

Integration of Digital Ethics into the Digital Literacy Curriculum: Building the Character of 21st Century Generation

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Abstract

21st-century education demands mastery of digital literacy as one of the core competencies for the younger generation. However, digital literacy that focuses solely on technical skills without considering ethical aspects can pose moral challenges in the digital era. This study examines the importance of integrating digital ethics into the digital literacy curriculum to build the character of the 21st-century generation to be responsible, critical, and ethical in their use of technology. Using a qualitative descriptive approach, this research analyzes various literature and educational practices that incorporate the teaching of digital ethics into the learning process. The findings show that the integration of digital ethics not only helps students understand how to use technology effectively but also enhances their critical awareness of the social and moral impacts of digital activities. Moreover, a curriculum that emphasizes digital ethics contributes to the development of students' character, enabling them to think reflectively, respect privacy, and avoid negative behaviors such as cyberbullying and plagiarism. Therefore, a holistic digital literacy education, encompassing both technical skills and ethical awareness, is an urgent need to prepare the younger generation to face the challenges of the complex digital world.

Keywords: digital ethics, digital literacy, character, 21st-century generation, education.

Introduction

The development of digital technology has transformed various aspects of human life, including the field of education. In the 21st century, the ability to use technology effectively has become one of the essential skills that every individual must possess. Technology not only provides wide access to information but also influences the way people learn, communicate, and work. In the context of education, digital literacy is crucial for preparing younger generations to face the challenges of a highly digital modern world.¹

According to UNESCO's definition, digital literacy involves the ability to use information and communication technology effectively, critically, and ethically². In the 21st-century education curriculum, mastering digital literacy is not only limited to technical skills, such as using software or the internet, but also includes ethical and moral aspects in the use of technology.³ This is important because technology can be used for both positive and negative purposes, depending on the user's awareness and responsibility.

¹ Julian Sefton-Green et al., *The Class: Living and Learning in the Digital Age* (New York: New York University Press, 2016), 23

² UNESCO, *Digital Literacy in Education*, (Paris: UNESCO Publishing, 2013), 15

³ Eszter Hargittai and Yuli Patrick Hsieh, *Digital Literacy: Key Issues and Controversies* (Cambridge: MIT Press, 2019), 47

However, digital literacy that focuses only on the technical aspects without considering the ethical dimension can lead to various social challenges. The use of technology without ethical awareness can cause serious issues, such as cyberbullying, privacy violations, the spread of false information (hoaxes), and plagiarism. This phenomenon highlights the need for a more holistic approach to digital literacy education, which not only teaches technical skills but also integrates digital ethics as an integral part of the learning process⁴.

The integration of digital ethics into the digital literacy curriculum is key to shaping a responsible young generation in their use of technology. Digital ethics refers to the moral principles that guide individuals' behavior when interacting in digital spaces. It encompasses aspects such as privacy, security, responsibility in sharing information, and respect for the rights of others online. Without strong digital ethics awareness, young people are vulnerable to engaging in negative behaviors in digital spaces that can harm both their own and others' reputations.

Previous research suggests that the integration of digital ethics into the curriculum not only helps students understand the social and moral consequences of their online actions but also contributes to the development of more reflective and critical character.⁵ A curriculum that incorporates lessons on digital ethics can prepare students to become responsible digital citizens, capable of using technology wisely and contributing positively to society.⁶ A curriculum that incorporates lessons on digital ethics can prepare students to become responsible digital citizens, capable of using technology wisely and contributing positively to society..

Furthermore, the integration of digital ethics is not only beneficial for students but also for educators. Teachers who understand the importance of digital ethics can provide better guidance in directing students to use technology productively and safely. Through this approach, teachers can help create a healthy learning environment where students can collaborate, learn, and share information with moral responsibility. Thus, digital ethics plays a crucial role in fostering an educational atmosphere conducive to the development of positive character.

