Volume 1 Issue 6 (December,2024)
Jurnal of Pedagogi : Jurnal Pendidikan
ISSN: : 3046-9554 (Online)

Improving Digital Literacy in Schools: Education Management Strategies to Prepare Students for Global Challenges

Rachma Putri Kasimbara
Universitas Brawijaya, Indonesia

DOI: https://doi.org/10.62872/xc7ta403

Abstract
The rapid development of digital technology has changed various aspects of life, including education, making digital literacy an essential competency that students must have to face global challenges. This study aims to explore education management strategies in improving digital literacy in schools to prepare students for global challenges. This research uses a systematic literature review method, which includes analyzing various studies and reports related to the implementation of digital literacy in educational settings. The results show that effective digital literacy policies, integration of technology in the curriculum and training for teachers can improve students' ability to use technology productively and creatively. Recommendations generated from this literature study include the importance of the role of teachers in supporting students' digital literacy, the need for adequate technology facilities in schools, and collaboration between schools and various external institutions to improve the quality of digital literacy. The implication of this research is the importance of developing more targeted and technology-based education policies, in order to answer the growing global challenges.

Keywords: *Digital Literacy, Education Management, Global Challenges*

Corresponding author :
Email Address : rachmakasimbara@ub.ac.id
Received November 30, 2024, Accepted December 22, 2024, Published December 31, 2024

Introduction
The rapid advancement of information technology, digital literacy is an inseparable element of modern life, especially in the era of globalization and the industrial revolution 4.0 (Wahyudi & Kurniasih., 2021). Digital technology has changed the way humans communicate, work and access information. Globalization accelerates the flow of information across countries, which creates new opportunities and challenges (Ariya & Ismail., 2025). In this context, digital literacy plays an important role to help individuals understand, access and utilize technology wisely and effectively. Without adequate digital skills, people risk being misinformed and facing threats to privacy and personal data security. The industrial revolution 4.0 brings a more profound transformation, with the presence of smart technologies such as artificial intelligence (AI) and the Internet of Things (IoT) penetrating various sectors, including the world of work (Maulana et al., 2024). Jobs that were once done manually are now being replaced by automation, while more complex digital skills are increasingly needed. Digital

DOI: https://doi.org/10.62872/k3d5gd27

literacy is not only a matter of technical ability, but also the ability to think critically about the information obtained and understand the impact of technology in everyday life (Cynthia & Sihotang., 2023). With good digital literacy, individuals will be better prepared to face the challenges of globalization and adapt to the changes that occur in society.

The global challenges faced by today's students are increasingly complex, along with rapid technological developments, changes in the job market, and demands for 21st century skills (Jaya et al., 2023). Evolving digital technologies provide greater access to information and learning opportunities, but also create challenges such as dependence on digital devices and the risk of exposure to inaccurate information (Amalia et al., 2025). Students are faced with the demand to not only master technology, but also have the skills to filter and analyze information critically, in order to utilize technology wisely and productively in everyday life. Changes in the labor market are also an important factor affecting students' readiness for the future (Zakaria et al., 2023). Existing jobs are undergoing automation, while many new sectors require specialized skills, such as artificial intelligence, big data, and other creative skills. Therefore, students are faced with the need to prepare themselves with skills relevant to future industrial and occupational developments. The demands of 21st century skills, such as the ability to think critically, collaboration, communication, and creativity, have become crucial to ensure that students are not only technically prepared, but also able to compete in an increasingly complex and connected world (Pare & Sihotang., 2023).

Digital literacy is a very important aspect in education. Digital literacy refers to the ability to access, analyze, and use information obtained through digital technology effectively, critically, and responsibly (Nugraha., 2022). This ability is not only needed by students to adapt to changing times, but also by educators and education managers to create a learning environment that is relevant to technological developments. Therefore, education must be able to respond to this challenge by introducing digital literacy as a basic skill that must be possessed by all elements of education (Farid., 2023).

Education management has a very strategic role in improving digital literacy in schools and other educational institutions (Wahab., 2022). In this case, the role of education managers, both at the central and regional levels, is decisive in formulating educational policies that support the development of digital literacy. Through policies that favor technology, such as the integration of technology in the curriculum, the provision of adequate infrastructure, and the development of training programs for teachers, education management can encourage the implementation of digital literacy as a whole (Mannan., 2025). The existence of appropriate policies will create a strong foundation for the development of digital skills among students. In addition to policies, education management is also responsible for ensuring that educators have sufficient skills in using digital technology (Sholeh & Efendi., 2023). Continuous education and training for teachers is key to enable them to effectively implement technology in the learning process. Teachers who are skilled in using digital tools will be better able to teach digital skills to students, as well as create more engaging and interactive learning experiences. Thus, the quality of teaching will improve and students will find it easier to develop digital literacy skills (Resti et al., 2024).

Technology integration in the curriculum is an equally important aspect in improving digital literacy. Education management must ensure that every subject accommodates the use of technology that supports the achievement of learning objectives. This includes not only the use of hardware such as computers and the internet, but also software that can help students process information, conduct research and produce creative work. A curriculum that supports digital literacy will prepare students with relevant skills and be ready to face the challenges of an increasingly digitally connected world (Lubis et al., 2023). Overall, education management has a central role in facilitating the development of digital literacy in schools. By designing supportive policies, providing training for teachers, and integrating technology in the curriculum, education can prepare a generation that is not only skilled in using digital tools, but

DOI: https://doi.org/10.62872/k3d5gd27
also able to think critically and responsibly in managing information obtained through technology (Armini., 2024). Well-developed digital literacy will enable students to compete globally in an increasingly digital and complex world.

