

Character Education in the Digital Age: Challenges and Opportunities Amidst Technological Developments

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Abstract

This study aims to explore the challenges and opportunities for character education in the digital era, faced with rapid technological developments. The study used a descriptive qualitative approach with data collection techniques through in-depth interviews, observations, and documentation studies involving teachers, students, parents, and education experts. The results indicate that the main challenges in character education in the digital era include social media addiction, decreased direct social interaction, and low digital literacy among teachers and parents. However, opportunities for character strengthening remain open through the use of digital platforms such as educational videos, interactive applications, and social media to campaign for positive values. Strengthening strategies are needed, such as increasing digital literacy, integrating character education into technology-based learning, and multi-stakeholder collaboration between schools, parents, and the community.

Keywords : character education, digital era, digital literacy, technology

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1. Introduction

The development of digital technology has brought about major changes in the social interaction patterns and behavior of the younger generation in various aspects of life. The presence of the internet, social media, and digital devices allows young people to communicate, network, and share information instantly without the constraints of space and time. Interaction patterns previously dominated by face-to-face meetings have now shifted to virtual communication, which is more flexible but less involving direct emotional closeness. Furthermore, the behavior of the younger generation has also undergone a transformation, both in how they acquire knowledge, build their identity, and participate in social and cultural issues (Hanandini, 2024).

Digital technology has also fostered a culture of multitasking, a tendency to quickly seek information, and a more dynamic lifestyle, but it is also vulnerable to distraction and digital addiction. On the other hand, these developments open up significant opportunities for young people to innovate, develop creativity, and build careers in new technology-based sectors. Therefore, it is crucial for all parties families, educational institutions, and the government to equip young people with adequate digital literacy so they can utilize technology wisely, productively, and responsibly (Miswar et al., 2024).

Character education is crucial as a primary foundation for protecting the younger generation from the negative impacts of the rapid development of digital technology. Amidst the rapid flow of information and easy access to various content via the internet and social media, young people are vulnerable to moral degradation due to exposure to values that are

inconsistent with the nation's social and cultural norms. Furthermore, excessive, uncontrolled use of devices can trigger digital addiction, which can lead to a decline in the quality of real-world social interactions, mental health problems, and reduced productivity (Sarwatay et al., 2021).

Furthermore, the younger generation is also facing an identity crisis, often confused about who they are due to the influence of foreign cultures and standards of living shaped by social media. Therefore, character education must be comprehensively integrated into both formal and informal education processes by instilling the values of honesty, responsibility, discipline, empathy, and independence. This education aims not only to develop individuals with integrity, but also to enable the younger generation to select and utilize technology wisely while remaining grounded in the nation's moral and cultural values in every aspect of their lives (Qadir, 2023).

The digital era not only brings challenges but also offers significant opportunities for strengthening the character of the younger generation through the use of digital media and technology-based learning platforms. With various innovations in digital education, character values such as honesty, responsibility, discipline, and social awareness can be instilled through more interactive, creative methods that align with the learning styles of today's generation. E-learning platforms, educational applications, and digital content designed with a moral values approach can be an effective means of developing a personality with integrity (Hadi et al., 2025).

Furthermore, digital technology also enables global collaboration that broadens cultural horizons, fosters tolerance, and strengthens empathy through interactions across nations and communities. With proper management, social media and technology can be a positive medium for building leadership, creativity, and critical thinking skills among young people. Therefore, synergy between education, families, and technology developers is essential to creating a digital ecosystem that not only supports academic achievement but also shapes a generation that is emotionally, socially, and morally intelligent amidst the dynamics of the digital era (Zhanguzhinova et al., 2025).

The challenges of character building in the digital era are increasingly complex due to weak oversight of technology use by the younger generation and the lack of integration of character values into current digital learning systems. The lack of adequate control from parents, educators, and the social environment makes children and adolescents more vulnerable to exposure to negative content, such as violence, pornography, hate speech, and false information, which can shape deviant behavior and undermine morality. On the other hand, many technology-based learning platforms still focus solely on mastering cognitive aspects, without accompanying them with strengthening affective and character aspects (Naswa & Muthoifin, 2025).

As a result, digital-based education often produces students who are academically intelligent but weak in the values of integrity, empathy, and social responsibility. This situation is exacerbated by the lack of training for teachers to effectively integrate character education into the digital curriculum. Therefore, a comprehensive strategy is needed to strengthen the role of supervision, both within the family, school, and community, and to encourage the development of digital content rich in character values. Furthermore, it is crucial to equip educators with the competencies to implement learning methods that are not only technology-based but also capable of instilling positive character in the younger generation (Haikal et al., 2025).

Formal education in Indonesia often fails to optimally integrate character education into technology-based curricula. Despite the continued growth in the use of technology in learning, the primary focus remains on achieving cognitive aspects such as mastery of academic knowledge and skills, while strengthening affective and character development has

yet to become a primary focus in digital curriculum design (Fransyaigu et al., 2021). Many schools and educational institutions lack an integrated strategy to incorporate character values such as honesty, responsibility, empathy, and discipline into every technology-based learning activity. Furthermore, teachers' limited competence in managing digital learning, which also focuses on character building, is a limiting factor. Teachers are generally more skilled at utilizing technology to deliver learning materials, but they lack training in creatively integrating character education into digital media (Rodrigues, 2020).