In addition, various studies show that digital ethics education can reduce the incidence of cyberbullying and other harmful behavior among students. Students who are educated about the importance of maintaining ethics in digital interactions tend to be more respectful of privacy and the rights of others, and more aware of the negative impacts of unethical behavior in cyberspace⁷. Therefore, a curriculum that emphasizes both digital literacy and digital ethics can serve as an essential foundation in preparing students to face future digital challenges. However, despite the growing awareness of the importance of digital ethics, many educational institutions still face challenges in implementing a curriculum that balances technical and ethical aspects. One of the main challenges is the lack of adequate resources and training for teachers to effectively teach digital ethics⁸. Therefore, a collaborative effort is needed from the government, educational institutions, and society to develop a curriculum that can provide a deep understanding of digital literacy and ethics. This article aims to explore the importance of integrating digital ethics into the digital literacy curriculum, as well as how this approach can help shape students' responsible and critical character in using technology. By reviewing existing literature and successful educational practices, this article offers a comprehensive view of effective strategies to prepare the younger generation to face moral challenges in this digital era.

Methods

This research employs a literature review approach to explore and analyze the integration of digital ethics into the digital literacy curriculum. Data were collected through literature studies that included journal articles, books, and research reports relevant to the themes of digital ethics and digital literacy. The analysis process involved identifying and categorizing information related to best practices in teaching digital ethics, the challenges faced by educators, and the impact of integrating digital ethics on

⁴ David Buckingham, *Youth, Identity, and Digital Media* (Cambridge: MIT Press, 2008), 64

⁵ Karen Mossberger et al., *Digital Citizenship: The Internet, Society, and Participation* (Cambridge: MIT Press, 2012), 89.

⁶ Riel Miller, *Transforming the Future: Anticipation in the 21st Century* (Paris: UNESCO Publishing, 2018), 61.

⁷ Jonathan Alexander, *The Ethics of Digital Interaction: Identity, Privacy, and Civility* (London: Routledge, 2019), 102

⁸ Tara Fenwick et al., *Learning, Literacy, and Technology: Contexts of Development* (New York: Routledge, 2017), 74

students' character. By using this approach, the research aims to provide a comprehensive overview of the importance of teaching digital ethics in 21st-century education, as well as to offer recommendations for better curriculum development to prepare the younger generation for the challenges of the digital era.

Result and Discussion

This research found that the integration of digital ethics into the digital literacy curriculum has a significant impact on the character development of students. First, a substantial body of literature indicates that students exposed to digital ethics instruction are better able to understand the consequences of their actions in the online world. Knowledge of digital ethics helps students develop critical awareness of issues such as privacy and personal data security⁹. Students become more cautious in sharing information and more respectful of others' rights in online interactions.

Secondly, teaching digital ethics also contributes to the reduction of negative behaviors such as cyberbullying. Data obtained from case studies in several schools indicate that classes that actively integrate digital ethics into their learning experience a significant decrease in online bullying incidents. Students with a better understanding of ethics tend to be more empathetic and are more willing to report unethical behavior among their peers¹⁰.

Additionally, the integration of digital ethics helps students develop critical thinking skills. By studying real cases involving ethical violations in the digital world, students are encouraged to analyze and evaluate situations in depth. This process not only hones their analytical abilities but also prepares them to make better decisions in similar situations in the future¹¹. This awareness is becoming increasingly important in an era where misinformation can easily spread.

The research findings also indicate that teaching digital ethics can enhance students' sense of responsibility for their actions in the digital space. Students who understand that their actions have consequences, both for themselves and others, are more likely to behave ethically. Emphasizing personal responsibility in the digital context serves as a strong foundation for the development of good character¹². This indicates that character education integrated with digital ethics can shape individuals to be more responsible.

Furthermore, this research found that the integration of digital ethics into the digital literacy curriculum supports the development of positive values such as honesty and mutual respect. By addressing issues such as plagiarism and the appreciation of others' work, students learn the importance of respecting intellectual property rights. This knowledge not only enhances ethical awareness but also encourages students to produce original work and value the efforts of others¹³.