In today's digital era, digital literacy has become a very important skill, considering that almost all aspects of human life are now influenced by information technology (Suhartini et al., 2024). Digital literacy is not only limited to the technical ability to use digital devices, but also includes the ability to access, evaluate, analyze and utilize information from various digital sources effectively, ethically and responsibly. In an increasingly internet-connected world, digital literacy enables individuals to actively participate in digital society and face the challenges and opportunities offered by technological advances. This makes digital literacy one of the main skills that must be possessed by every individual, especially in the context of education (Wahab., 2022).

The components of digital literacy include several important interrelated aspects, each of which has a role in creating individuals who are not only technologically literate, but also able to think critically and wisely in using technology (Masitoh., 2018). First, technical skills that include mastery of digital devices, applications, and technological aids used in daily life and in the world of work. The ability to evaluate information found in the digital world, so that individuals can distinguish valid and relevant information from unreliable information. The ability to communicate effectively on digital platforms, both in personal and professional contexts, as well as the ability to cooperate and collaborate virtually. Skills to maintain the privacy and security of personal data in cyberspace, given the many threats that can harm individuals if personal data is not managed properly (Erikha & Hoesein., 2025).

The importance of digital literacy in education is increasingly clear, especially when we look at how technology has changed the way learning is done (Meilinda et al., 2020). In an educational world that is increasingly dependent on digital devices, such as computers, tablets and the internet, digital literacy is a basic skill that students must master. Education that integrates digital literacy not only gives students the ability to use digital tools, but also to use them wisely and critically (Cynthia & Sihotang., 2023). Thus, education that develops digital literacy can equip students with skills that are relevant to their future lives, both in the professional and social worlds. In addition, through digital literacy, students can access various sources of information and learn independently, which is increasingly necessary in an ever-evolving world. On the other hand, the development of a job market that is increasingly influenced by technology also requires an increase in digital literacy among students (Margasari et al., 2020). Many jobs that used to rely on manual skills have now been replaced by automation and technology-based systems. In addition, many new sectors are creating job opportunities that prioritize digital skills, such as software development, data analysis and artificial intelligence. Therefore, digital literacy is an important element in preparing students to face an increasingly competitive and connected world of work (Ikhlas & Suyanto., 2024). With good digital literacy skills, students will be better prepared to adapt to changes in the job market and take advantage of existing opportunities, both at the local and global levels. Digital literacy has a huge role in forming a society that is technologically literate and able to compete in an increasingly digital world (Putranto., 2024).

Education management includes a series of activities designed to achieve optimal educational goals, including planning, organizing, implementing, and evaluating in a school environment (Sukma., 2024). The main task of education management in schools is to manage the various components involved in the learning process, such as the curriculum, human resources, and supporting facilities. Education managers must ensure that all aspects of education run effectively to produce students who are competent and ready to face future challenges (Suryadi et al., 2024). Therefore, education management plays an important role in creating an environment that supports the quality of education, both in academic and non-academic aspects. Education management has a very important role in facilitating the

DOI: https://doi.org/10.62872/k3d5gd27

development of digital literacy in schools (Aifalesasunanda et al., 2024). Digital literacy, which involves an individual's ability to use technology effectively and responsibly, has become an essential skill in the digital age. Education managers in schools need to design policies that integrate technology in learning and ensure adequate access to digital devices and the internet. Training for teachers is also crucial so that they can teach digital literacy in an effective and relevant way. Education management is responsible for creating infrastructure and supporting teaching processes that enable students to develop their digital skills in both academic and daily life contexts (Hadi., 2024).

The role of education management in developing digital literacy can also be seen in its ability to manage changes and challenges arising from technological advances (Yuniarto & Yudha., 2021). Education managers must have a clear vision of the application of technology to improve the quality of learning. In addition, they need to develop strategies that support the adaptation of technology by both teachers and students. Through careful planning, education management can create a conducive environment for technology-based learning and ensure that technology is used wisely in learning and teaching activities. The importance of integrating digital literacy into education also requires good management from school management, both in terms of providing facilities and relevant curriculum policies (Aprilianto & Rachmawati., 2025). Programs that support digital literacy should include more than just the use of digital devices, but also include teaching about how information in cyberspace can be accessed, analyzed and used critically.

Effective education management ensures that digital literacy becomes an integral part of education, enriching students' learning experiences and equipping them with relevant skills in the modern world (Rahmadani., 2024). Through good management, education managers can encourage collaboration between technology, teaching and curriculum and ensure that all aspects of the school support the development of students' digital skills. Thus, education management directly contributes to preparing students to face global challenges that are increasingly influenced by technological developments (Febrineng., 2024).

