



Digital Literacy as a Transformative Framework for Character Education: A Case Study in Madrasah Ibtidaiyah

Purniadi Putra^{1✉}, Mohd Faez Ilias², Rudi Hartono³, Burhanuddin⁴, Nanda Saputra⁵, Barsihanor⁶

¹ Universitas Sultan Muhammad Syafiuddin Sambas, Indonesia

² Selangor Islamic University, 43000 Kajang, Selangor, Malaysia

^{3,4} Universitas Sultan Muhammad Syafiuddin Sambas, Indonesia

⁵ Sekolah Tinggi Ilmu Tarbiyah Al-Hilal Sigli, Indonesia

⁶ Universitas Islam Kalimantan Muhammad Arsyad Al Banjari Banjarmasin, Indonesia

Corresponding Email: putrapurniadi@gmail.com;

Received: 20-08-2025

Revised: 21-11-2025

Accepted: 29-12-2025

Abstract

Digital transformation has significantly changed learning practices in Islamic primary education; however, the role of digital literacy as a transformative framework for character education, particularly through collaboration between teachers and parents in Madrasah Ibtidaiyah, remains under-explored. To address this research gap, this study investigates how digital media facilitates the internalisation of core moral values, strengthens participatory character building, and enhances students' ethical reasoning within the Islamic educational context. The research employs a qualitative case study Design, complemented by descriptive quantitative data to ensure triangulation and robust interpretation of findings. Data were collected through systematic classroom observations, in-depth interviews with the madrasah principal, teachers, and students, and digital documentation of learning activities. Qualitative data were analysed using NVivo for thematic coding and pattern validation, while quantitative data were examined using mean score calculations to support the qualitative insights. The findings indicate that digital media effectively enhance students' understanding of moral values, promote emotional engagement, and provide opportunities for reflective moral reasoning. Teachers demonstrate strong competence in integrating technology into learning, yet parental involvement remains moderate due to constraints in digital literacy and accessibility. Based on these findings, this study proposes a digital literacy-based character education model grounded in transformative and sociocultural learning perspectives. The model provides practical guidance for developing collaborative, technology-integrated character education policies and offers strategies for strengthening teacher-parent partnerships. Ultimately, the study contributes to advancing character education in Islamic primary schools by bridging theoretical, technological, and sociocultural dimensions of moral learning.

Keywords: Character Education; Digital Literacy; Transformative Learning; Madrasah Ibtidaiyah.

Abstrak

Transformasi digital telah secara signifikan mengubah praktik pembelajaran di pendidikan dasar Islam; namun, peran literasi digital sebagai kerangka kerja transformatif untuk pendidikan karakter, khususnya melalui kolaborasi antara guru dan orang tua di Madrasah Ibtidaiyah, masih kurang diteliti. Untuk menjawab kesenjangan ini, penelitian ini mengeksplorasi bagaimana media digital mendukung internalisasi nilai moral inti, memperkuat pembentukan karakter partisipatif, serta meningkatkan

kemampuan berpikir moral siswa dalam konteks pendidikan Islam. Penelitian ini menggunakan desain studi kasus kualitatif, dilengkapi data kuantitatif deskriptif untuk memperkuat triangulasi dan interpretasi temuan. Data dikumpulkan melalui observasi kelas secara sistematis, wawancara mendalam dengan kepala madrasah, guru, dan siswa, serta dokumentasi digital terkait kegiatan pembelajaran. Data kualitatif dianalisis menggunakan NVivo untuk pengkodean tematik dan validasi pola, sementara data kuantitatif dianalisis melalui perhitungan skor rata-rata untuk mendukung interpretasi. Hasil penelitian menunjukkan bahwa media digital secara efektif meningkatkan pemahaman siswa terhadap nilai moral, mendorong keterlibatan emosional, dan memberikan kesempatan bagi refleksi berpikir moral. Guru menunjukkan kompetensi tinggi dalam mengintegrasikan teknologi dalam pembelajaran, namun keterlibatan orang tua masih terbatas akibat keterbatasan literasi digital dan aksesibilitas. Berdasarkan temuan ini, penelitian ini menawarkan model pendidikan karakter berbasis literasi digital yang berlandaskan perspektif pembelajaran transformatif dan sosiokultural. Model ini memberikan panduan praktis untuk merancang kebijakan pendidikan karakter yang kolaboratif dan terintegrasi teknologi, serta strategi untuk memperkuat kemitraan guru-orang tua. Secara keseluruhan, penelitian ini berkontribusi pada pengembangan pendidikan karakter di sekolah dasar Islam dengan menjembatani dimensi teoretis, teknologi, dan sosiokultural dalam pembelajaran moral siswa.

Kata Kunci: Pendidikan Karakter; Literasi Digital; Pembelajaran Transformatif; Madrasah Ibtidaiyah

INTRODUCTION

Character education has become a critical dimension of educational systems worldwide as schools face increasingly complex social, ethical, and digital challenges. In Indonesia, Madrasah Ibtidaiyah plays a central role in shaping students' moral, cognitive, and social development from an early age, integrating strong Islamic values alongside academic instruction. However, rapid digital transformation introduces new moral and behavioral dynamics that traditional approaches to character education may not fully address, highlighting the need to examine how digital tools influence moral reasoning, ethical decision-making, and responsible behavior in young learners (Lickona, 1991; Livingstone & Third, 2017; Ribble, 2011).

While prior research has explored character education in Madrasah Ibtidaiyah (Aprily, 2020; Fatah, Khoiruddin, & Fakhruddin, 2025; Ikhwan, Anjelita, Kartiko, Zukhrufin, & Ikhwan, 2025; Ma'arif, Muqorrobin, Kartiko, Sirojuddin, & Rofiq, 2024) and the impact of digital literacy on learning outcomes (Banda, 2025; Brown, McCray, Neal, & Caldwell-Serges, 2023; Reksiana, Nata, Rosyada, Rahiem, & Ugli, 2024), little is known about how digital literacy functions as a transformative framework for character education in Islamic primary schools. Existing studies tend to focus either on normative moral education or general digital skills, neglecting the integration of religious, ethical, and sociocultural dimensions within digital learning environments. Furthermore, international experiences with digital ethics and moral development (e.g., Finland, South Korea, UK) provide insights into school-wide frameworks but fail to reflect the unique Islamic moral formation practiced in Indonesian madrasahs (Choi, 2020; Salmivalli, Marinus Voeten, & Elisa Poskiparta, 2011).