Furthermore, the research findings indicate that there are challenges in implementing digital ethics teaching in the classroom. Many teachers report a lack of training and resources to effectively teach digital ethics. This highlights the need for better support and training for educators so that they can teach digital ethics confidently and effectively¹⁴. Without adequate support, initiatives to integrate digital ethics into the curriculum are often hindered.

Moreover, some schools still have a separate approach to teaching technology and ethics. These findings suggest that a more holistic approach, where digital ethics are taught alongside technical skills, would be more effective. Students need to understand that responsible use of technology is not separate from their technical skills; rather, the two complement each other¹⁵.

This research also highlights the importance of collaboration between parents, teachers, and the community in supporting the teaching of digital ethics. When all stakeholders are involved in the educational process, the message about digital ethics becomes more consistent and powerful. Parental

⁹ David Buckingham, *Youth, Identity, and Digital Media* (Cambridge: MIT Press, 2008), 64.

¹⁰ Katie Davis, *The Ethics of Digital Citizenship* (Cambridge: MIT Press, 2016), 12

¹¹ Riel Miller, *Transforming the Future: Anticipation in the 21st Century* (Paris: UNESCO Publishing, 2018), 61

¹² Sonia Livingstone, *The Class: Living and Learning in the Digital Age* (Cambridge: Polity Press, 2016), 88.

¹³ Jonathan Alexander, *The Ethics of Digital Interaction: Identity, Privacy, and Civility* (London: Routledge, 2019), 102

¹⁴ Tara Fenwick et al., *Learning, Literacy, and Technology: Contexts of Development* (New York: Routledge, 2017), 74

¹⁵ Julian Sefton-Green et al., *The Class: Living and Learning in the Digital Age* (New York: New York University Press, 2016), 23

involvement in discussions about digital ethics can help reinforce the values taught in schools, creating a better learning environment for students¹⁶.

Furthermore, the integration of digital ethics into the digital literacy curriculum also provides students with the opportunity to practice ethical behavior in simulations and real projects. Through group projects that require students to design ethical digital content, they learn how to apply ethical principles in their everyday actions. This not only helps them apply their knowledge but also reinforces their teamwork and communication skills¹⁷.

The importance of digital ethics also lies in the development of a positive attitude towards the use of technology. Students exposed to digital ethics education are more likely to adopt a proactive attitude towards technology, such as contributing to a safe digital environment and supporting one another in the online world. These findings underscore that digital ethics education can serve as a tool for creating better and more inclusive online communities¹⁸.

In addition, the research findings indicate that students who understand digital ethics are better able to recognize and avoid misleading or false information. With the increasing amount of information available online, the ability to think critically and analyze digital content becomes increasingly important. Students trained in digital ethics demonstrate sharpness in assessing the credibility of information sources and validating facts¹⁹.

Finally, this research emphasizes the need for a more structured and integrated curriculum in teaching digital ethics. A curriculum that combines theory with practice will be more effective in helping students understand and apply the concepts of digital ethics. The development of strong character in the digital context is not only beneficial for individuals but also for society as a whole, fostering a more ethical and responsible generation in the online world²⁰.

By integrating digital ethics into the digital literacy curriculum, we not only equip students with technical skills but also shape their character to face the challenges of the digital world. The findings of this research indicate that a holistic approach in education can yield better outcomes in developing a generation of young people who are ethical, critical, and responsible in their use of technology. Therefore, the integration of digital ethics into the digital literacy curriculum should be a priority for all educational institutions in this information era²¹.

Discussion

The discussion in this research focuses on the relevance and implications of integrating digital ethics into the digital literacy curriculum to build the character of the 21st-century generation. As information and communication technology continues to evolve, the moral challenges faced by young people are becoming increasingly complex. Therefore, it is essential to prioritize education that not only teaches technical skills but also emphasizes the development of ethical attitudes necessary for everyday technology use.