The global challenges faced by future generations are increasingly complex, especially with the rapid development of technology and dynamic changes in the job market (Hidayah et al., 2024). 21st century skills have become an essential element that students must possess to be able to compete and adapt in an ever-changing world. These skills include not only technical aspects such as digital literacy, but also social skills, creativity and critical thinking. Students need to master various competencies, such as the ability to work collaboratively, communicate effectively, and manage information efficiently. In addition, an understanding of global issues, the ability to innovate, and readiness to face social and environmental challenges are also indispensable skills. Education must prepare students with relevant skills so that they can face global challenges and play an active role in shaping a better future (Thana & Hanipah., 2023). Education has a huge role in equipping students with the 21st century skills needed to face global challenges (Zubaidah., 2019). As an institution responsible for shaping students' character and abilities, education must adapt to the times. In this case, the curriculum taught in schools must include skills that are relevant to the needs of the modern world, both in terms of knowledge and practical skills. Education must teach students to become lifelong learners, who not only master knowledge but are also able to think critically, innovate, and work in teams. Therefore, this study aims to explore education management strategies in improving digital literacy in schools to prepare students for global challenges.

Method

This research uses the literature review method to analyze effective education management strategies in improving digital literacy in schools. This method was chosen because it allowed the researcher to integrate findings from various relevant previous studies, thus providing a comprehensive picture of approaches, challenges and best practices in digital

DOI: https://doi.org/10.62872/k3d5gd27
literacy development. The research process began with the collection of literature related to the topics of digital literacy, education management and preparing students for global challenges. Literature sources were drawn from scientific journals, books, research reports and policy documents published in the last 10 years to ensure the relevance and actuality of the data. Databases used included Google Scholar, Scopus and other credible databases. The selected literature was then analyzed using a narrative analysis approach. This process involved identifying key themes, such as technology integration in the curriculum, teacher training in educational technology mastery and the role of multi-stakeholder collaboration in supporting digital literacy. In addition, a critical synthesis was conducted to identify the relationship between the various strategies and their impact on improving students' digital literacy. Through this method, the research aims to generate a comprehensive understanding of education management strategies that can be applied in the school context.

Result and Discussion

The Importance of Digital Literacy in Education

A review of the literature shows that digital literacy encompasses more than just technical skills in using digital devices. Digital literacy includes the ability to think critically, evaluate information in depth and apply technology ethically to support daily activities (Sinha, 2024). These competencies are particularly important in the digital age, where information is abundantly available but not all of it is valid or relevant. Therefore, students need to be trained to sort out credible information, understand its context, and apply it responsibly according to academic and social needs. As a key competency, digital literacy helps students prepare for global challenges characterized by rapid technological development (Abulibdeh, 2024). Rapid technological changes require students to be able to adapt to various innovations, such as artificial intelligence, big data and the Internet of Things (IoT). In addition, digital literacy provides a foundation for students to understand the knowledge-based economy, where the ability to process information and utilize it into added value is needed. Thus, digital literacy is the main pillar in building 21st century skills needed in the world of work and social life.

Students' digital literacy level includes the ability to manage information critically. This means students need to be able to sort out relevant information, analyze it well and use it for constructive purposes. While most students can easily access information, they often lack the skills to evaluate the validity and accuracy of information found on the internet. This suggests the need to teach students more in-depth critical skills, especially in an era where inaccurate or misleading information can be easily spread (Nevira et al., 2024). Understanding digital ethics is also an important part of digital literacy. In measuring digital literacy, students are expected to not only master technology, but also understand how to use technology safely and responsibly (Nevira et al., 2024).

In the context of education, digital literacy not only helps students access information but also supports an active and innovative learning process (Sari, 2024). With digital literacy, students can utilize various digital learning resources, such as e-learning platforms, learning videos and interactive simulations (Ivanytska, 2021). This allows students to learn independently, explore materials according to their interests, and develop creativity in completing tasks. In addition, technology-based learning encourages students to be more actively involved in the learning process, thus improving understanding and motivation. Digital literacy also encourages wider collaboration in education. Technology allows students to interact with peers, teachers and even experts from different parts of the world through digital platforms (Garlinska, 2023). In collaborative projects, students can learn to work together, share ideas and integrate multiple perspectives to solve problems. This kind of collaboration not only broadens students' horizons but also builds social and communication skills that are important in professional and personal life.

DOI: https://doi.org/10.62872/k3d5gd27

The ethical application of digital literacy in education is also a major concern. Students' ability to use technology responsibly is essential to prevent misuse, such as plagiarism, the spread of fake news, or privacy violations. With good digital literacy, students are taught to respect intellectual property rights, understand the social impact of technology, and apply moral values in the use of technology. Education that emphasizes ethical digital literacy plays a role in shaping a generation that is socially responsible and capable of being wise users of technology (Khairunisa, 2023). Digital iteration literacy is not only a tool to support the learning process, but also a foundation for building a technologically literate society. With adequate digital literacy, students are not only able to adapt to technological changes but also contribute actively in building innovations that have a positive impact on society. Therefore, the integration of digital literacy into the education system needs to be prioritized to produce a generation that is competent, adaptive and ready to face global challenges in the future.

Technology Integration in the School Curriculum

One of the main strategies in improving the quality of education in the digital era is to integrate technology into the curriculum (Valverde, 2021). This integration is not just about adding technological devices to the classroom, but also involves redesigning the learning process to make the most of technology. In research, some schools have successfully practiced this integration through a project-based learning approach that utilizes digital platforms to encourage student engagement. This method allows students to learn through hands-on experience by utilizing technology to design, evaluate and present projects. The integration of technology into the curriculum is proven to provide a range of significant benefits. One of the main benefits is an increase in student motivation to learn (Thelma, 2024). By using technology, students can access more engaging learning resources, such as interactive videos, digital simulations and educational games. Technology also provides a more personalized and flexible learning experience, where students can learn at their own pace and style. This helps to boost students' self-confidence while encouraging their active participation in the learning process.

