. In this framework, local wisdom provides meaningful cultural contexts, educational games facilitate experiential learning processes, and AI supports personalized and adaptive learning experiences. Such a combination reflects the principles of contemporary pedagogy, which emphasize that effective learning environments should consider students' backgrounds, active participation, and individual learning needs. Research on value-based learning highlights that character development becomes more effective when educational practices integrate knowledge acquisition with contextual experiences and opportunities for social engagement (Fathonah & Heriyanto, 2025). The findings suggest that the proposed integration model contributes to Pancasila Education by repositioning students as active participants who construct understanding through interaction with cultural resources and digital learning environments.

From a theoretical perspective, the integration model strengthens the connection between culturally responsive pedagogy, experiential learning, and adaptive learning theory. Local wisdom-based learning reinforces culturally responsive pedagogy because it recognizes students' cultural backgrounds as valuable sources of knowledge rather than external elements separated from formal education. Educational games support experiential learning principles by allowing students to engage in simulated situations that require collaboration, problem-solving, and decision-making, which are essential processes for developing civic and character competencies. Meanwhile, AI-supported learning environments correspond with adaptive learning theory because they enable personalized feedback and instructional adjustments based on students' learning progress. Previous studies have demonstrated that integrating local cultural contexts into elementary education strengthens students' cultural identity while supporting the achievement of broader educational competencies (Wahyudi et al., 2025). The relationship between these theoretical perspectives demonstrates that the proposed model provides an interdisciplinary contribution by connecting cultural studies, educational technology, and character education within a unified pedagogical framework.

The pedagogical implications of this integration model are reflected in its potential to transform the role of teachers, learning activities, and assessment practices in Pancasila Education. Teachers are no longer positioned only as transmitters of information but as facilitators who design meaningful learning experiences by combining cultural resources with innovative instructional strategies. Educational games enable students to participate in collaborative activities where Pancasila values can be practiced through interaction, while AI provides additional support for monitoring learning progress and responding to individual differences. The application of digital learning media based on local culture has been shown to support student engagement because learning materials become more relevant and connected to learners' experiences (Safitri, 2025). The model also encourages a shift from knowledge-based assessment toward more holistic evaluation that considers students' participation, collaboration, problem-solving ability, and demonstration of character values. This pedagogical orientation is consistent with the objectives of elementary education, which emphasize the development of students' intellectual, social, and moral capacities simultaneously (Ninawati et al., 2025).

Table 1. Theoretical and Pedagogical Contributions of the Integrated Local Wisdom-Based Educational Model

Component	Theoretical Contribution	Pedagogical Implication
West Kalimantan Local Wisdom	Strengthens culturally responsive pedagogy by positioning cultural practices as meaningful sources of knowledge	Provides contextual learning materials that connect Pancasila values with students' social experiences

Educational Games	Supports experiential learning theory through active participation, simulation, and reflection	Encourages collaboration, problem-solving, decision-making, and value internalization
Artificial Intelligence	Supports adaptive learning theory through personalization and responsive learning systems	Provides individualized feedback, learning assistance, and progress monitoring
Integrated Learning Model	Connects cultural education, digital pedagogy, and character development within one conceptual framework	Creates innovative Pancasila learning environments that are interactive, contextual, and student-centered

The framework presented in Table 3 demonstrates that each component contributes distinct yet interconnected functions within the proposed learning model. Local wisdom provides the cultural foundation that ensures learning remains meaningful and aligned with students' identities, while educational games translate cultural values into interactive activities that promote active engagement. Artificial Intelligence extends these possibilities by supporting adaptive learning processes that accommodate differences in students' abilities and learning trajectories. The combination of these components indicates that technology integration in education should not be understood merely as the introduction of digital tools but as a process of designing learning environments that connect human values, cultural knowledge, and technological capabilities. Research on AI in education emphasizes that intelligent technologies can improve learning effectiveness when implemented alongside appropriate pedagogical principles and instructional objectives (Fabunmi et al., 2025). Therefore, the proposed integration model contributes to contemporary pedagogy by presenting an approach that balances technological innovation with cultural authenticity and character development.

The findings of this study also provide practical implications for elementary schools, teachers, and educational policymakers seeking to develop relevant learning approaches in the digital era. For teachers, the model offers an alternative framework for designing Pancasila Education activities that incorporate local cultural resources into engaging digital learning experiences. For schools, the integration of local wisdom-based educational games can support cultural preservation while improving students' digital literacy and character development. For policymakers, the model highlights the importance of developing educational technologies that are culturally responsive and aligned with national education goals rather than adopting technological solutions without contextual consideration. The integration of local wisdom and digital innovation has the potential to strengthen students' appreciation of cultural identity while preparing them to participate in increasingly complex social environments (Adiwijaya et al., 2023). Future educational development can further explore empirical implementation of this conceptual model to examine its effectiveness in improving students' understanding, engagement, and practice of Pancasila values within diverse elementary school contexts.

CONCLUSION

This study concludes that the integration of West Kalimantan local wisdom, educational games, and Artificial Intelligence (AI) provides a promising conceptual approach for strengthening Pancasila Education in elementary schools. Local cultural practices, including the Saprahan Tradition, the Dayak Longhouse, Customary Deliberation, the Cap Go Meh Festival, and the Dayak Customary Forest, contain values that are closely aligned with Pancasila principles, such as mutual cooperation, responsibility, tolerance, deliberation, environmental awareness, and respect for diversity. When transformed into educational game content, these cultural resources can create contextual learning experiences that enable students to understand Pancasila values through meaningful activities rather than abstract explanations. The integration of digital technology and AI further expands this potential by supporting interactive learning processes, personalized feedback, and adaptive experiences that respond to students' learning needs. The conceptual model developed in this study contributes to contemporary pedagogy by positioning local wisdom as learning content, educational games as an experiential learning strategy, and AI as a technological facilitator for character-oriented education. This approach offers a relevant framework for teachers, educational institutions, and policymakers in designing innovative Pancasila Education that combines cultural relevance with digital transformation.

Although this study provides theoretical and pedagogical contributions, its conceptual nature represents a limitation because the proposed integration model has not been implemented and empirically evaluated in elementary school learning environments. The findings are derived from qualitative literature analysis; therefore, further investigation is required to examine how the model functions in actual classroom contexts, including its influence on students' engagement, understanding of Pancasila values, character development, and digital learning experiences. Future research should focus on developing and validating prototypes of local wisdom-based educational games supported by AI through research and development (R&D) approaches, usability testing, and experimental studies involving elementary school students and teachers. Empirical evaluation will provide deeper insights into the effectiveness, practicality, and sustainability of the proposed learning model across different educational settings. Such studies are expected to strengthen the connection between cultural preservation, technological innovation, and contemporary learning science while contributing to the advancement of contextual and value-based digital pedagogy in elementary education.

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