

Fostering Religious Character Education Through the Implementation of Digital Literacy Culture

Eny Wahyu Suryanti¹, Any Ikawati²

¹ Universitas Wisnuwardhana Malang, Malang, Indonesia; enywahyu901@gmail.com

² Universitas Wisnuwardhana Malang, Malang, Indonesia; anyunidha@gmail.com

ARTICLE INFO

Keywords:

Culture;
Digital Literacy;
Religious Character Education

Article history:

Received 2024-11-22

Revised 2025-01-29

Accepted 2025-02-14

ABSTRACT

In the digital era, educators must adopt innovative strategies to integrate learning technology effectively. Digital literacy culture serves as a key approach to strengthening students' religious character education. This study explores strategies for enhancing religious character education through the implementation of digital literacy culture in schools. This research employs a qualitative descriptive approach, utilizing interviews, observations, and documentation for data collection. The study examines how digital literacy initiatives contribute to character development within the school environment. Findings indicate that the integration of digital literacy culture in religious character education is facilitated through various literacy programs, character-building activities, and technology-based innovation movements. These initiatives not only improve students' engagement with digital tools but also reinforce essential moral values. The implementation of digital literacy culture significantly enhances the quality of innovative learning while fostering core religious values such as honesty, discipline, skills, independence, responsibility, and tolerance. These attributes prepare students to navigate the challenges of the globalized world. The study concludes that digital literacy culture is an effective strategy for strengthening religious character education. Future research should explore broader educational settings and assess long-term impacts to further optimize digital literacy initiatives in character development.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Eny Wahyu Suryanti

Universitas Wisnuwardhana Malang, Indonesia; enywahyu901@gmail.com

1. INTRODUCTION

The education sector faces significant challenges in preparing future generations for the digital era. With rapid advancements in technology across various fields, schools are increasingly competing to integrate digitalization into their educational systems. To keep pace, educational institutions must optimize the use of digital-based learning media. Educators, in turn, need to enhance their skills, creativity, and innovation in utilizing digital tools for effective teaching and learning. In this context, digital literacy serves as a transformative learning innovation that reinforces character education in the Society 5.0 era (Nisa et al., 2023). As a fundamental pillar of education, character formation requires the integration of positive values, which can be supported through guided and responsible digital media

usage. Proper assistance ensures that students engage with digital platforms constructively, preventing misuse and promoting a digital literacy movement focused on enhancing education quality and character development. This study aims to identify effective strategies for strengthening religious character education through the implementation of a digital literacy culture in schools.

Digital literacy is a combination of two words, namely literacy and digital. Literacy is a form of a person's ability to read and write, while digital is a reading or writing format that exists on technological devices such as laptops, computers, cellphones, and other digital media (Anjarwati et al., 2021; Johnston, 2020; Liu et al., 2020; Pratiwi & Hs, 2024). The digital literacy movement is used as a form of activity to develop reading and writing skills so that students can be more directed towards good things. A positive digital literacy culture can shape the character of students for the better (Suriani & Hadi, 2022; Sukmawati et al., 2023; Wang et al., 2022). The demands of the times are increasingly rapid in the era of globalization. Digital literacy culture is the government's effort to prepare a generation of nations that are ethical, creative, independent, responsible, and have a global outlook so that they can compete in the international world.

Digital literacy is the ability to use information and communication technology (ICT). A person's ability to respond to hoax information needs to pay attention to four aspects of digital literacy, namely digital skills, digital ethics, digital safety, and digital culture (Kominfo, 2022). This is a form of government participation in overcoming the misuse of digital media as a source of information and community communication. Improving character education for students in schools through a digital literacy culture is one form of effort to minimize the abuse of digital media in the era of educational transformation. Learners need assistance in using literacy media so that they are focused on learning activities and can build character for students.

Character education plays a fundamental role in shaping students' morals, ethics, and values, serving as a foundation for their personal and social development. Traditionally, character formation has been reinforced through a collaborative effort between families, schools, and communities, ensuring a sustainable and holistic educational approach (Lickona, 1996). However, with the rapid advancements in technology and the increasing influence of globalization, there is a growing need to integrate digital literacy into character education. Digital literacy equips students with the skills necessary to navigate the digital world responsibly while reinforcing ethical values in their daily interactions (Ribble, 2011). Although previous studies have explored the impacts of character education and digital literacy separately, there is still limited research on how a digital literacy culture can specifically enhance religious character education in the era of Society 5.0 (Nisa et al., 2023). The primary gap in existing literature lies in the absence of a structured framework that systematically combines digital literacy with religious character-building efforts in schools. Addressing this gap, this study aims to develop a comprehensive strategy for integrating digital literacy into religious character education, ensuring that students acquire both ethical values and technological competencies.