On the other hand, there are not many learning platforms or applications explicitly designed to build students' character alongside their academic development. Therefore, a more holistic education policy is needed that encourages the integration of character values into every aspect of digital learning, along with intensive training for educators to enable them to fulfill their role as learning facilitators who not only educate but also shape resilient and integrated personalities in the technological era (Zhao et al., 2023).

A new, adaptive, and innovative approach is needed to build the character of the younger generation amidst the rapid development of digital technology. Rapid changes in the world of technology require education systems to not only adopt digital media and methods but also actively integrate character values into every technology-based learning process. This approach must be able to meet the challenges of the times by combining cognitive, emotional, and moral intelligence in a unified whole. For example, character building can be achieved through the use of interactive digital platforms, educational gamification, and multimedia content that is not only visually appealing but also rich in ethical messages and values (Pramesworo et al., 2023).

Furthermore, educators and educational institutions need to be supported with ongoing policies and training to design curricula that are responsive to technological developments and relevant to 21st-century character developments, such as integrity, social responsibility, empathy, and critical thinking skills. Synergy between schools, families, and communities is also crucial to creating a conducive educational ecosystem that fosters a generation that is not only digitally proficient but also possesses resilient personalities, noble character, and is ready to face global challenges (Latuheru et al., 2024).

There is a significant research gap regarding character education in the context of digital technology, with a lack of comprehensive and in-depth studies. Most previous research tends to focus solely on the negative impacts of technology use on the behavior of the younger generation without offering concrete solutions based on character education. Furthermore, few studies specifically explore the direct experiences of teachers, students, and parents in implementing character education through various digital platforms. This situation is further exacerbated by the lack of technology-integrated character education models that can be effectively adopted by educational institutions in Indonesia. Therefore, research is needed to bridge this gap by exploring digital-based character education approaches, strategies, and models that are applicable and relevant to the needs of the times (Timotheou et al., 2023).

This research aims to explore the challenges and opportunities in implementing character education in the digital era, while also understanding the strategies used by educators and educational institutions to build student character through the use of digital media. Furthermore, this research aims to formulate recommendations that can strengthen character education so that it remains relevant and effective amidst the dynamics of ever-changing technological developments, thereby producing a generation that is not only digitally proficient but also imbued with integrity and noble character.

2. Method

This research uses a descriptive qualitative approach to deeply understand the phenomenon of character education in the digital era, focusing on the perceptions, experiences, and strategies implemented by teachers, students, parents, and education experts. The research was conducted in schools, educational institutions, and digital communities, using data collection techniques such as in-depth interviews, observations, and documentation studies of character learning modules and education policies (Ritonga, 2022). Data validation was conducted through source triangulation, member checking, and peer review to ensure the validity of the information obtained. Data analysis was carried out through the stages of data reduction, data presentation in narrative or tabular form, and drawing conclusions regarding the challenges and opportunities of character education amidst technological developments. The research instruments used included an interview guide, observation format, and a documentation study checklist. To maintain data validity, criteria of credibility, transferability, dependability, and confirmability were used so that the results of this study were trustworthy, consistent, and relevant to the broader educational context.

3. Results and Discussion

Based on research conducted through in-depth interviews, observations, and documentation studies, it was found that character education in the digital era faces several significant challenges. The main challenges faced are students' increasing tendency to become addicted to social media and online games, as well as exposure to negative content that has the potential to damage moral values. Furthermore, there is a decline in students' ability to interact directly with others due to the dominance of digital communication, which has resulted in a decline in empathy, manners, and cooperation skills. Furthermore, many teachers and parents still have limited digital literacy skills, making it difficult to guide their children in using technology wisely.

However, this study also found significant opportunities for leveraging technology to strengthen character education. Digital platforms such as educational videos, interactive learning apps, and social media can be effective tools for instilling character values such as honesty, discipline, responsibility, and tolerance. Several schools that have implemented technology-based learning have demonstrated that, with the right strategies, students' character can be developed through a combination of academic materials and values education.

Effective strategies have been found through strengthening digital literacy for teachers, students, and parents, integrating character education into every technology-based subject, and collaboration between schools, families, and communities. Teachers act as facilitators in internalizing character values both offline and online, while parents play a role in guiding and controlling technology use at home. This study concludes that although the digital era poses serious challenges for character education, opportunities to strengthen these values remain wide open if accompanied by learning innovation, improved educator competency, and multi-stakeholder synergy in educating the younger generation in the digital era.