This gap establishes the novelty of the current study. While character education is normatively positioned as a foundational effort to cultivate honesty, responsibility, discipline, and empathy among students, its implementation in contemporary educational settings faces new challenges shaped by digital transformation (Yusuf & Laksmi Evasufi Widi Fajari, 2025). Previous discussions have largely emphasized the moral objectives (Moreno-Ortiz & María

García-Gámez, 2026) of character education and its alignment with national education goals; however, they often overlook how these values are negotiated, internalised, and potentially transformed within digitally mediated learning environments (Mufrihah, Yudha, Supriatna, Ahman, & Nurihsan, 2025; Permadi, Sain, Thelma, & Alai, 2025; Turrohma, Prasetya, & Nuplord, 2025). By incorporating media literacy through the lens of religion and philosophy, educators can foster a deeper understanding of truth, virtue, and moral responsibility in an increasingly complex information landscape (Liang, Liang, & Liang, 2025). In practice, the dominance of digital media in students' daily lives introduces complex moral dynamics that cannot be addressed solely through traditional character education approaches (Fahrudin & Warti'ah, 2023; Zamroni, Fatikh, & Sholihah, 2025). This condition indicates that character education should no longer be understood merely as the transmission of moral norms, but as a dynamic process involving cognitive, affective, and psychomotor dimensions that are continuously shaped by digital interactions. Therefore, there is a critical need to reconceptualise character education by integrating digital literacy as a transformative framework that enables students to develop moral reasoning, ethical awareness, and responsible behaviour in both physical and digital social contexts.

This study aims to explore how digital media can support the internalisation of core moral values and foster participatory character building in Madrasah Ibtidaiyah. Specifically, it examines how teachers and parents collaborate through digital platforms to mediate character learning and ethical reasoning. By situating digital literacy within transformative and sociocultural learning perspectives, the research seeks to provide a framework that addresses both cognitive and affective dimensions of moral development. The study investigates two main questions: How does digital literacy mediate the internalisation of moral values in students, What role do teachers and parents play in supporting character education through digital tools? It is hypothesized that effective integration of digital media enhances students' understanding, engagement, and moral reasoning, while the absence of structured collaboration may limit the internalisation of character values.

By bridging digital literacy, character education, and Islamic moral pedagogy, this study contributes both theoretically and practically. Theoretically, it extends existing frameworks of character education by integrating digital moral ecology and sociocultural mediation. Practically, it provides evidence-based recommendations for curriculum design, teacher training, and parent engagement in Islamic primary schools, addressing gaps left by prior research and offering a model adaptable to other similar educational contexts.

METHOD

This study employed a qualitative case study design, grounded in a constructivist epistemology, to explore how digital literacy mediates the transformation of character education in an Islamic primary school context. A case study was chosen because it allows for an in-depth examination of a bounded system in this case, the Madrasah Ibtidaiyah in Sambas District while capturing the complex interactions among teachers, students, and parents in the process of moral value internalization (Creswell, 2014). Unlike other qualitative approaches such as ethnography, grounded theory, phenomenology, or narrative inquiry, the case study approach

is particularly suitable for investigating context-dependent phenomena in real-life educational settings, where multiple data sources can be triangulated to enhance validity.

To strengthen methodological rigor, this research incorporated supportive descriptive quantitative data alongside the primary qualitative investigation, positioning the study as a qualitatively driven case study with quantitative supplements. The quantitative component—mean scores from student surveys served to corroborate qualitative insights regarding the effectiveness of digital literacy interventions in character education.

The study was conducted in a State Madrasah Ibtidaiyah in Sambas District, characterized by a mixed socio-economic student population, varied access to digital devices, and limited ICT infrastructure. The school operates within a strong Islamic cultural environment, where pedagogical practices emphasize religious values, teacher authority, and parental involvement. Its digital ecosystem—comprising smartphones, WhatsApp groups, limited computer labs, and intermittent internet connectivity—directly shapes how moral values are communicated, modeled, and internalized. These contextual characteristics align with the theoretical frameworks of Digital Moral Ecology, Sociocultural Mediation, and Transformative Learning, which collectively position digital media as a socio-cultural tool influencing moral development.

Data collection instruments included structured observation guides, semi-structured interview protocols, and digital documentation (photos, videos, and learning artefacts), all developed based on established indicators of digital literacy and Islamic character values. Content validity was strengthened through expert review by specialists in character education and instructional technology, ensuring reliability and applicability to the research context.

The participants in this study consisted of the madrasah principal, classroom teachers, and upper-grade students from a State Madrasah Ibtidaiyah in Sambas District. Purposive sampling was employed to ensure that all participants had direct involvement in the school's digital literacy and character education initiatives. The research procedure began with obtaining institutional permission, followed by two weeks of classroom observations and in-depth interviews. All procedures adhered to research ethics, including informed consent, confidentiality, and voluntary participation. The main instruments for data collection included structured observation guides, semi-structured interview protocols, and digital documentation (photos, videos, and learning artefacts). These instruments were developed based on established indicators of digital literacy and Islamic character values. Their content validity was strengthened through expert reviews involving specialists in character education and instructional technology.

The collected data were analyzed using NVivo and guided by (Yin, 2018) analytic strategy for case study research, which provides a rigorous and systematic framework for interpreting complex educational phenomena. Yin's approach was operationalized through the following stages:

Pattern Matching

Emerging findings were compared with theoretical propositions derived from Transformative Learning, Sociocultural Mediation, and Digital Moral Ecology. This technique strengthened the internal validity by matching empirical patterns with expected conceptual patterns regarding how digital media mediates moral learning.

Explanation Building

An iterative process was conducted to develop a logical explanation of how digital literacy fosters value internalization. Interview transcripts and observational notes were revisited multiple times to refine causal propositions about teacher–student interactions, parental involvement, and digital media influence.

Developing a Case Description

A rich narrative description of the madrasah context covering socio-economic diversity, digital infrastructure, cultural norms, and pedagogical practices was constructed to situate the findings within the school’s institutional ecology. This step aligns with Yin’s emphasis on contextual embeddedness in case study analysis.

Logic Model Analysis

The study used a logic model to trace input–process–output sequences, showing how digital tools (input) shape learning interactions (process) and contribute to value comprehension (output). NVivo aided in mapping these elements into coherent thematic clusters.

Time-Series and Convergent Evidence Analysis

Although data were collected within a two-week window, Yin’s technique of converging lines of evidence was used to triangulate interviews, observations, and documents, enhancing construct validity.

RESULTS AND DISCUSSION

Findings

To support the qualitative findings, a simple survey was conducted with 60 students in grades IV and V of the State Islamic Boarding School (Madrasah Ibtidaiyah) that became the research sample. The survey used a 1-5 Likert scale related to students’ perceptions of the effectiveness of digital literacy in character building.