The use of technology in the curriculum helps to reinforce the understanding of the concepts being taught (Kilag, 2023). For example, digital simulations in science subjects allow students to understand complex phenomena through interactive visualizations. Technology also supports data-driven learning, where students are encouraged to analyze information and draw conclusions based on evidence. With this approach, students not only understand the theory but are also able to apply their knowledge in real situations, thus improving the quality of learning outcomes. Students' collaboration and communication skills also benefit from technology integration. In project-based learning, students often work in teams to complete tasks that utilize technological tools such as collaborative apps and cloud-based platforms. This process teaches them to share responsibility, respect others' ideas, and convey their ideas effectively. These abilities are highly relevant to the needs of the modern world of work, where cross-cultural and cross-disciplinary collaboration and communication skills are a must. The success of technology integration in the curriculum cannot be separated from the role of school management. Support from management is needed to design a curriculum that is relevant to the needs of the digital era. This includes training teachers in the use of technology, providing adequate infrastructure, and adjusting learning methods to suit student characteristics. Without this support, technology will only be an additional tool with no significant impact on the learning process. Therefore, collaboration between teachers, school management and policy makers is essential to ensure that technology integration is effective (Akram, 2022). Technology integration in the school curriculum is an important step to prepare students for future challenges. With the proper utilization of technology, students not only gain academic knowledge but also relevant skills to adapt in the digital era. This effort requires careful planning and commitment from all parties so that the benefits of technology can truly be felt in the world of education.

DOI: https://doi.org/10.62872/k3d5gd27

The Impact of Digital Literacy on Student Readiness

Research results reveal that digital literacy has a significant impact on students' readiness to face various global challenges (Mujtahid, 2021). Students who have good digital literacy tend to be more adaptive to change, both in education, career and social life. With this ability, they can access information independently, use technology to learn, and develop new skills according to the needs of the digital era. Digital literacy provides the foundation for dealing with an increasingly connected and technology-oriented world. In education, digital literacy enables students to become independent learners. They are able to search, evaluate and utilize information from various digital sources efficiently (Chen, 2022). This ability is highly relevant to modern learning needs that often involve exploring materials online. With good digital literacy, students can utilize e-learning platforms, video tutorials and educational apps to deepen their understanding. This self-directed learning process not only enhances their knowledge but also builds confidence in proactively completing tasks.

In the context of careers, digital literacy provides a competitive advantage for students. Those who master technology have the ability to adapt quickly to the changing demands of the world of work (Nurjanah, 2024). For example, skills in using collaboration software, analyzing data or communicating through digital platforms are important assets in various professions. Digital literacy also helps students understand the latest technological trends, such as artificial intelligence and data analytics, which are increasingly at the core of modern industries. Thus, digital literacy not only improves students' readiness to enter the workforce but also enables them to become innovators in their fields. In addition, digital literacy strengthens critical thinking and problem-solving skills. In the digital world, students are often exposed to diverse information, which is not always valid or relevant. Digital literacy trains them to critically analyze information, evaluate its sources and make decisions based on accurate facts (Audrin, 2022). These skills are essential to face challenges in the future workforce that often require innovative and data-driven solutions. With strong critical thinking skills, students will not only be passive users of technology but also individuals who are able to optimize technology to solve problems.

Digital literacy supports students' engagement in social life in the digital era. With mastery of technology, students can contribute to digital communities, such as participation in discussion forums, social campaigns, or online-based collaborative activities (Resia, 2024). They can also become agents of change who utilize technology to disseminate useful information and build collective awareness of social issues. In this sense, digital literacy not only enhances individuals' abilities but also strengthens their role in creating a more advanced and inclusive society. Digital literacy plays an important role in preparing students to face global challenges in various aspects of life. With adequate digital literacy, students are not only able to adapt to a dynamic environment but also become innovative, critical and ready to contribute in building a better future. Therefore, digital literacy should be prioritized in the education system to produce a competent and highly competitive generation in the digital era.

Effective Education Management Strategies

Education management has a central role in developing digital literacy in the school environment. Educational management strategies implemented by schools are very influential in creating an effective learning environment (Suryadi et al., 2024). One of the main strategies is adjusting the curriculum that is relevant to the times. The curriculum must be able to accommodate 21st century skills, such as digital literacy, problem solving and creativity. Therefore, identification of the implemented curriculum is necessary to ensure that the learning provided is in line with the evolving needs of students and the world of work. Evaluation of the curriculum is useful to find out whether the material taught is able to equip students with the skills needed in the future (Nur & Insani., 2024). Adequate budget allocation for the procurement of digital facilities is also an important strategy in supporting digital literacy. Procuring hardware such as computers, tablets and projectors, as well as fast and stable internet

DOI: https://doi.org/10.62872/k3d5gd27
access, are the first steps that should be prioritized. In addition, investment in interactive and relevant educational software can also help create a more engaging and effective learning experience for students. Proper budget allocation shows the school management's commitment to improving the quality of learning through technology.