This research investigates how digital literacy culture can be effectively implemented to strengthen religious character education in schools. Specifically, it explores the key strategies that educators can employ to enhance religious character development through digital literacy initiatives. Furthermore, this study examines the broader impact of digital literacy on students' moral development and life skills, particularly in navigating ethical dilemmas in the digital era (Freire & Bettencourt, 2020). By identifying effective strategies for fostering religious character education through digital literacy culture, this research provides a novel contribution to the field. It presents a structured framework that integrates digital literacy with moral and ethical education, ensuring that students develop both technological proficiency and strong character values. The findings of this study are expected to guide educators, policymakers, and curriculum developers in designing educational programs that prepare students to face the challenges of the digital age responsibly while maintaining their ethical and religious principles.

2. METHODS

This research uses a descriptive qualitative research approach. The purpose of the research is to describe the application of digital literacy culture in improving religious character education at school. The research location was carried out at MIN 1 Malang City. The selection of subjects in this study using a purposive sampling technique, namely the sources were selected based on knowledge, understanding, and direct experience in the application of digital literacy culture in improving religious character education in schools, including madrasah head, vice curriculum, person in charge of digital, teachers, and students. Data collection techniques used were interviews, observation, and documentation. Furthermore, data analysis using data analysis techniques starting from data collection, data reduction, data presentation, and conclusion drawing.

The data collection techniques used were interviews, observation, and documentation. At the interview stage; the informants totaled 15 people consisting of the principal, vice principal of curriculum, 1 person in charge of digital, 6 teachers, and 6 students. Then at the observation stage; observations were made on digital literacy-based learning activities and student character-building activities. Furthermore, at the documentation stage; the school profile, some forms of digital literacy and character building activities were documented in a structured manner.

Data analysis using data analysis techniques starts with data collection, data reduction, data presentation, and conclusion drawing. At this stage, researchers conducted coding on each informant to maintain their respective credibility. The following is a table of informant coding forms in this study:

Table 1. The Coding Form of Research Informants

No.	Code	Position	Gender	Total
1.	K-LD	School Principal	Female	1
2.	WK-LD	The head of a curriculum	Female	1
3.	PJD-LD	Digital responsible person	Male	1
5.	GK-LD	Teacher	Male	3
6.	GP-LD	Teacher	Female	3
7.	SL-LD	Student	Male	3
8.	SL-LD	Student	Female	3

3. FINDINGS AND DISCUSSION

3.1 Character-based Digital Literacy

The research findings were obtained through a combination of observations, interviews, and document analysis conducted during the study. Data collection involved interviews with key stakeholders, including the head of MIN 1 Malang City, the head of curriculum, the digital program coordinator, teachers, and students. Additionally, relevant documentation was analyzed to support the study's findings.

The study reveals that MIN 1 Malang City, an Islamic elementary school, has been officially recognized as a moderate digital madrasa by the Ministry of Religion of the Republic of Indonesia. This recognition reflects the institution's commitment to madrasah transformation, aligning with technological advancements and global challenges. Digitalization has been integrated across various aspects of school operations, including learning media, infrastructure development, integrated school services, online transactions in the canteen and school cooperatives, and digitalized library systems.

From the moment students enter the madrasa, digitalization is evident in their daily routines. Attendance is recorded through an online barcode system embedded in student ID cards, ensuring an efficient and streamlined process. Inside the classroom, students benefit from digital-based learning facilities, enhancing the learning experience through interactive and technology-driven methods. The overarching goal of this digital transformation is to integrate and facilitate student information services,

providing a seamless, technology-supported educational environment that prepares students to adapt to the evolving digital landscape.

Some forms of activities to implement digital literacy culture in improving religious character education at MIN 1 Malang City consist of mutually sustainable activities starting with habituation of literacy and character movements, increasing innovation movements, optimizing reading corners, using digital media in learning, assisting the use of digital media, developing digital technology-based facilities and infrastructure, and motivating students to excel. As explained by Mrs. KS-LD as follows:

“several forms of activities in an effort to improve the character education of students, including: getting students used to participating in literacy and character building activities, for example reading storybooks 10 minutes before learning begins”.

Mrs. WK-LD also stated that:

“The application of digital literacy consists of many activities, one of which is using madrasah e-learning digital media to improve the quality of student learning”.

Based on the data exposure above, it can be explained that the application of digital literacy culture is able to improve religious character education for students with several forms of activities that support digital literacy, namely as follows:

Table 2. Forms of Character-Based Digital Literacy Implementation

No	Activity	Implementation
1.	Habituation of literacy and character movement	The literacy movement includes literacy habituation 15 minutes before learning, early introduction to the library, and mentoring storybook writing activities. Character habituation activities consist of the habituation of obedience to worship, the application of the five S's (smile, greeting, greeting, politeness) and the five T's (orderly time, orderly administration, orderly learning, orderly teaching, orderly environment).
2.	Improvement of the innovation movement	The innovation movement consists of demonstrating students' talents and creativity, assisting students' <i>podcast</i> activities, making class magazines, and creating promotional content and activity information.
3.	Optimizing the reading corner	Reading corners are provided in each class. Some of the books available in the reading corner include story books, comics, children's magazines, posters, anthology books, and other books that attract students to read.
4.	Use of digital media in learning	The use of digital media in learning activities, among others: <i>e-learning</i> , <i>quizizz</i> , <i>e-book</i> , <i>classpoint</i> , <i>kahoot</i> , <i>wordwall</i> , and supported by digital learning facilities, namely <i>iTBoard</i> interactive whiteboards, <i>laptops</i> , <i>computers</i> , <i>tablets</i> , <i>cellphones</i> , and ICT laboratories.
5.	Assistance in using social media	The form of assistance provided to students, including: how to answer or comment on a post with good and polite language, how to make a status with a positive form that does not offend others, and how to write messages always starting and ending with greetings.

6. Development of digital technology-based facilities and infrastructure	Development of digitalization-based facilities and infrastructure, namely: <i>e-learning</i> ; digitization of mail management, use of digital administration services, digital library; digital-based <i>IDCard</i> ; digital-based cooperatives and canteens; and digital-facilitated buildings.
7. Motivate learners to excel	Digital literacy activities that can motivate students to excel: Literacy Ambassadors, Language Week Celebrations, and Assistance with <i>science</i> and language <i>olympiad</i> activities at local, regional, national, and international levels.

First, the habituation of literacy and character movement. Literacy habituation activities are supported by: 1) literacy habituation, namely reading 15 minutes before learning begins, both reading the holy book, storybooks, and other literacy readings, 2) early introduction to the library, namely with the library subject schedule for students, and 3) assistance with storybook writing activities for students. This is accompanied by character habituation starting from obedience to worship, application of the five S's (smile, greeting, greeting, salim, politeness) and five T's (orderly time, orderly administration, orderly learning, orderly teaching, orderly environment) in the school environment as an effort to improve character education. With the habituation of positive activities, it will have a good influence on the character of students. The implementation is not only at school but also at home and in the community.

Habituation in religious activities can shape the personality of students for the better (Suryanti, 2022; Lisyawati et al., 2023). In this case, exemplary is one of the strategies in character education for students (Dong et al., 2022; Suryanti & Widayanti, 2023). Therefore, as an educator, you must be able to provide examples of good behavior or habits to serve as role models for your students. The school literacy movement (GLS) can increase students' interest in reading (Hayun & Haryati, 2020; Kuromiya et al., 2022). This can be realized with the availability of reading books and the enthusiasm of students to familiarize reading and writing activities. Learners who are accustomed to reading and motivated to write improve their linguistic intelligence (Johnston, 2020; Husna, 2020; Hasan et al., 2024). Literacy culture as a form of effort to improve students' skills (Liu et al., 2020; Suryanti & Ikawati, 2023). Reading and writing activities must be developed in students who will later produce their work. Students' works will be displayed during comparative study visits from other schools, PHBN/PHBI, and end-of-semester activities. The organization of these activities is a form of school appreciation in assessing the success of students.

Second, the movement to innovate is shown by the following activities: 1) demonstration of students' talents and creativity staged at creativity performance activities including; hosting, reading poetry, singing, dancing, sociodrama, etc., 2) mentoring student podcast activities with guests stars, 3) making class magazines, and 4) creating promotional content and information on school activities both through Instagram, WhatsApp, and others.

At the implementation stage, the literacy movement is accompanied by an innovation movement to motivate students to develop their interests and talents. Innovation in learning needs to be improved as an effort to realize quality education (Hapsari & Fatimah, 2021; Tinmaz et al., 2022; Widayanti et al., 2022). Innovative literacy activities can instill character values in students. Starting from preparation, practice to the implementation of activities, there are various forms of learner skill development. Thus, motivation is needed to provide support for learners to be more active in participating in literacy activities.

Third, optimizing the reading corner. The reading corner media was developed as a form of facility for literacy activities in each class, with the hope that students, especially at the primary level, can increase their interest in reading by not having to come to the school library. Some of the books available in the reading corner include story books, comics, children's magazines, posters, anthology books and

other books that attract students to read. In addition to the provision of reading books, the reading corner is also equipped with various kinds of creativity to attract and motivate students to be interested in reading and writing. For example, it is equipped with an interesting reading corner shape, collage and diorama, mini theater, creative writing activities, and eradication fences. The development of reading corners in the classroom aims to develop students' interest in reading and literacy culture.

The reading corner is a literacy media that increases students' interest in reading. Literacy culture is developed from an early age as an effort to optimize learning and writing activities by preparing books for students' needs (Husna, 2020; Heryadi & Anriani, 2023; Suryanti & Ikawati, 2023). Creativity in managing the reading corner determines the success value of literacy activities. Students become more enthusiastic about reading and writing in developing their interests and talents. Homeroom teacher assistance in developing reading corner media can increase students' response to literacy.