Firstly, the research findings indicate that teaching digital ethics plays a crucial role in developing students' critical awareness of their behavior in the online world. Students exposed to the concept of digital ethics are more likely to understand the consequences of their actions, including the impact of spreading misinformation, privacy violations, and other unethical

¹⁶ Karen Mossberger et al., *Digital Citizenship: The Internet, Society, and Participation* (Cambridge: MIT Press, 2012), 89

¹⁷ Matthew B. Miles, A. Michael Huberman, and Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 3rd ed. (Thousand Oaks: Sage, 2014), 12

¹⁸ Eszter Hargittai and Yuli Patrick Hsieh, *Digital Literacy: Key Issues and Controversies* (Cambridge: MIT Press, 2019), 47

¹⁹ UNESCO, *Digital Literacy in Education*, (Paris: UNESCO Publishing, 2013), 15

²⁰ David Buckingham, *Youth, Identity, and Digital Media* (Cambridge: MIT Press, 2008), 64.

²¹ Jonathan Alexander, *The Ethics of Digital Interaction: Identity, Privacy, and Civility* (London: Routledge, 2019), 102

behaviors. In this context, a curriculum that integrates digital ethics can equip students with the skills to evaluate and analyze the information they encounter, enabling them to participate more responsibly in the digital world.

Additionally, teaching digital ethics provides a foundation for students to avoid negative behaviors such as cyberbullying. By understanding the importance of empathy and respect in online interactions, students can develop a more positive attitude towards their fellow internet users. Research shows that classrooms that actively teach digital ethics report a significant decrease in incidents of cyberbullying, indicating that ethical education can have a real impact on students' social behavior.

Furthermore, the integration of digital ethics into the digital literacy curriculum helps students develop essential critical thinking skills. By analyzing real-life cases of ethical violations in the online world, students are encouraged to think critically and seek solutions to existing problems. This approach not only hones their analytical abilities but also prepares them to make wiser decisions in the future.

However, challenges in implementing digital ethics education still exist. Many educators express concerns about the lack of training and resources to effectively teach digital ethics. To address these challenges, it is important for educational institutions to provide adequate support and training for teachers so that they can confidently integrate digital ethics into their teaching.

Moreover, the separate approach to teaching technology and ethics needs to be changed. The integration of digital ethics must be done alongside the development of technical skills. In this way, students can understand that responsible use of technology is an integral part of the skills they are learning. A curriculum that combines both aspects will be more effective in shaping a generation of youth who are not only technically proficient but also ethically aware.

The role of parents and the community in supporting the teaching of digital ethics cannot be overlooked. Parental involvement in discussions about digital ethics can help reinforce the values taught in schools. When all stakeholders are engaged, the message about the importance of digital ethics becomes more consistent and profound. Therefore, collaboration among schools, parents, and the community is essential for creating an environment that supports the teaching of digital ethics.

Moreover, the integration of digital ethics into the digital literacy curriculum provides students with the opportunity to practice ethical behavior through real-world projects. By designing digital content that considers ethics, students can apply their knowledge directly while also developing teamwork and communication skills. This approach not only enhances their understanding of ethics but also creates a collaborative and innovative learning environment.

Conclusion

The integration of digital ethics into the digital literacy curriculum is a crucial step in shaping a responsible, critical, and ethical character in the younger generation regarding technology use. This research shows that teaching digital ethics not only increases students' awareness of moral responsibilities in digital interactions but also reduces negative behaviors such as cyberbullying and plagiarism. Through a holistic approach that combines technical skills and ethics, students can develop a reflective attitude towards the impact of their actions in the digital world. The research findings underscore the importance of adequate training for educators so they can effectively teach digital ethics. Involvement from parents and the community is also essential to create a learning environment that supports ethical values in the digital space. Thus, educational institutions must develop a curriculum that is integrated and responsive to the evolving challenges of the times. A holistic and ethics-oriented digital literacy education not only equips students with technical skills but also builds their character to actively and positively participate in the digital world. By integrating digital ethics into education, we

can prepare the younger generation to face the challenges and opportunities of the information age, while simultaneously creating a more ethical and responsible society.

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