Table 1. Survey of Student Perceptions of the Effectiveness of Digital Literacy in Character Building

Statement	Average Score	Category
Digital media helps understand the value of honesty	4.32	Strongly Agree
Digital learning makes learning characters more fun	4.45	Strongly Agree
Teachers make good use of digital media	4.21	Agree
Parents accompany when studying online	3.89	Moderately Agree
Character values reinforced through videos and digital stories	4.38	Strongly Agree

Understanding the Value of Honesty through Digital Media (M = 4.32),

Students responded positively to the use of digital media as a means of understanding the value of honesty. The high mean score indicates that visual content—such as video stories, animations, and educational games—was effective. These media clarified the meaning of honesty in a concrete and accessible manner.

The high mean score for the statement “*Digital media helps understand the value of honesty*” (M = 4.32) suggests that students perceive digital media as a clear and concrete channel for learning moral concepts. The qualitative data show that moral values are constructed through

visual and narrative modeling, where honesty is depicted in everyday situations that students can relate to.

One student explained: “When I watch the story, I can see what happens if the character lies and how they feel guilty. It makes me think that being honest is better, even if it’s difficult.”

(S4)

In this case, digital narratives function as moral simulations that allow students to observe cause–effect relationships between actions and consequences. From the perspective of moral cognition, students are not only memorizing the concept of honesty but are engaging in reasoning about motives, consequences, and emotional outcomes. The combination of visual cues, character emotions, and narrative resolution helps them construct a more nuanced understanding of honesty in context. *Another student remarked: “The video shows a boy returning money he found. I imagined if I were him, and I felt I should do the same.”* (S11)

This quote illustrates moral perspective-taking and the emergence of digital moral agency, where students begin to position themselves as potential moral actors within similar situations. Digital media thus serves as a mediational tool that scaffolds the transition from abstract moral rules to personally meaningful commitments.



Figure 1. Students of MIN 2 Sambas Visual content

Character Learning is More Fun (M = 4.45)

The highest score was obtained on this statement, indicating that digital-based learning In addition to also conveys values, but also creates an engaging learning experience. This has the potential to increase students' emotional and cognitive engagement with character values.

The highest mean score appears in the statement “*Digital learning makes learning characters more fun*” (M = 4.45). This indicates that digital media not only transmits values but also reconfigures the affective climate of character education. Students frequently described digital-based lessons as “not boring”, “more alive”, and “easier to remember”. One student commented: “When we learn with videos and stories, I don’t feel sleepy. I enjoy it, and I remember the message longer.” (S18).

From the standpoint of transformative learning, enjoyment and emotional engagement act as triggers for reflection. When students feel positively connected to the learning experience, they are more willing to question their previous habits and re-examine their own behavior.

Digital media, therefore, does not merely entertain; it activates emotional channels that make moral reflection more accessible.

Another student stated: “The funny animations make me laugh, but at the end there is always a lesson. I feel like the advice is talking directly to me.” (S27)

Here, we see how humour and narrative closure combine to form a narrative-based moral dialogue, where the learner perceives the message as personally addressed. This indicates an emerging sense of moral agency in digital spaces, where students do not passively consume content but actively interpret and internalize its meaning



Figure 2. Digital Learning

Utilization of Digital Media by Teachers (M = 4.21).

The majority of students stated that teachers have utilized digital media well, especially in compiling character materials that are appropriate to the age and context of students. This is an indicator that teachers' competence in educational technology supports the character transformation process. The item “*Teachers make good use of digital media*” received a mean score of 4.21, suggesting that, from students’ perspectives, teachers exercise competent professional digital agency in selecting and using digital tools for character education.

A student reflected: “Our teacher chooses videos that are suitable for our age. She pauses the video and asks us what we learn from the story.” (S9)

This practice illustrates sociocultural mediation, where the teacher acts as a mediator between students and digital artefacts. Rather than leaving interpretation entirely to the screen, teachers guide students to articulate and negotiate meanings. This aligns with Vygotsky’s view that tools and signs here, digital media gain educational power when embedded in guided interaction.

In another interview, a student noted: “Sometimes the teacher asks us to create our own short digital story about being honest or helping friends.” (S22)

This indicates a shift from consuming to producing moral narratives, strengthening students’ digital and moral agency. By inviting students to create content, teachers allow them to reconstruct moral values in their own words and visual language, which deepens cognitive and affective engagement with the values taught.

Parental Assistance (M = 3.89)

Despite being in the “moderately agree” category, this score shows that there are still obstacles in parental involvement during the online learning process. Some students stated that not all parents have the time or capacity to be actively involved in the character learning assistance process at home.

The relatively lower mean score for *“Parents accompany when studying online”* ($M = 3.89$) reveals a partial but inconsistent parental presence in digital character learning. While some students reported active support, others indicated minimal involvement due to time, literacy, or technological constraints. One student admitted: “Sometimes my mother is busy, so I watch the video alone. I only tell her a little about the lesson.” (S31).

This suggests that the home digital moral ecology is uneven, with some students experiencing rich dialogic reinforcement and others navigating moral content more independently. Another student stated: “My father only checks if I am not playing games too much, but he doesn’t always discuss the moral lessons.” (S36)

These accounts show that parental mediation often focuses on control and regulation (screen time, gaming) rather than co-interpretation of moral meanings. This has implications for moral cognition in digital environments, as the absence of reflective dialogue at home may limit the depth of moral reasoning triggered by digital content. The findings therefore underscore the need for structured school-home collaboration to ensure that digital moral messages are reinforced consistently across contexts.

Value Reinforcement through Videos and Digital Stories ($M = 4.38$)

Digital narrative-based content is highly appreciated by students because it is able to provide a concrete picture of good behavior that can be emulated. This media is also considered more effective because it touches the affective side and encourages students' self-reflection.

The statement *“Character values are reinforced through videos and digital stories”* obtained a high mean score ($M = 4.38$), confirming that digital narratives play a central role in value reinforcement. Students repeatedly emphasized that stories, characters, and scenarios helped them “see” what good and bad behavior looks like in concrete situations.

One student explained: “In the story, the character first does something wrong and then realizes it. I imagine myself in that situation and think about what I should do.” (S13)

This exemplifies moral imagination, where students use narrative scenarios to rehearse alternative courses of action and compare them with their own values. From a theoretical standpoint, digital stories provide symbolic spaces in which learners experiment with moral choices without real-world consequences. This supports both moral cognitive development (reasoning about right and wrong) and digital moral agency (imagining oneself as an actor in digital-moral situations).

Another student shared: “The story about helping a friend who is bullied online made me feel that I should not stay silent if I see something unfair.” (S19). Here, the digital narrative not only communicates a value (helping, justice) but also re-positions the student as an active moral agent, responsible for responding to injustice in digital and physical spaces. This reflects a movement from passive reception to transformative moral engagement, aligning with transformative learning theory.