Fourth, digital media is used in learning. Digital media is a means or tool with a digital format and is read by machines. With the development of technology, education is required to develop digitalized media as a means of learning in preparing the nation's generation in the era of society 5.0. Several types of digital media used in learning activities, among others: e-learning, quizizz, e-book, classpoint, kahoot, wordwall, and supported by digital learning facilities, namely iTBoard interactive whiteboards, laptops, computers, tablets, cellphones, and ICT laboratories. Digital-based learning activities are intended to increase students' interest in reading and writing and facilitate access to learning activities.

The importance of digital media to be used in learning activities can facilitate understanding of the material, motivate students to be enthusiastic about learning, and develop multimedia skills (Liu et al., 2020; Suranto, 2022; Putra et al., 2023). Learning activities aim to improve students' knowledge, skills, and attitudes (Kuromiya et al., 2022; Suryanti, 2022). Positive changes in learners indicate the success of the learning process that has been implemented. The use of digital media provides positive value to improve competence as an educator (Morney, 2022; Nuraini et al., 2022; Sugiarto & Farid, 2023). The use of various digital media can improve the competence of educators and the skills of students in following technological developments. The challenge in the era of globalization is that all forms of activities in all fields require the use of technology. The role of educators in equipping knowledge and skills has an influence on the readiness of students to follow technological developments in the future.

Fifth, mentoring the use of social media. Assistance in using social media for students is carried out with the aim of creating a positive literacy culture and improving the character of students. Some of the uses of social media are WhatsApp, Instagram, Facebook, YouTube, and TikTok. The form of assistance given to students, including: how to answer or comment on a post with good and polite language, how to make a status with a positive form of matter that does not offend others, and how to write messages always starting and ending with greetings, then convey the needs sufficiently with good language. With character habituation, it can create a culture of literacy that can improve character education.

Appropriate use of social media can improve the quality of learning to the maximum (Suriani & Hadi, 2022; Rahman, 2023; Sukmawati et al., 2023). The role of social media can be used as a substitute for mass and conventional media (Suryanti & Bariyah, 2021; Suranto, 2022; Yusuf et al., 2023). Social media makes it easy to provide information to the wider community. The level of public interest is very high by using social media as a means of communication and information (Morney, 2022; Purwa, 2022; Heryadi & Anriani, 2023). There is a need for assistance in using social media as a form of vigilance against the misuse of technology. Technological literacy is a technological machine that develops social and ethical aspects in its use (Rusydiyah et al., 2020; Nuraini et al., 2022; Hasan et al., 2024).

Sixth, the development of digital technology-based facilities and infrastructure. Supporting every school program activity is the availability of facilities and infrastructure. Therefore, the development of facilities and infrastructure to support digital literacy culture activities can be made a top priority. Madrasah is one of the "Moderate Digital Madrasahs" that will be the driving force of digitalization for

other educational institutions. Thus, several facilities and infrastructure have been prepared to support digitalization-based activities, namely: 1) e-learning; as a learning media for students based on digitalization, 2) digitalization of letter management; the process of structuring and preparing letters in and out with digital application programs through one-stop integrated services, 3) the use of digital administrative services, including simpatika; digital applications used for the Ministry of Religious Affairs PTK service center, for example; portfolios, assistance / scholarships, allowances, training, certification, and other programs, and pusaka kemenag RI; digital application to access religious services, including information on religion and education, assistance, scholarships, and training, attendance of ASN kemenag, and other services, 4) digital library; starting from the process of entering the library and borrowing using digital applications, as well as available reading books and textbooks (e-books) that can be accessed online, 5) digital-based idCard; an integrated barcode id card functions for the attendance of students, education personnel, and madrasah employees, for access to borrowing books in the library, purchasing goods or food in cooperatives and canteens, school financial services, and other services, 6) digital-based cooperatives and canteens; namely the payment system for purchasing goods, food, and drinks online through a digital application integrated with idCard and 7) Building with digital facilities; starting from air-conditioned rooms, and digital-based learning media.

The components of facilities and infrastructure in educational institutions influence the success of learning (Suranto, 2022; Purwa, 2022; Heryadi & Anriani, 2023). So that the completeness of facilities that support in every activity must be prepared optimally to support the success of the programs that have been planned by the school. Information technology that is increasingly sophisticated provides excellent benefits for improving the quality of learning in schools (Suhandoko et al., 2020; Suryanti & Bariyah, 2021). The use of e-learning media in learning activities can improve the quality of student learning. Technology-based learning is the favorite of Generation Z, because there are forms of activities that make students learn happily and actively in activities. E-learning is a learning process that uses the Internet (Suryanti & Bariyah, 2021; Widayanti et al., 2024). Its use requires good internet access so that during the learning process, there are no obstacles.