Another important aspect of education management strategy is human resource management, especially teacher professional development. Schools must ensure that teachers have skills that match the changing needs of education. Continuous training programs and upskilling in the use of educational technology are necessary to support more effective learning. Evaluation of teacher training can help determine whether the program is successful in improving teaching quality and supporting students' competency development (Fitri & Dilla., 2024). With a good evaluation, schools can determine the right training program for the needs of teachers and students. Improving teacher competencies in a structured and sustainable manner allows teachers to transform into effective learning facilitators, as well as mentors who are able to guide students in developing digital literacy optimally. Teachers who are skilled in utilizing educational technology can create learning experiences that are innovative, adaptive and relevant to the needs of students in the digital era (Manca, 2021). In addition, the training also equips teachers with the ability to face challenges, such as the technology gap, low student engagement, and resistance to change in the educational environment. Thus, developing teacher competencies not only has an impact on improving the quality of learning in the classroom, but also on strengthening students' readiness to face future global challenges.

Another important strategy in improving digital literacy in schools is the implementation of continuous evaluation of the digital literacy program. This evaluation serves as a tool to assess the extent to which technology integration has successfully had a positive impact on the learning process and student learning outcomes (Purba, 2024). Through this process, school management can obtain a comprehensive picture of the effectiveness of the program, both in terms of implementation and results achieved. Evaluation is also a means to identify potential strengths that can continue to be developed and weaknesses that require immediate improvement, so that the digital literacy program can be adjusted to the existing needs and challenges. Systematic and data-driven evaluation is key in supporting strategic decision-making. Using both quantitative and qualitative data, school management can monitor the success of the program from various aspects, such as the level of student engagement, digital competencies achieved and the relevance of technology use in learning. In addition, the evaluation also helps identify emerging barriers, such as gaps in technology access or lack of optimal utilization of digital tools. The results of this evaluation allow schools to develop more targeted corrective measures, so that digital literacy can be continuously improved in accordance with the dynamics of global education needs.

Schools that have a clear vision of digital literacy tend to be more successful in implementing related programs (Dewi, 2023). This vision should reflect a commitment to the development of 21st century skills and readiness for the digital age. With a strong vision, school management can inspire the entire education community, including students, teachers and parents, to collaborate in creating a technology-based learning ecosystem. This collaboration strengthens joint efforts in building sustainable digital literacy. Overall, effective education management strategies are key to improving digital literacy in schools. By crafting supportive policies, allocating the right budget, training teachers, evaluating programs on an ongoing basis and putting forward a clear vision, schools can create a supportive environment for digital literacy development. This strategy not only helps students to master technology but also prepares them to be competent and adaptive individuals in the digital era

Conclusion

Digital literacy, education management strategies and student readiness have a very close relationship and support each other in preparing students to face increasingly complex

DOI: https://doi.org/10.62872/k3d5gd27
global challenges. Digital literacy, as one of the core skills of the 21st century, is an important foundation for students to access, analyze and disseminate information in a world dominated by technology. Curriculum implementation that integrates digital literacy and the development of other skills such as creativity and problem-solving will help students adjust to technological changes and the dynamics of the evolving job market. On the other hand, the education management strategies implemented in schools determine the success in creating a learning environment that supports the development of these skills. Adaptive curriculum management, continuous teacher training and adequate educational facilities play a key role in creating effective and innovative learning processes. Evaluation of education management strategies allows schools to continuously optimize efforts in preparing students for global challenges. Therefore, success in improving students' readiness to compete in a globalized world relies heavily on effective collaboration between digital literacy, responsive education management and continuous competency development. Students equipped with 21st century skills, supported by skilled teachers and adequate facilities, will be better able to adapt and succeed in the face of rapid changes in the global society.

Bibliography

Abulibdeh, A., Zaidan, E., & Abulibdeh, R. (2024). Navigating The Confluence Of Artificial Intelligence And Education For Sustainable Development In The Era Of Industry 4.0: Challenges, Opportunities, And Ethical Dimensions. Journal Of Cleaner Production, 140527. Https://Doi.Org/10.1016/J.Jclepro.2023.140527

Aifalesasunanda, R., Citriadin, Y., & Maujud, F. (2024). Strategi Pengembangan Sumber Daya Manusia Melalui Literasi Digital Di Mts Nurul Yasin Buer Sumbawa. Ascent: Al-Bahjah Journal Of Islamic Education Management, 2(1), 42–58. Https://Doi.Org/10.61553/Ascent.V2i1.153

Akram, H., Abdelrady, A. H., Al-Adwan, A. S., & Ramzan, M. (2022). Teachers' Perceptions Of Technology Integration In Teaching-Learning Practices: A Systematic Review. Frontiers In Psychology, 13, 920317. Doi: 10.1007/978-3-030-82616-1_28

Ariya, A. A., & Ismail, I. (2025). Filsafat Pendidikan Di Era Globalisasi: Tantangan Dan Peluang Dalam Konteks Multikultural. Jiip - Jurnal Ilmiah Ilmu Pendidikan, 8(1), 1122–1131. Https://Doi.Org/10.54371/Jiip.V8i1.6442

Armini, N. K. (2024). Evaluasi Metode Penilaian Perkembangan Siswa Dan Pendidikan Karakter Dalam Kurikulum Merdeka Pada Sekolah Dasar. Metta : Jurnal Ilmu Multidisiplin, 4(1), 98–112. Https://Doi.Org/10.37329/Metta.V4i1.2990

Audrin, C., & Audrin, B. (2022). Key Factors In Digital Literacy In Learning And Education: A Systematic Literature Review Using Text Mining. Education And Information Technologies, 27(6), 7395-7419. Https://Doi.Org/10.1007/S10639-021-10832-5