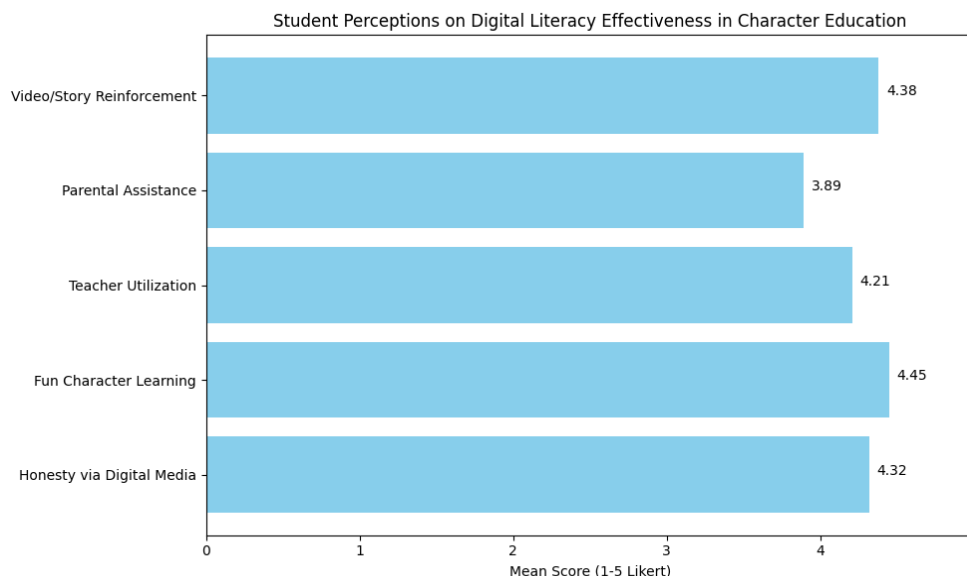


Figure 1. Student Perceptions on Digital Literacy Effectiveness in Character Education

The results of the study indicate that digital-based learning is highly effective in enhancing students' character learning experiences. The indicator 'Digital learning makes learning characters more fun' received the highest score ($M = 4.45$), indicating that students not only understand moral values but are also more emotionally engaged and motivated, thereby supporting moral reflection and internalisation of values (Banda, 2025). The indicator 'Character values reinforced through videos and digital stories' ($M = 4.38$) shows that digital narrative content strengthens students' understanding of good behaviour, improves moral imagination, and strengthens digital moral agency. Digital media also serves as a concrete channel for understanding abstract moral concepts, such as honesty, through visual and narrative simulations, with the score 'Digital media helps understand the value of honesty' reaching 4.32. Teachers utilise digital media professionally with a score of 4.21, acting as mediators in character learning in accordance with the principles of Sociocultural Mediation (Vygotsky, 1978). Meanwhile, parental involvement in online learning is still limited ($M = 3.89$), indicating the need for more structured teacher-parent collaboration to strengthen the internalisation of values at home. Overall, digital literacy has been proven to increase student engagement and understanding through interactive and narrative content, but its effectiveness remains influenced by teacher and parent support, emphasising the importance of a holistic and collaborative approach in digital-based character education.

Discussion

Internalization of Character Values through Digital Media

The use of digital media has become a strategic medium in conveying character values to students of Madrasah Ibtidaiyah Negeri 2 Sambas. Based on the results of NVivo analysis, this theme obtained the highest frequency, which shows the dominance of discourse on how teachers integrate digital content such as educational videos, infographics, interactive stories,

and learning apps in strengthening character values such as honesty, responsibility, and cooperation.

The finding that teachers actively integrate digital media such as educational videos, infographics, and learning applications to strengthen character values shows that digital literacy is not only a technical tool, but also a transformative medium in character education (Budiyono, Suroso, & Priyanto, 2024; Maulida, Prasetya, & Ghanib, 2025; Mustikamah, Na'imah, & Qutsiyah, 2025; Nada Nabilah, Juliani, Nida Khafia Lubis, Kristiana, & Wahyu Rizqi Ardana, 2024; Nurdi & Ahmad, 2025). This responds to the gap in previous literature that shows the limited implementation of digital literacy at the basic education level (Ampesi, Handayani, Azizah, Januari, & Hermanto, 2025; Asweni, Wabiser, & Amsad, 2024; Pohan & Wandini, 2025; Simanjuntak, Rafli, & Utami, 2025; Tang, Cooper, Rappa, & Edwards, 2026). By utilizing contextually designed and engaging digital content, teachers not only transfer knowledge, but also shape moral values in a context that is more applicable and relevant to students' lives.

Findings on teachers' use of digital media show that digital literacy operates as a non-neutral moral mediation practice. Although educational videos and digital narratives provide effective prosocial models, the process of internalising values takes place within a broader media ecology that often conflicts with the Islamic moral norms taught in madrasahs. The (Vygotsky, 1978), mediation perspective helps explain the role of technology as a symbolic tool, but students' moral interpretations remain shaped by their digital habitus (Bourdieu, 1984), which is influenced by inequalities in access and home digital culture. This confirms that digital character education is not only a learning process, but also an arena for the negotiation of values between institutions, families, and the media.

From (Albert Bandura, 1986) Bandura's social learning perspective, teacher-curated digital content serves as counter-modelling to the mainstream of more problematic moral models in the public digital space. However, the lack of parental guidance and device inequality indicate structural moral vulnerability, where some students do not obtain a stable and layered moral ecology as described by (Bronfenbrenner, 1979). Thus, the integration of digital literacy (Trisiana, Sutikno, & Wicaksono, 2020) in character education must be understood as a socio-political intervention: it addresses, while also reproducing, inequalities in digital and moral capital. In conclusion, digital media-based character learning in madrasahs not only teaches values but also reframes how morality is negotiated in a digital environment fraught with ambivalence and power asymmetries.

To avoid gaps in the implementation of digital literacy in character education at the Madrasah Ibtidaiyah level, it is recommended that teachers actively design learning that is integrated with value-based technology. The utilization of educational videos, infographics and learning applications that suit the characteristics of learners is a concrete alternative in creating a relevant learning environment. It is important for educational institutions to support this initiative by providing access to infrastructure and digital literacy-based training. Thus, potential obstacles due to the lack of digital media in learning can be prevented from the beginning. However, if these conditions already occur, there is no need to worry because the results of this study have shown that the targeted integration of digital content can be an effective solution to strengthen students' character values.