Seventh, motivating students to achieve. Various efforts are being made to assist educators in providing motivation and support to students to achieve achievements in all fields of activity. Here are some digital literacy activities that can motivate students to achieve: 1) Literacy Ambassadors, given to students who are always active in reading and writing at the end of each semester in the hope of increasing students' literacy interest, 2) Language Week Celebration; celebration activities carried out to commemorate language month, namely a book bazaar by displaying book works by students and teachers, followed by poetry competitions, short story reading, speeches, standup comedy, debates, and other competitions, and 3) Assistance in science and language olympiad activities at regional, national, and international levels.

The importance of motivation in every activity to produce something satisfying. Motivation gives encouragement to someone to produce something good (Rahman, 2021; Tinmaz et al., 2022). Thus, providing motivation must always be given to students in order to achieve optimal results. The achievements achieved by students are a form of self-development according to their skills. Self-development activities contribute to knowing the talents and interests of each student (Sugiarto & Farid, 2023; Luthfia & Mustofa, 2024; Pratiwi & Hs, 2024). The freedom to determine creativity in all forms of expertise will lead to determining the competence of each learner. Achieving success in activities is a matter of pride for each individual. In this case, the role of educators and parents is needed to assist and motivate in every process of activities carried out in order to achieve satisfactory results. Many achievements have been made by students ranging from local, regional, national, and international levels with the following details:

Table 3. Achievements of Learners in the 2023/2024 academic year

No.	Type of Achievement	Quantity
1.	International	718
2.	National	555
3.	Regional	147
4.	Local	793
totally		2213

These programs are the school's efforts to create a culture of literacy that improves students' religious character education at school. The key to the success of character education depends on the school culture that is created. Thus, the principal and existing *stakeholders* must work together to develop students so that their interest in reading and literacy can improve character education. Hopefully, the goal of education will be realized and able to produce a generation of nations that are ready to face the challenges of digitalization in the era of globalization.

3.2 Implications of Digital Literacy Culture for Character Education

The implications of the results of the application of character-based digital literacy culture above include two aspects; 1) The implications for the learning activity process have a very positive effect on improving the quality of student learning, namely; (1) motivating students to learn more actively; this can be seen from the fact that initially students are less enthusiastic about paying attention to the material, with various forms of digital media that are able to increase the activeness of students following learning, (2) facilitating access to learning for students starting from downloading material, watching video shows, and doing questions, and other learning activities, (3) increasing the creativity and innovation of students; with the existence of digital media, students are able to innovate in displaying their creativity through poetry, singing, drama, writing stories, and other activities, (4) facilitate administrative services; all school administration activities can be accessed wherever and whenever they are not only at school but at home can also be accessed with direct parental monitoring, (5) accelerate activity services at school, starting from filling attendance, online payment transactions in canteens and cooperatives, and borrowing books in the library, and 6) facilitate monitoring of student activities with an integrated digital service system.

As stated by Mr. PJD-LD below:

“digital literacy has a lot of influence on the motivation of students to study harder because they feel very happy to use digital media in various forms”.

Likewise, Mr. GK-LD also explained:

“the effect of implementing digital literacy is able to improve the quality of learning which is increasingly effective, innovative and fun, it can be seen that students are very enthusiastic when participating in learning activities in the classroom”.

2) Implications for the character building of students can foster individuals who have honesty, discipline, independence, responsibility, and tolerance. The formation of these attitudes starts from the process of using digital media in literacy activities, not blamed for use other than for learning activities, use is adjusted to the time determined by each teacher, and they support each other with friends who cannot use the application. The character that students have is their provision to face challenges in an increasingly sophisticated world.

Table 4. Implications of Implementing a Digital Literacy Culture

No.	Implications on the learning process	Implications on character building
1.	Motivating students to learn more actively	Honestly
2.	Facilitate access to learning for students	Disciplines
3.	Increase learners' creativity and innovation	Skillfully
4.	Facilitate administrative services	Independently
5.	Accelerate the service of school activities	Responsibility
6.	Facilitate monitoring of students' activities	Tolerance

Digital literacy plays a crucial role in enhancing both the quality of learning and the development of students' character. In an increasingly digitalized world, education must not only focus on academic achievement but also on equipping students with digital competencies that foster ethical decision-making and responsible technology use (Suhandoko et al., 2020; Wang et al., 2022). A well-structured digital literacy culture contributes significantly to improving students' knowledge, skills, and attitudes, enabling them to navigate the complexities of the modern world effectively.

The learning environment is a key determinant of students' emotional, social, and cognitive growth, influencing their ability to adapt to technological advancements and ethical challenges in digital spaces. By embedding digital literacy within the school culture, educators can create an environment that not only enhances critical thinking and problem-solving skills but also strengthens students' moral and ethical values. Schools serve as primary institutions where students learn to balance technological proficiency with character development, ensuring they become responsible digital citizens.