Chen, C. M., Li, M. C., & Chen, Y. T. (2022). The Effects Of Web-Based Inquiry Learning Mode With The Support Of Collaborative Digital Reading Annotation System On Information Literacy Instruction. Computers & Education, 179, 104428. Https://Doi.Org/10.1016/J.Compedu.2021.104428

Cynthia, R. E., & Sihotang, H. (2023). Melangkah Bersama Di Era Digital: Pentingnya Literasi Digital Untuk Meningkatkan Kemampuan Berpikir Kritis Dan Kemampuan Pemecahan Masalah Peserta Didik. Jurnal Pendidikan Tambusai, 7(3), 31712-31723. Https://Doi.Org/10.15575/Ath.V3i1.4196.S668

DOI: https://doi.org/10.62872/k3d5gd27

Dewi, A. C., Jannah, M., Cantika, A. Z., Aurora, F., & Amirah, A. (2023). Menelusuri Jejak Guru Ideal Di Era Digital. Pendiri: Jurnal Riset Pendidikan, 1(1), 1-8. Https://Ejournal.Ranedu.My.Id/Index.Php/Pendiri/Article/View/11

Erikha, A., & Hoesein, Z. A. (2025). Strategi Pencegahan Kebocoran Data Pribadi Melalui Peran Kominfo Dan Gerakan Siberkreasi Dalam Edukasi Digital. Jurnal Retentum, 7(1), 48-64.

Febrineng, F. (2024). Implementasi Konsep Pendidikan Berkelanjutan Dalam Manajemen Pendidikan Islam Di Era Globalisasi. Jurnal Review Pendidikan Dan Pengajaran (Jrpp), 7(3), 11333-11341. Https://Doi.Org/10.71305/Jmpi.V2i2.88

Fitri, W. A., & Dilia, M. H. H. (2024). Optimalisasi Teknologi Ai Dalam Meningkatkan Efektivitas Pembelajaran. Sindoro: Cendikia Pendidikan, 5(11), 11-20. Https://Doi.Org/10.47668/Edusaintek.V11i3.1215

Garlinska, M., Osial, M., Proniewska, K., & Pregowska, A. (2023). The Influence Of Emerging Technologies On Distance Education. Electronics, 12(7), 1550. Https://Doi.Org/10.3390/Electronics12071550

Hadi, A. (2024). Implementasi Kurikulum Merdeka Dalam Pendidikan Islam: Integrasi Nilai-Nilai Keislaman Dan Kemandirian Belajar. Jurnal Review Pendidikan Dan Pengajaran (Jrpp), 7(4), 15522-15534. Https://Doi.Org/10.71260/Jpal.V1i2.43

Hidayah, N., Ridwan, A., & Azis, A. (2024). Tantangan Dan Solusi Dalam Implementasi Manajemen Pendidikan Islam Di Era Modern. Jurnal Al-Fatih, 7(2), 209-228

Ivanytska, N., Tymoshchuk, N., Dovhan, L., Osaulchyk, O., & Havryliuk, N. (2021). Effectiveness Of Digital Resources In The Learning Management System Within Online Education Of Future Entrepreneurs. Journal Of Entrepreneurship Education, 24(4), 1-8.

Jaya, H., Hambali, M., & Fakhrurrozi, F. (2023). Transformasi Pendidikan: Peran Pendidikan Berkelanjutan Dalam Menghadapi Tantangan Abad Ke-21. Https://Doi.Org/10.46963/Aulia.V9i2.1395

Khairunisa, W., & Sundawa, D. (2023, December). The Urgency Of Digital Literacy In Developing Character Education For Youth In Society 5.0. In International Seminar (Vol. 5, Pp. 125-143). Https://Doi.Org/10.36563/Proceeding.V5i0.107

Kilag, O. K. T., Segarra, G. B., De Gracia, A. M. L., Del Socorro, A. S., Abendan, C. F. K., Camangyan, G. A., & Mahasol, E. T. (2023). Ict Application In Teaching And Learning. Science And Education, 4(2), 854-865 .

Lubis, M. U., Siagian, F. A., Zega, Z., Nuhdin, N., & Nasution, A. F. (2023). Pengembangan Kurikulum Merdeka Sebagai Upaya Peningkatan Keterampilan Abad 21 Dalam Pendidikan. Anthor: Education And Learning Journal, 2(5), 691–695. Https://Doi.Org/10.31004/Anthor.V1i5.222

Manca, S., & Delfino, M. (2021). Adapting Educational Practices In Emergency Remote Education: Continuity And Change From A Student Perspective. British Journal Of Educational Technology, 52(4), 1394-1413. Https://Doi.Org/10.1111/Bjet.13098

Mannan, A., & Laisa, E. (2025). Pesantren Dalam Pendidikan Nasional: Menghadapi Tantangan Dan Memanfaatkan Peluang Pasca Uu No. 18 Tahun 2019. Shibghoh:

DOI: https://doi.org/10.62872/k3d5gd27
Prosiding Ilmu Kependidikan Unida Gontor, 3(1), 266-289. Https://Doi.Org/10.20414/Elhikmah.V16i1.6193

Margasari, N., Sholikhah, Z., Andhini, M. M., & Fitrianna, H. (2020). Peningkatan Literasi Digital Untuk Membentuk Jiwa Student-Preneurship Pada Siswa Sekolah Menengah Atas (Sma) Di Yogyakarta. Darma Sabha Cendekia, 2(2), 32-39. Https://Doi.Org/10.33650/Guyub.V3i3.4729