The Challenges of Character Education in the Digital Era

Character education in the digital age faces various complex challenges along with the rapid development of technology. One major challenge is the widespread misuse of technology by students, such as addiction to social media, online games, and access to negative content that has the potential to shape deviant behavior and disregard moral values (Juanda et al., 2025). Furthermore, the decreased intensity of face-to-face social interactions due to the dominance of virtual communication has also impacted the decline in empathy, interpersonal communication skills, and social sensitivity among students. Another challenge is the low digital literacy of teachers and parents, resulting in limited ability to guide and

direct the healthy and productive use of technology. This condition is exacerbated by the limitations of the educational curriculum, which has not fully integrated character education with the systematic and applicable use of digital technology. Without a comprehensive strategy and multi-stakeholder support, efforts to build student character amidst the onslaught of digitalization will be increasingly difficult to implement effectively (Neumeyer et al., 2021).

Character Education Opportunities through Technology

The opportunities for character education through the use of digital technology are truly abundant in this modern era. Digital platforms serve not only as a means of delivering academic material but can also be leveraged to shape students' character through various innovative methods such as inspiring educational videos, interactive applications that encourage active engagement, and gamified learning that integrates character values into every challenge or game provided (Wong & Hughes, 2023). Furthermore, social media has the potential to become a platform for promoting positive values such as honesty, responsibility, discipline, and tolerance, with creative content that is easily accessible and disseminated among the younger generation. The use of e-learning also provides a more contextual space for character education through online discussions, case study completion, and value reflection, encouraging students to think critically and internalize moral values in their daily lives. Thus, technology is not only a tool but also a medium of transformation in instilling character education in an adaptive and relevant manner to meet the needs of the times (Lina & Robbaniyah, 2024).

Strategies for Strengthening Character Education in the Digital Era

To address the challenges of character education in the digital age, a comprehensive and sustainable strengthening strategy is needed. One strategic step is to improve digital literacy for teachers, students, and parents, so they have sufficient skills to utilize technology as an effective medium for instilling character values. This digital literacy encompasses not only technical skills but also an understanding of digital ethics, cybersecurity, and the ability to filter useful information. Furthermore, the integration of character values into every subject through a technology-based approach is crucial so that character formation does not occur separately from academic learning (Krisnaningsih et al., 2023).

This strategy can be implemented through the use of educational apps, online discussion platforms, and case study-based problem-solving relevant to students' digital lives. Collaboration between schools, parents, and digital communities also needs to be strengthened to create a healthy and conducive character education ecosystem, where all parties play an active role in providing role models and ongoing mentoring. (Trespacios & Florez, 2020) Furthermore, developing an adaptive curriculum is imperative, combining character education with strengthening 21st-century skills such as critical thinking, creativity, communication, and collaboration. This type of curriculum will prepare students not only to become individuals of character but also to be competent in facing the complex challenges of the digital age (Erstad et al., 2021).

The Role of Teachers and Parents

The role of teachers and parents is key to optimizing character education in this challenging digital era. Teachers are no longer merely transmitters of material, but also serve as facilitators and role models capable of internalizing character values both in the physical classroom and through online learning platforms (Borup & Stimson, 2019). Through exemplary behavior, wise use of digital media, and the development of learning activities that integrate moral values, teachers can instill character traits such as integrity, responsibility, and

tolerance in students. Meanwhile, parents have a strategic role as supervisors, mentors, and companions in the use of technology at home (Cholifah & Faelasup, 2024).

Parents are expected to limit their children's access to inappropriate content, guide the use of digital devices toward educational activities, and foster open communication regarding the risks and benefits of technology. Synergy between teachers and parents is crucial for creating continuous character development, both at school and at home, so that character education can be holistic and effective in shaping a generation that is intellectually and morally intelligent amidst the current digitalization (Nurdiansyah & Wahab, 2025).

The implications for education in the digital era demand continuous innovation in character-based learning designs that are relevant to the characteristics of the digital native generation. Learning models must be creatively designed by combining interactive technology, educational multimedia, and learning methods that encourage active student participation in understanding and practicing character values. Furthermore, a more progressive and responsive national education policy is needed to encourage the integration of character education through the use of technology in the school environment. This policy should include strengthening educators' capacity to apply technology pedagogically, providing equitable digital infrastructure, and developing a curriculum that is adaptive to technological developments while rooted in the nation's moral and cultural values. Thus, education will not only focus on academic achievement but also be able to shape a generation with strong character, ethical technology, and prepared to face global challenges in the digital era.

Conclusions

Character education in the digital era faces serious challenges such as addiction to social media and online games, as well as a decline in the quality of students' social interactions, which impacts empathy and communication skills. Low digital literacy among teachers and parents also hinders students' ability to use technology wisely and productively. However, advances in digital technology also open up significant opportunities to strengthen character education through interactive learning media, educational videos, and positive value campaigns on social media that are easily accessible to the younger generation. However, the integration of character education into every technology-based subject in educational institutions still needs to be strengthened to ensure consistent moral values are instilled. Effective strategies include strengthening digital literacy for all parties, innovative character learning that utilizes technology, and collaboration between schools, parents, and communities to create a healthy character education ecosystem. In this regard, the role of teachers as facilitators at school and parents as supervisors at home is crucial to ensure the ongoing internalization of character values. Therefore, a national education policy that is more adaptive and responsive to the dynamics of technological developments is needed to strengthen character education among the younger generation.

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