To achieve these objectives, collaboration among all stakeholders—including school leaders, teachers, parents, and policymakers—is essential. Effective implementation of digital literacy initiatives requires collective efforts to create structured programs that promote safe, ethical, and productive technology use. The ultimate goal is to prepare a smart, skilled, independent, and globally competitive generation that can navigate digital challenges responsibly while upholding strong ethical and moral principles. As society transitions into Industry 4.0 and Society 5.0, integrating digital literacy culture into character education becomes not only beneficial but necessary for fostering a well-rounded and future-ready generation.

4. CONCLUSION

The findings of this study indicate that enhancing character education through a digital literacy culture in schools involves various strategic activities. These include habitual literacy and character movements, fostering innovation, optimizing reading corners, transforming digital media in learning, mentoring students in digital media use, developing digital technology-based facilities and infrastructure, and motivating students to excel. The implementation of digital literacy has significant implications for two key aspects: the learning process and character building. In terms of learning, digital literacy motivates students to engage more actively, facilitates easier access to educational resources, enhances student creativity and innovation, streamlines administrative processes, accelerates school activity services, and improves monitoring of student activities. Meanwhile, in character formation, digital literacy contributes to the development of honesty, discipline, skills, independence, responsibility, and tolerance, which serve as essential attributes for students in navigating the challenges of globalization.

Despite its contributions, this study has limitations, particularly in not exploring broader aspects of digital literacy's impact beyond the school environment, such as its influence on students' home learning environments or social interactions. Additionally, the research is limited to a specific educational setting, which may affect the generalizability of the findings. Future research should expand its scope to include different school types, wider geographical regions, and longitudinal studies

to better understand the long-term effects of digital literacy on character education. Educational institutions must also focus on human resource development, encouraging educators to participate in training and workshops on digital literacy and education technology. By doing so, schools can continuously enhance creativity and innovation in using digital-based learning media, ensuring that students receive a holistic and future-oriented education.

Conflicts of Interest: The authors declare no conflicts of interest.

REFERENCES

- Anjarwati, L., Pratiwi, D. R., & Rizaldy, D. R. (2021). Implementasi Literasi Digital dalam Upaya Memperkuat Pendidikan Karakter Siswa. *Buletin Pengembangan Perangkat Pembelajaran*, 3(2), 87-92. <https://journals.ums.ac.id/index.php/bppp/article/view/19420>
- Batubara, C., Sari, D. P., Safitri, D., Khairi, M. H., & Anggraini, C. (2023). Pembinaan Akhlakul Karimah Peserta Didik Melalui Pembiasaan Shalat Dhuha Di UPT SDN 26 Desa Aras Kabupaten Batu Bara. *Jurnal Pengabdian Kepada Masyarakat Nusantara*, 4(4), 3023-3029. <https://ejournal.sisfokomtek.org/index.php/jpkm/article/view/1696>
- Dong, Y., Lin, J., Li, H., Cheng, L., Niu, W., & Tong, Z. (2022). How Parenting Styles Affect Children's Creativity: Through the Lens of Self. *Thinking Skills and Creativity Journal*, 45, 101045. <https://doi.org/10.1016/j.tsc.2022.101045>
- Hapsari, I. I., & Fatimah, M. (2021). Inovasi Pembelajaran Sebagai Strategi Peningkatan Kualitas Guru Di SDN 2 Setu Kliwon. Prosiding dan Web Seminar (Webinar) "Standarisasi Pendidikan Sekolah Dasar Menuju Era Human Society 5.0", 187-194.
- Hart, P. (2021). Reinventing character education: the potential for participatory character education using MacIntyre's ethics. *Journal of Curriculum Studies*, 54(4), 486-500. <https://doi.org/10.1080/00220272.2021.1998640>
- Hasan, L., Adhimah, S., & Rido'i, M. (2024). Stimulasi Kecerdasan Linguistik Anak Usia Dini melalui Pembelajaran Bahasa Arab. *Aphorisme: Journal of Arabic Language, Literature, and Education*, 5(1), 127-142. <https://doi.org/10.37680/aphorisme.v5i1.5401>
- Heryadi, Y., & Anriani, N. (2023). Budaya Literasi melalui Program Gerakan Literasi Sekolah (GLS) dalam Menumbuhkembangkan Minat Baca Siswa di Sekolah Dasar. *Jurnal Basicedu*, 7(6), 3717-3723. <https://doi.org/10.31004/basicedu.v7i6.6506>
- Husna, Z. (2020). Pemanfaatan Pojok Baca Kelas Dalam Peningkatan Gerakan Literasi Sekolah. *Ecodunamika*, 3(2). <https://ejournal.uksw.edu/ecodunamika/article/view/3374>
- Hayun, M., & Haryati, T. (2020). Program Gerakan Literasi Sekolah (GLS) Dalam Meningkatkan Kecerdasan Linguistik Siswa SD Lab School FIP UMJ. *Yaa Bunayya: Jurnal Pendidikan Anak Usia Dini*, 4(1), 79-89. <https://doi.org/10.24853/yby.4.1.79-89>
- Johnston, N. (2020). The Shift towards Digital Literacy in Australian University Libraries: Developing a Digital Literacy Framework. *Journal of the Australian Library and Information Association*, 69(1), 93-101. <https://doi.org/10.1080/24750158.2020.1712638>
- Kominfo. (2022). Report Survey Literasi Digital Indonesia 2022. Retrieved from <https://web.kominfo.go.id/sites/default/files/ReportSurveyStatusLiterasiDigitalIndonesia2022.pdf>
- Kuromiya, H., Majumdar, R., Miyabe, G. & Ogata, H. (2022). E-book-based learning activity during COVID-19: engagement behaviors and perceptions of Japanese junior-high school students. *RPTTEL* 17(1), 1-15. <https://doi.org/10.1186/s41039-022-00184-0>
- Lisyawati, E., Mohsen, Hidayati, U., & Taufik, O. A. (2023). Literasi Digital Pembelajaran Pendidikan Agama Islam Pada MA Nurul Qur'an Bogor. *EDUKASI: Jurnal Penelitian Pendidikan Agama Dan Keagamaan*, 21(2), 224-242. <https://doi.org/10.32729/edukasi.v21i2.1618>