Masitoh, S. (2018). Blended Learning Berwawasan Literasi Digital Suatu Upaya Meningkatkan Kualitas Pembelajaran Dan Membangun Generasi Emas 2045. Proceedings Of The Icecrs, 1(3). Https://Doi.Org/10.21070/Picecrs.V1i3.1377

Maulana, N., Mukhtasar, M., Wibowo, M. G., Razali, R., & Safwan, S. (2024). Transformasi Pasar Modal Syariah Indonesia: Menavigasi Tantangan Digitalisasi Dan Inklusi Keuangan Di Era 5.0. Jurnal Iqtisaduna, 10(2), 447-469. Https://Doi.Org/10.54298/Jk.V2i2.3387

Meilinda, N., Malinda, F., & Aisyah, S. M. (2020). Literasi Digital Pada Remaja Digital (Sosialisasi Pemanfaatan Media Sosial Bagi Pelajar Sekolah Menengah Atas). Jurnal Abdimas Mandiri, 4(1). Https://Doi.Org/10.36982/Jam.V4i1.1047

Mujtahid, I. M., Berlian, M., Vebrianto, R., Thahir, M., & Irawan, D. (2021). The Development Of Digital Age Literacy: A Case Study In Indonesia. The Journal Of Asian Finance, Economics And Business, 8(2), 1169-1179. Https://Doi.Org/10.13106/Jafeb.2021.Vol8.No2.1169

Nevira, A. J., Nasution, M. Z., Sa'adah, N., & Sari, H. P. (2024). Rekonstruksionisme Dalam Pendidikan Islam: Menghadapi Tantangan Akses Informasi Di Era Digital:(Reconstructionism In Islamic Education: Facing The Challenges Of Information Access In The Digital Era). Raqib: Jurnal Studi Islam, 1(2), 144-157. Https://Doi.Org/10.59829/Dq88ve47

Nugraha, D. (2022). Literasi Digital Dan Pembelajaran Sastra Berpaut Literasi Digital Di Tingkat Sekolah Dasar. Jurnal Basicedu, 6(6), 9230–9244. Https://Doi.Org/10.31004/Basicedu.V6i6.3318

Nur, F. F., & Insani, S. M. (2024). Evaluasi Kurikulum Sekolah Dasar Dalam Menilai Efektifitas Dan Relevansi Pembelajaran Di Sdn Sirnaraja. Pendas: Jurnal Ilmiah Pendidikan Dasar, 9(2). Https://Doi.Org/10.23969/Jp.V3i2.572

Nurjanah, S., Bedi, F., & Fitri, T. A. (2024). Strategi Pemimpin Dalam Meningkatkan Daya Saing Siswa Lulusan Di Era Digitalisasi. Re-Jiem (Research Journal Of Islamic Education Management), 7(2), 213-233. Https://Doi.Org/10.19105/Re-Jiem.V7i2.15753

Pare, A., & Sihotang, H. (2023). Pendidikan Holistik Untuk Mengembangkan Keterampilan Abad 21 Dalam Menghadapi Tantangan Era Digital. Jurnal Pendidikan Tambusai, 7(3), 27778-27787. Https://Doi.Org/10.30659/Jspi.7.1.56-67

Permana, I. A., & Sudrajat, J. (2022). Pengelolaan Manajemen Dalam Upaya Meningkatkan Kualitas Mutu Pendidikan. Jiip - Jurnal Ilmiah Ilmu Pendidikan, 5(5), 1479–1487. Https://Doi.Org/10.54371/Jiip.V5i5.590

Purba, E. F. (2024). Strategi Peningkatkan Mutu Lembaga Pendidikan Di Era Digital: Sebuah

DOI: https://doi.org/10.62872/k3d5gd27

Kajian Literatur. Dikaios| Jurnal Manajemen Pendidikan Kristen, 4(2), 26-41.

Putranto, F. K. H. (2024). Peran Pembelajaran Informatika Dalam Menumbuhkan Pemahaman Literasi Digital Pada Siswa. Jurnal Tahsinia, 5(8), 1131-1142.

Rahmadani, S. (2024). Strategi Pembelajaran Pendidikan Agama Islam Di Era Digital: Tinjauan Literatur Kualitatif. Jurnal Media Akademik (Jma), 2(6). Https://Doi.Org/10.61132/Jmpai.V2i3.385

Resia, A. S., Pamungkas, P. D. J., & Rachman, I. F. (2024). Membangun Masa Depan Digital: Inovasi Literasi Remaja Tasikmalaya Dan Sdgs 2030. Indopedia (Jurnal Inovasi Pembelajaran Dan Pendidikan), 2(2), 366-376. Https://Indopediajurnal.My.Id/Index.Php/Jurnal/Article/View/295

Resti, R., Wati, R. A., Ma'arif, S., & Syarifuddin, S. (2024). Pemanfaatan Media Pembelajaran Berbasis Teknologi Sebagai Alat Untuk Meningkatkan Kemampuan Literasi Digital Siswa Sekolah Dasar. Al Madrasah Jurnal Pendidikan Madrasah Ibtidaiya, 8(3), 1145. Https://Doi.Org/10.35931/Am.V8i3.3563