The dominant use of digital content found in this study challenges conventional approaches to character education that tend to be lecture-based and normative. Content such as interactive stories and educational videos provide opportunities for students to experience the value internalization process more deeply through narrative and visual approaches. This is in line with the view of (A. Bandura, 1962) in social learning theory, which emphasizes that children will more easily understand and imitate behavior through observation of concretely displayed models. Thus, the transformation of the approach from indoctrinative methods to digital media-based participatory approaches creates a new space for more meaningful character learning. The use of digital content also allows personalization of learning according to student characteristics, which is rarely found in conventional approaches. To avoid being trapped in conventional and decontextualized character learning methods, educators are encouraged to shift to participatory approaches through digital media that stimulate students' emotional and cognitive engagement. Interactive stories and app-based simulations are proven to improve understanding of values such as honesty and responsibility. These strategies also build meaningful and memorable learning experiences. Teachers need to be given the space to experiment and innovate with various forms of value-oriented educational content. If the character learning that has been implemented previously is still monotonous and ineffective, the results of this study provide evidence that the transformation of methods through digitalization is a proven solution that can improve the effectiveness of character education.

The high frequency of use of digital content relevant to the values of honesty, responsibility and cooperation makes an important contribution to the empirical evidence of the effectiveness of digital literacy in character education. While many previous studies have emphasized the potential dangers of digital media, this finding underscores that if used purposefully, digital media can strengthen the affective aspects of education (Ribble, 2011). This research also supports the *positive digital citizenship* approach, which emphasizes the use of technology to build a strong moral identity from an early age. This process reflects character learning practices that do not only take place in the classroom, but also extend to students' digital experiences. Thus, digitalization in character education is not a threat, but rather an opportunity to strengthen human values through a medium that is familiar to the current generation.

Finally, these findings make an important contribution to the development of a digital literacy-based character learning model that is contextual and relevant to the conditions of Madrasah Ibtidaiyah in Indonesia. This integrative model is rooted in local reality where teachers have the creativity to combine technology with Islamic values and local wisdom. This expands the discourse that digital literacy is not universal, but needs to be adapted to the needs and cultural values of learners (Jhunhunwala & Mishra, 2012; Taja, Nurdin, Kosasih, Suresman, & Supriyadi, 2021). Thus, this approach has the potential to become a conceptual and practical reference for the development of character education policies in the madrasah environment. In addition, this research opens space for further studies in developing a more systematic pedagogical framework regarding the integration of digital literacy in character education at the basic education level.

Parent-Teacher Collaboration through Digital Platforms

The findings that show the importance of collaboration between teachers and parents through digital platforms such as WhatsApp and Google Classroom expand the understanding that character education cannot stand alone in the institutional realm of schools. The use of WhatsApp and Google Classroom does open up opportunities for digital collaboration between teachers and parents, but the fact that parental involvement is only at a 'moderate' level reflects structural and cultural barriers that cannot be ignored. In the context of madrasahs, many families have limited digital habits (Bourdieu, 1984), access to devices, low digital literacy, and a cultural understanding that character education is the responsibility of religious teachers so they tend to be minimally involved. Epstein's (Palts & Kalmus, 2015) Overlapping Spheres of Influence model is relevant, but the overlap between home and school is weakened by digital inequality and incompatible technological rhythms; teachers' messages via WhatsApp are often interpreted as administrative information rather than an invitation to moral dialogue. From a media ecology perspective, digital platforms do disseminate moral values, but without the support of reflection at home, the internalisation of values in children is fragmented (Mustarsida, Maarif, & Rusydi, 2023; Shofiatin & Rosodor, 2024). Thus, moderate parental involvement is not merely low participation, but the result of complex interactions between technology access, family culture, and media ecology that shape children's moral experiences.

The previous view that puts the responsibility of character building solely on the school is now less relevant in the digital era. (Epstein, 2011; Pennycook dkk., 2021) in the *Overlapping Spheres of Influence* model emphasizes that effective education, including character education, requires synergistic involvement between families and schools. Digital platforms allow communication and coordination of values between the two spheres to occur in real-time and consistently. Thus, this technology-based collaboration can be considered as a strategic strategy to bridge the role gap between home and madrasah in supporting the internalization of character values in children.

Digital platforms can promote more effective two-way communication between teachers and parents. This research shows that the use of communication apps such as ClassDojo and Seesaw encourages parents' participation in their children's education (Velasco dkk., 2024). The results revealed that parents engaged in discussions covering various important aspects of home-school cooperation. They reflected on their individual roles in digital home-school collaboration, the significance of the information received from the school, and the nature of the school's involvement in home-school collaboration. Additionally, the focus group discussions highlighted the positive effects of using digital tools on parents' experiences of digital home-school collaboration (Pöntinen, Rätty-Záborszky, & Kontkanen, 2023).

Some teachers explained that they actually use the parent's chosen channel for reasons of safety, convenience, or timeliness, as their goal is to interact with parents in any way possible. Discussions with parents, in turn, revealed that they agreed to use the communication channel chosen by the teacher use the communication channel chosen by the teacher (Miftahuddin, Aman, & Yuliantri, 2024; Palts & Kalmus, 2015; Widiana, Triyono, Sudirtha, Adijaya, & Wulandari, 2023).

Referring to Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979), interactions between teachers and parents via WhatsApp and Google Classroom are part of the mesosystem, which is the space where the two main contexts of children home and school meet. However, this mesosystem does not function ideally because it is influenced by conditions within the family microsystem, such as parents' time constraints, low digital literacy, and economic inequality that affects access to devices and connectivity. The literature by Olmstead (2013) and Zlotnikova & van der Weide (2015) emphasises that the effectiveness of digital-based partnerships depends on the selection of communication channels that suit the preferences and capacities of families; however, in the context of madrasahs, these preferences are shaped by cultural norms, parents' work structures, and household priorities that are not always in line with the rhythm of school communication. Therefore, the analysis needs to highlight how digital platforms, despite enabling faster and more efficient communication, can actually reinforce disparities if they do not take into account technological literacy disparities and the socio-economic burden on families (Prismadianto, Endrawati, & Putra, 2025). This study needs to point out that strengthening family-school partnerships through digital media must take into account the complex dynamics of the social ecology, not just the selection of communication platforms.

To avoid neglecting parental involvement in digital-based character education, it is recommended that madrasahs initiate a structured and sustainable communication system through digital platforms such as WhatsApp, Google Classroom, or official school social media. Parents need to be actively involved, not only as recipients of information, but also as dialogical partners in assisting children's character development. This effort will strengthen the role of the family in expanding the character learning space outside of school. Researchers suggest that teachers periodically deliver character value content that can be accessed and understood by parents, so that there is continuity of education between madrasah and home. If parental involvement has previously been passive or even unawakened, then there is no need to worry, because the results of this study have shown that the use of digital platforms can be an effective bridge that can overcome these problems.