- Liu, Z.-J., Tretyakova, N., Fedorov, V., & Kharakhordina, M. (2020). Retracted Article: Digital Literacy and Digital Didactics as the Basis for New Learning Models Development. *International Journal of Emerging Technologies in Learning (ijET)*, 15(14), pp. 4–18. <https://doi.org/10.3991/ijet.v15i14.14669>
- Luthfia, H. U., & Mustofa, T. A. (2024). Upaya Meningkatkan Prestasi Akademik dan Non-Akademik Peserta Didik Melalui Manajemen Kesiswaan di SMA Al-Islam 1 Surakarta. *Didaktika: Jurnal Kependidikan*, 13(2), 1609-1616. <https://doi.org/10.58230/27454312.622>
- Maulidya, D., Syauqi, A., Taraki, A., Jannah, M., & Purba, W., N., Z. (2023). Integrasi Pendekatan Pembiasaan Dalam Membentuk Akhlakul Karimah Pada Anak Didik Melalui Kegiatan Keagamaan Di Madrasah Ibtidaiyah. *Jurnal Riset Pendidikan Dasar*, 6(1), 66-76. <https://doi.org/10.26618/jrpd.v6i1.9777>.
- Morney, E. (2022). Creative prerequisites for innovation in group collaboration – A case study of slow-TV, the genesis of a Norwegian television genre. *Journal of Creativity*, 32(3), 100031. <https://doi.org/10.1016/j.yjoc.2022.100031>
- Nuraini, R., Pattiasina, P. J., & Ulfah, A. (2022). Peran Literasi Teknologi Dalam Dunia Pendidikan. *Al-Madrasah*, 6(3), 659-666. <http://dx.doi.org/10.35931/am.v6i3.1045>
- Nisa, N., Hidayat, N. A. S. N., & Wahyuningsih, Y. (2023). Penguatan Pendidikan Karakter melalui Literasi Digital di Sekolah Dasar. *Journal on Education*, 5(2), 2457-2464. <https://jonedu.org/index.php/joe/article/view/908>
- Pratiwi, A. L., & Hs, B. C. (2024). Literasi Digital Sebagai Penguatan Pendidikan Karakter Menuju Era Society 5.0. *Prosiding Seminar Nasional Manajemen*, 4(1), 131–135. Retrieved from <https://openjournal.unpam.ac.id/index.php/PSM/article/view/44796>
- Purwa, IBG. (2022). Pemanfaatan Media Sosial Menuju Masyarakat Cerdas Berpengetahuan. *Media Sains Informasi dan Perpustakaan*, 2(1), 49-58. <https://ejournal2.undiksha.ac.id/index.php/msip/article/view/2071>
- Putra, L. D., Fitriyani, D. A., Fatimah, S., & Berlianti, D. S. S. (2023). Pengaruh Penggunaan Teknologi Media Digital dalam Pembelajaran Siswa Secara Kontekstual dan Audio Visual di Sekolah Dasar. *Jurnal Basicedu*, 7(4), 2672-2678. <https://doi.org/10.31004/basicedu.v7i4.5921>.
- Rahman, S. (2021). Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar. *Prosiding Seminar Nasional Pendidikan Dasar “Merdeka Belajar dalam Menyambut Era Masyarakat 5.0”*, 289-302. <https://ejournal.pps.ung.ac.id/index.php/PSNPD/article/view/1076>
- Rahman, M., Nursyabilah, I., Astuti, P., Syam, M. I., & Mukramin, S. (2023). Pemanfaatan Media Sosial Sebagai Media Pembelajaran. *Journal on Education*, 5(3), 10646-10653. <https://doi.org/10.31004/joe.v5i3.1890>
- Rosmana, P. S., Iskandar, S., Rahma, A. R., Maria, S., Supriatna, S., & Wahyuningtyas, T. 2023. Efektivitas Penggunaan Media Pembelajaran Digital Pada Hasil Belajar Siswa Kelas 5 SD N Nagri Kaler. *Jurnal Sinetik*, 6(1), 10-17. <https://doi.org/10.33061/js.v6i1.8205>
- Rusydiah, E., Purwati, E., & Prabowo, A. (2020). How To Use Digital Literacy As A Learning Resource For Teacher Candidates In Indonesia. *Jurnal Cakrawala Pendidikan*, 39(2), 305-318. doi:<https://doi.org/10.21831/cp.v39i2.30551>
- Suhandoko, A. D. J., & Hsu, C-H. (2020). Applying Self-Regulated Learning Intervention to Enhance Students’ Learning: A Quasi-Experimental Approach. *International Journal of Instruction*, 13(3), 649-664. <https://doi.org/10.29333/iji.2020.13344a>
- Sugiarto, & Farid, A. . (2023). Literasi Digital Sebagai Jalan Penguatan Pendidikan Karakter Di Era Society 5.0. *Cetta: Jurnal Ilmu Pendidikan*, 6(3), 580–597. <https://doi.org/10.37329/cetta.v6i3.2603>
- Sukmawati, A., Ni’ma, S. L., & Marsanti, A. P. N. (2023). Peranan Budaya Literasi Dalam Membentuk Pendidikan Karakter Siswa. *Jurnal Basicedu*, 7(4), 2048-2057. <https://doi.org/10.31004/basicedu.v7i4.5839>
- Suriani, A. I., & Hadi, S. (2022). Kebijakan Literasi Digital Bagi Pengembangan Karakter Peserta Didik. *JKPD: Jurnal Kajian Pendidikan Dasar*, 7(1), 54-64. <https://doi.org/10.26618/jkpd.v7i1.7030>