Rezkiana, N. M., Manda, D., & Awaru, A. O. T. (2023). Penguatan Pendidikan Karakter Siswa Melalui Pembelajaran Berbasis Literasi Digital Dalam Mata Pelajaran Sosiologi Di Sekolah Menengah Atas (Sma) Bosowa School Makassar. Jurnal Pendidikan Tambusai, 7(3). Https://Doi.Org/10.21831/Jpk.V8i1.21672

Sari, G. I., Winasis, S., Pratiwi, I., & Nuryanto, U. W. (2024). Strengthening Digital Literacy In Indonesia: Collaboration, Innovation, And Sustainability Education. Social Sciences & Humanities Open, 10, 101100. Https://Doi.Org/10.1016/J.Ssaho.2024.101100

Setiabudi Sukma, H., Iskandar, & Pahrudin, A. (2024). Manajemen Mutu Pendidikan Pada Pendidikan Dasar Dan Menengah Di Sekolah Dan Madrasah. Jurnal Manajemen Pendidikan Dan Ilmu Sosial, 5(3), 242–252. Https://Doi.Org/10.38035/Jmpis.V5i3.1925

Sholeh, M. I., & Efendi, N. (2023). Integrasi Teknologi Dalam Manajemen Pendidikan Islam: Meningkatkan Kinerja Guru Di Era Digital. Jurnal Tinta: Jurnal Ilmu Keguruan Dan Pendidikan, 5(2), 104-126. Https://Doi.Org/10.61181/Ats-Tsaqofi.V2i1.215

Sinha, P., & Ugwulebo, J. E. (2024). Digital Literacy Skills Among African Library And Information Science Professionals–An Exploratory Study. Global Knowledge, Memory And Communication, 73(4/5), 521-537. Https://Doi.Org/10.1108/Gkmc-06-2022-0138

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

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

Suhartini, C., Setiawan, I., Darsih, E., & Hanggara, A. (2024). Pelatihan Literasi Digital: Meningkatkan Kemampuan Remaja Dalam Menghadapi Tantangan Digital Di Tbm Hipapelnis Desa Kalimanggiskulon. Kalandra Jurnal Pengabdian Kepada Masyarakat, 3(1), 1-8. Https://Doi.Org/10.55266/Jurnalkalandra.V2i1.223

Suryadi, F., Pasaribu, M. H., Siahaan, A. D., Sabri, A., & Lubis, Y. (2024). Peran Manajemen

DOI: https://doi.org/10.62872/k3d5gd27
Pendidikan Dalam Mewujudkan Sekolah Berkualitas. Inspirasi Dunia: Jurnal Riset Pendidikan Dan Bahasa, 3(4), 92-107. Https://Doi.Org/10.58192/Insdun.V3i4.2617

Thana, P. M., & Hanipah, S. (2023). Kurikulum Merdeka: Transformasi Pendidikan Sd Untuk Menghadapi Tantangan Abad Ke-21. Prosiding Konferensi Ilmiah Dasar, 4, 281-288. Https://Doi.Org/10.46963/Aulia.V9i2.1395

Thelma, C. C., Sain, Z. H., Mpolomoka, D. L., Akpan, W. M., & Davy, M. (2024). Curriculum Design For The Digital Age: Strategies For Effective Technology Integration In Higher Education. International Journal Of Research, 11(07), 185-201. Https://Doi.Org/10.5281/Zenodo.13123899

Valverde-Berrocoso, J., Fernández-Sánchez, M. R., Revuelta Dominguez, F. I., & Sosa-Díaz, M. J. (2021). The Educational Integration Of Digital Technologies Precovid-19: Lessons For Teacher Education. Plos One, 16(8), E0256283. Https://Doi.Org/10.1371/Journal.Pone.0256283

Wahab, A. (2022). Penguatan Pendidikan Karakter Melalui Literasi Digital Sebagai Strategi Dalam Menuju Pembelajaran Imersif Era 4.0. Jurnal Pendidikan Dan Konseling, 4(5), 4644-4653. Https://Doi.Org/10.24235/Edueksos.V10i2.8096

Wahyudi, D., & Kurniasih, N. (2021). Literasi Moderasi Beragama Sebagai Reaktualisasi "Jihad Milenial" Era 4.0. Moderatio: Jurnal Moderasi Beragama, 1(1), 1–20. Https://Doi.Org/10.32332/Moderatio.V1i1.3287

Yuniarto, B., & Yudha, R. P. (2021). Literasi Digital Sebagai Penguatan Pendidikan Karakter Menuju Era Society 5.0. Edueksos : Jurnal Pendidikan Sosial &Amp; Ekonomi, 10(2). Https://Doi.Org/10.24235/Edueksos.V10i2.8096

Zakaria, Z., Sukomardojo, T., Sugiyem, S., Razali, G., & Iskandar, I. (2023). Menyiapkan Siswa Untuk Karir Masa Depan Melalui Pendidikan Berbasis Teknologi: Meninjau Peran Penting Kecerdasan Buatan. Journal On Education, 5(4), 14141-14155. Https://Doi.Org/10.61104/Ihsan.V1i2.61

Zubaidah, S. (2019, September). Steam (Science, Technology, Engineering, Arts, And Mathematics): Pembelajaran Untuk Memberdayakan Keterampilan Abad Ke-21. In Seminar Nasional Matematika Dan Sains, September (Pp. 1-18). Https://Doi.Org/10.25273/Pe.V5i01.328