Many previous studies have highlighted the lack of parental involvement in character education due to limitations in time, distance or access to information. The findings challenge these assumptions by showing that digital technology has opened up new opportunities to actively involve parents in the character learning process. WhatsApp and YouTube, for example, provide a medium to deliver value materials and child development reports directly to parents so that they can follow up on character learning at home. The *parental involvement* theory developed by (Hoover-Dempsey & Sandler, 1997) supports that parents' perception of the importance of their role increases when they feel they have access to information on their children's education. Therefore, digital literacy is not only important for teachers but also a crucial element to increase parents' participation in character education.

To prevent value gaps between home and madrasah, there is a need to synchronize character learning objectives between teachers and parents. A relevant suggestion is to build a common understanding through digital communication forums, for example in the form of discussion groups or short online trainings that introduce the main values taught in madrasah. Thus, parents will have the same reference in guiding children at home according to the values

instilled by teachers. Consistency in the delivery of values is important to strengthen the character internalization process in students. And if previously there have been differences in value approaches between home and madrasah, the results of this study have provided a solution through the use of digital platforms as a medium for unification and coordination between educators and parents.

One of the classic challenges in character education is the inconsistency of values between home and school, which can lead to moral confusion in learners. The discovery that digital platforms serve as a communication bridge between teachers and parents provides a concrete answer to this challenge. When values such as honesty, responsibility and cooperation are delivered continuously through digital channels, learners will receive uniform messages from both of their primary environments. This is in line with the principles of *ecological systems theory* from (Bronfenbrenner, 1979), which emphasizes the importance of integration between microsystems in shaping children's behavior. Thus, intensive and structured digital communication between teachers and parents can reduce the value gap and form a cohesive character education ecosystem.

Digitalization of learning is often perceived as an individualistic process, lacking social touch, and at risk of reducing emotional engagement between educational actors. The findings in this study reinforce that the use of digital platforms can be a tool to facilitate social relationships and cooperation between parties in education. WhatsApp is not just a one-way communication medium, but a space for discussion and exchange of good practices between teachers and parents. The *socio-cultural theory* perspective developed by (Vygotsky, 1978) supports that learning - including value learning - occurs optimally in the context of social interaction. Thus, the digital collaboration found in this study challenges the notion that digital education weakens social aspects; instead, it strengthens them through intensive and meaningful communication networks.

This research also enriches the literature by showing a digital platform-based collaboration model that can be widely adapted by Madrasah Ibtidaiyah in character education. When madrasahs are able to establish a scheduled, transparent and technology-based communication system with parents, character education is no longer exclusively the responsibility of teachers. This model emphasizes the importance of digital communication planning that includes conveying grades, involving parents in character assessment, and reporting student progress. According to (Ertmer & Ottenbreit-Leftwich, 2010), technology integration in education will only be successful if it is supported by a paradigm shift and cross-role collaboration. Thus, the results of this study not only address the existing gap, but also provide an initial foothold for the development of a collaborative framework that is contextual and applicable in the madrasah environment.

In order to avoid a one-way approach to character education from teachers to students, it is necessary to involve parents in the process of planning and evaluating children's character. This can be done by providing a feedback space through a digital platform, so that parents can convey their responses, constraints, and children's development at home directly to the teacher. This two-way approach creates a sense of ownership and shared responsibility in shaping children's character. It is also recommended that madrasahs develop internal policies that support regular digital reporting and engagement practices. If previously character education

was only carried out by teachers without family involvement, then the results of this study have proven that digital collaboration can enrich and strengthen the character education process to be more participatory and holistic (Putra, 2017)

The lack of technology-based collaborative models in character learning can be prevented by designing digital collaboration guidelines or protocols that are appropriate to the local context of madrasah. These guidelines can include communication mechanisms, the type of value content shared, and the role of each party in assisting children (Abidin, Fatawi, & Kausar, 2025). Teachers should be facilitated to improve their digital literacy skills and collaborative communication with parents. This advice also includes the importance of building a healthy, ethical and character-oriented digital culture. If the madrasah does not yet have such a model, the results of this study have offered good practices that can be used as an initial reference in developing a collaborative design that is relevant, adaptive and can be implemented in stages.

The Digital-Mediated Character Formation Model (DMCF Model) explains that character formation in madrasahs occurs through the mediation of digital devices that connect teachers, parents, and students' digital ecology. Moral values are conveyed through digital content (videos, stories, animations) that trigger moral attention and imagination, then interpreted through the guidance of teachers as the main mediators. Parents act as digital companions with involvement influenced by digital habitus, technological literacy, time, and the family's socio-economic conditions. Digital interactions between home and school via WhatsApp or Google Classroom form a mesosystem alignment (Bronfenbrenner), enabling continuity of values, but also opening up space for inequality if the family's digital capacity is inadequate. This model places character learning in the broader context of digital moral ecology, while contributing to the global debate on *digital citizenship* and moral development by emphasising the importance of digital moral agency and value negotiation in contemporary digital culture.

CONCLUSION

This study concludes that the transformation of character education through digital literacy at the State Madrasah Ibtidaiyah (MIN) in Sambas Regency cannot run optimally without active collaboration between teachers and parents. Analysis shows that digital platforms such as WhatsApp, Google Classroom, and YouTube have played a strategic role as a bridge of communication between the madrasah and the home. This collaboration enables the creation of continuity of values between the school and family environments, as well as strengthening the role of parents in helping to shape their children's character. This transformation is not only technological but also cultural, as it encourages a paradigm shift in the relationship between educators and parents. Therefore, these findings make an important contribution to the development of a more adaptive and relevant collaborative approach to the challenges of the digital age in the context of Islamic primary education. From a theoretical perspective, these findings broaden the understanding of the role of technology as a social mediator in value learning, while reinforcing Bronfenbrenner's ecological theory and Vygotsky's sociocultural theory in the framework of character education. Practically, the results of this study provide a concrete model that can be used as a reference by madrasahs in designing digital platform-based communication to strengthen character values. These findings also contribute to the development of educational policies that support collaboration between home and school in

the digital era. However, this study has limitations, particularly in its scope, which is limited to one specific madrasah context, and its use of qualitative methods that do not measure the quantitative impact of such collaboration. Therefore, it is recommended that future research expand its scope to include more locations and participants, and combine quantitative approaches to examine the deeper causal relationship between digital collaboration and overall student character development.