- Suranto, D. I., Annur, S., Ibrahim, & Alfianto, A. (2022). Pentingnya Manajemen Sarana dan Prasarana Dalam Meningkatkan Mutu Pendidikan. *Jurnal Kiprah Pendidikan*, 1(2), 59-66. <https://doi.org/10.33578/kpd.v1i2.26>
- Suryanti, E. W., & Ikawati, A. (2020). Peningkatan Pembelajaran Berbasis Karakter melalui Gerakan Literasi Sekolah. *Jurnal Likhitaprajna*, 22(1), 22-29. <https://doi.org/10.37303/likhitaprajna.v22i1.172>
- Suryanti, E. W., & Bariyah, K. (2021). Model Pembelajaran Berbasis E-Learning di Sekolah. *Jurnal Likhitaprajna*, 23(1), 176-183. <https://doi.org/10.37303/likhitaprajna.v23i2.206>
- Suryanti, E. W. (2022). Manajemen Pembelajaran Berbasis Karakter. Malang: Unidha Press.
- Tinmaz, H., Lee, YT., Fanea-Ivanovici, M. & Baber, H. (2022). A systematic review on digital literacy. *Smart Learn. Environ.* 9(1), 1-18. <https://doi.org/10.1186/s40561-022-00204-y>
- Wang, C., Mirzaei, T., Xu, T., & Lin, H. (2022). How learner engagement impacts non-formal online learning outcomes through value co-creation: an empirical analysis. *International Journal of Educational Technology in Higher Education*, 19(1), 1-26. <https://doi.org/10.1186/s41239-022-00341-x>
- Widayanti, F. D., Rahayuningsih, S., & Suryanti, E. W. (2022). Pelaksanaan Perkuliahan Microteaching Berbasis E-Learning. *Jurnal Edukasi Matematika dan Sains*, 10(2), 344-352. <http://doi.org/10.25273/jems.v10i2.13357>
- Widayanti, F. B., Yuniarto, E., Suryanti, E. W., & Rahayuningsih, S. (2024). Manajemen Pembelajaran Berbasis E-Learning pada Perguruan Tinggi. *Konstruktivisme: Jurnal Pendidikan dan Pembelajaran*, 16(1), 64-82. <https://doi.org/10.35457/konstruk.v16i1.3016>
- Yuniarto, B., & Yudha, R. P. (2021). Literasi Digital Sebagai Penguatan Pendidikan Karakter Menuju Era Society 5.0. *Eduksos: Jurnal Pendidikan Sosial dan ekonomi*, 10(2), 176-194. doi: [10.24235/edueksos.v10i2.8096](https://doi.org/10.24235/edueksos.v10i2.8096)
- Yusuf, F., Rahman, H., Rahmi, S., & Lismayani, A. (2023). Pemanfaatan Media Sosial Sebagai Sarana Komunikasi, Informasi, Dan Dokumentasi: Pendidikan Di Majelis Taklim Annursejahtera. *Jurnal Hasil-Hasil Pengabdian Dan Pemberdayaan Masyarakat*, 2(1),1-9. <https://journal.unm.ac.id/index.php/IHP2M/article/view/122>