REFERENCES

- Abidin, A. A., Fatawi, I., & Kausar, S. (2025). The Values of Islamic Education for Building Tolerance in the Jombang Community: A Qualitative Study of the Role of Religious Harmony Forum. *Tafkir: Interdisciplinary Journal of Islamic Education*, 6(1), 1–16. <https://doi.org/10.31538/tijie.v6i1.1182>
- Ampesi, D. V., Handayani, E. R., Azizah, N., Januari, A. R., & Hermanto. (2025). Intensive Mentoring Approach to Enhance Qur’anic Literacy and Prayer Memorization in Secondary Schools. *Journal of Islamic Education Research*, 6(4), 393–408. <https://doi.org/10.35719/jier.v6i4.519>
- Aprily, N. M. (2020). Implementasi Pendidikan Karakter Di Madrasah Ibtidaiyah Swasta (Mis) Az-Zahra Kota Bandung. *Dialog*, 43(1), 33–48. <https://doi.org/10.47655/dialog.v43i1.341>
- Asweni, D. F. N., Wabiser, Y. D., & Amsad, L. N. (2024). Analysis of the Needs for Developing Papua Context-Based Literacy Teaching Materials for ANBK Preparation: A Literature Review. *Interdisciplinary Journal of Social Sciences*, 1(2), 87–94. <https://doi.org/10.59373/ijoss.v1i2.86>
- Banda, J. H. K. (2025). A Critical Analysis Of Pedagogical Strategies For Fostering Ethical Decision-Making , Integrity , And Social Responsibility In Generation Z : Addressing The Impact Of Modern Societal Challenges On Moral Development. *Journal of Trends in Arts and Humanities*, 2(1), 15–25. <https://doi.org/10.61784/jtah3035>
- Bandura, A. (1962). *Social learning through imitation*. In M. R. Jones (Ed.), *Nebraska Symposium on Motivation*. Univer. Nebraska Press.
- Bandura, Albert. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice Hall.
- Bourdieu, P. (1984). *Distinction: A Social Critique of the Judgement of Taste*. Harvard University Press.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Brown, L. R., McCray, P., Neal, J. L., & Caldwell-Serges, L. (2023). Corporate Digital Literacy Mandates: Using SDT-Based Strategies to Circumvent “Quiet Quitting” Syndrome. *International Journal of Advanced Corporate Learning (iJAC)*, 16(2), 18–36. <https://doi.org/10.3991/ijac.v16i2.35747>
- Budiyono, H., Suroso, & Priyanto. (2024). The implementation of learning writing and development of character values of high school students. *Cakrawala Pendidikan*, 43(3), 694–710. <https://doi.org/10.21831/cp.v43i3.59966>
- Choi, S. (2020). Enhancing Teacher Self-Efficacy in Multicultural Classrooms and School Climate: The Role of Professional Development in Multicultural Education in the United States and South Korea. *AERA Open*, 6(4). <https://doi.org/10.1177/2332858420973574>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.)*.

- Epstein, J. L. (2011). *School, family, and community partnerships: Preparing educators and improving schools* (2nd, Ed.). New York: Routledge.
- Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255–284. <https://doi.org/10.1080/15391523.2010.10782551>
- Fahrudin, A. A., & Warti'ah, W. (2023). Manajemen pendidikan karakter disiplin terhadap peserta didik dalam peningkatan mutu pendidikan islam. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, 19(2), 280–290. <https://doi.org/10.54069/attaqwa.v19i2.632>
- Fatah, M., Khoiruddin, M. A., & Fakhruddin, F. M. (2025). Pesantren-Based Character Education: The Dzuriyah Strategy in Shaping the Character of Santri Ndalem. *Interdisciplinary Journal of Social Sciences*, 2(2), 65–75. <https://doi.org/10.59373/ijoss.v2i2.191>
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3–42. <https://doi.org/10.3102/00346543067001003>
- Ikhwan, A., Anjelita, R., Kartiko, A., Zukhrufin, F. K., & Ikhwan, A. N. (2025). Strengthening Student Character Through Tapak Suci Extracurricular Activities. *Kharisma: Jurnal Administrasi Dan Manajemen Pendidikan*, 4(1), 73–85. <https://doi.org/10.59373/kharisma.v4i1.70>
- Jhunjhunwala, S., & Mishra, R. K. (2012). Board diversity and corporate performance: The Indian evidence. *IUP Journal of Corporate Governanc*, 11(3).
- Liang, Y., Liang, T., & Liang, S. (2025). Literasi Media Dan Pendidikan Moral: Sebuah Penelitian Filosofis Tentang Pengajaran Ideologis Melalui Perspektif Agama Dan Etika. *Jurnal Filsafat Agama Eropa*, 17(2), 376–388. <https://doi.org/10.24204/ejpr.2025.4558>
- Lickona, T. (1991). *Educating for Character: How Our Schools Can Teach Respect and Responsibility*. United States: Bantam Books.
- Livingstone, S., & Third, A. (2017). Children and young people's rights in the digital age: An emerging agenda. *New Media & Society*, 19(5), 657–670. <https://doi.org/10.1177/1461444816686318>
- Ma`arif, M. A., Muqorrobin, F. M., Kartiko, A., Sirojuddin, A., & Rofiq, A. (2024). Developing Islamic Character Values Through Student Habituation. *Al-Hayat: Journal of Islamic Education*, 8(1), 337–349. <https://doi.org/10.35723/ajie.v8i1.501>
- Maulida, I., Prasetya, B., & Ghanib, M. F. A. (2025). Integrating Islamic Moral Values into Holistic Education: A Systematic Character Development Model in Indonesian Junior High Schools. *Journal of Islamic Education Research*, 6(4), 443–458. <https://doi.org/10.35719/jier.v6i4.525>
- Miftahuddin, Aman, & Yuliantri, R. D. A. (2024). Islamic character education model: An in-depth analysis for Islamic boarding school. *Cakrawala Pendidikan*, 43(2), 370–380. <https://doi.org/10.21831/cp.v43i2.66516>
- Moreno-Ortiz, A., & María García-Gámez. (2026). Emotion in Context: Human and AI Perspectives on the Affective Landscape of Severance. *Corpus Pragmatics*, 10(15), 1–28. <https://doi.org/10.1007/s41701-025-00220-6>
- Mufrihah, A., Yudha, E. S., Supriatna, M., Ahman, A., & Nurihsan, J. (2025). Rasch Model Analysis of Santri Reverence Morals Scale. *Islamic Guidance and Counseling Journal*, 8(1). <https://doi.org/10.25217/0020258548700>
- Mustarsida, U., Maarif, M. A., & Rusydi, I. (2023). Manajemen Pengembangan Karakter Anak Usia Dini Melalui Kegiatan Parenting. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 4(4), 855–866. <https://doi.org/10.31538/munaddhomah.v4i4.689>

- Mustikamah, M., Na'imah, F. U., & Qutsiyah, D. A. (2025). The Role of the Women's Organization 'WISNU' in the Internalization of Character Values in Pesantren. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, 21(1), 1–12. <https://doi.org/10.54069/attaqwa.v21i1.942>
- Nada Nabilah, Juliani, Nida Khafia Lubis, Kristiana, & Wahyu Rizqi Ardana. (2024). Building Students' Character and Life Skills through the Islamic Religious Education Curriculum. *Journal of Contemporary Gender and Child Studies*, 3(1), 172–177. <https://doi.org/10.61253/jcgcs.v3i1.278>
- Nurdi, M. S., & Ahmad, A. B. (2025). Analyzing the Implementation of Total Quality Management Principles in Character Education Programs at Madrasah Ibtidaiyah. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 8(1), 221–236. <https://doi.org/10.54069/attadrib.v8i1.896>
- Palts, K., & Kalmus, V. (2015). Digital channels in teacher-parent communication: The case of Estonia. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 11(3), 65–81.
- Pennycook, G., Epstein, Z., Mosleh, M., Arechar, A. A., Eckles, D., & Rand, D. G. (2021). Shifting attention to accuracy can reduce misinformation online. *Nature*, 592(7855), 590–595.
- Permadi, B. A., Sain, Z. H., Thelma, C. C., & Alai, A. (2025). Development of Comic-based Akidah Akhlak Teaching Materials on Praiseworthy Morals in Madrasah Ibtidaiyah. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 8(2), 384–396. <https://doi.org/10.54069/attadrib.v8i2.868>
- Pohan, R. I., & Wandini, R. R. (2025). The Influence of the "Earth Tells" Module Based on Ethnomathematics on the Mathematical Literacy Skills of Fifth Grade Elementary School Students. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 8(2), 452–463. <https://doi.org/10.54069/attadrib.v8i2.955>
- Pöntinen, S., Rätty-Záborszky, S., & Kontkanen, S. (2023). Digital Home-school Cooperation by Parents' Perspectives. *International Journal of Technology and Inclusive Education*, 12(1), 1833–1837. <https://doi.org/10.20533/ijtie.2047.0533.2023.0227>
- Prismadianto, G., Endrawati, L., & Putra, F. (2025). The Importance of Educational Attainment and Premarital Counseling in Building Family Harmony and Preventing Domestic Violence to Strengthen National Resilience. *Tafkir: Interdisciplinary Journal of Islamic Education*, 6(2), 305–321. <https://doi.org/10.31538/tijie.v6i2.1324>
- Putra, P. (2017). Internalisasi Pendidikan Karakter pada Pembelajaran IPA melalui Model Konstruktivisme di Madrasah Ibtidaiyah Negeri Sebebal. *Muallimuna: Jurnal Madrasah Ibtidaiyah*, 2(2), 75–88.
- Reksiana, Nata, A., Rosyada, D., Rahiem, M. D. H., & Ugli, A. R. R. (2024). Digital Extension of Digital Literacy Competence for Islamic Religious Education Teachers in the Era of Digital Learning. *Jurnal Pendidikan Agama Islam*, 21(2), 402–420. <https://doi.org/10.14421/jpai.v21i2.9719>
- Ribble, M. (2011). Digital citizenship in schools: Nine elements all students should know. *International Society for Technology in Education*.
- Salmivalli, C., Marinus Voeten, & Elisa Poskiparta. (2011). Bystanders Matter: Associations Between Reinforcing, Defending, and the Frequency of Bullying Behavior in Classrooms. *Taylor & Francis*, 40(5), 668–676. <https://doi.org/10.1080/15374416.2011.597090>
- Shofiatin, A., & Rosodor, S. (2024). Islamic Values in a Multicultural Society: An Analysis of Parenting and Social Integration of Muslim Minorities. *Urwatul Wutsqo: Jurnal Studi*

- Kependidikan Dan Keislaman*, 13(2), 234–244.
<https://doi.org/10.54437/urwatulwutsqo.v13i2.1692>
- Simanjuntak, M. B., Rafli, Z., & Utami, S. R. (2025). Elevating Vocational Student Competence: The Crucial Need for English Literacy Competence. *Jurnal Ilmiah Peuradeun*, 13(1), 721–744. <https://doi.org/10.26811/peuradeun.v13i1.1109>
- Taja, N., Nurdin, E. S., Kosasih, A., Suresman, E., & Supriyadi, T. (2021). Character education in the pandemic era: A religious ethical learning model through Islamic education. *International Journal of Learning, Teaching and Educational Research*, 20(11), 132–153. <https://doi.org/10.26803/ijlter.20.11.8>
- Tang, K.-S., Cooper, G., Rappa, N., & Edwards, J. (2026). Critical questioning with generative AI: Developing AI literacy in secondary education. *Thinking Skills and Creativity*, 59. <https://doi.org/10.1016/j.tsc.2025.102043>
- Trisiana, A., Sutikno, A., & Wicaksono, A. G. (2020). Digital Media-based Character Education Model As A Learning Innovation in the Midst of A Corona Pandemic. *Webology*, 17(2), 103–117. <https://doi.org/10.14704/WEB/V17I2/WEB17019>
- Turrohma, B. M., Prasetya, B., & Nuplord, A. (2025). Integrating Spiritual and Moral Development Through the Tahfidz Program: A Holistic Educational Model. *Journal of Islamic Education Research*, 6(4), 479–492. <https://doi.org/10.35719/jier.v6i4.527>
- Velasco, M. N., Torres, A. A., Manarin, J. A., Baldeo, G. D. C., Garcia, M. A. T., Velasco, C. R. T., & Pajavera, R. M. (2024). Enhancing Parent-Teacher Collaboration in Early Childhood Education through a Web-Based App. *Proceedings - International Conference on Informatics and Computational Sciences*, (July), 131–136. <https://doi.org/10.1109/ICICoS62600.2024.10636878>
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.
- Widiana, I. W., Triyono, S., Sudirtha, I. G., Adijaya, M. A., & Wulandari, I. G. A. A. M. (2023). Bloom's revised taxonomy-oriented learning activity to improve reading interest and creative thinking skills. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2221482>
- Yin, Robert. K. (2018). *Case Study Research and Applications Sixth Edition*. New York: Sage Publication.
- Yusuf, F. A., & Laksmi Evasufi Widi Fajari. (2025). Character Quality Development in Future-Oriented Education: A Case Study of Indonesian Nature-Based Schools. *Educational Process Internasional Journal*, 14(1). <https://doi.org/10.22521/edupij.2025.14.29>
- Zamroni, M. A., Fatikh, M. A., & Sholihah, M. (2025). Membangun Karakter Islami Melalui Pendidikan Berbasis Iman: Perspektif Teologis. *Adiluhung: Journal of Islamic Values and Civilization*, 1(1), 64–79. <https://doi.org/10.59373/adiluhung.v2i1.116>