

## The Digital Learning Model to Enhance Students' Understanding and Interest in Learning: A Case Study at Cangkreg II Lenteng State Elementary School, Sumenep

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**Abstract:** *Traditional learning models are often less effective in increasing elementary school students' interest in science and technology. The limitations of interactivity and visualization in traditional models encourage the need for digital-based learning innovations. This study aims to identify the impact of digital learning models on students' interest and learning outcomes in science subjects. The research used a qualitative approach with a case study method. The research subjects consisted of school teachers at Cangkreg II Lenteng Sumenep primary school. Data were collected through in-depth interviews, observation, and documentation, and analyzed using the Miles and Huberman analysis model which includes data condensation, data presentation, and conclusion. The findings indicate that digital learning models have great potential in improving the quality of science learning in primary schools. The use of interactive media, simulations, and engaging visualizations can help students build a better understanding of abstract science concepts. This research contributes to developing digital learning theory by demonstrating the effectiveness of technology-based learning models in improving students' motivation and learning achievement. The implication for learning practice is the importance of integrating digital technology into the science learning process to create a more enjoyable and effective learning environment.*

**Keywords:** Digital Learning, Elementary School, Student Interest

**Abstrak:** *Model pembelajaran tradisional sering kali kurang efektif dalam meningkatkan minat siswa sekolah dasar terhadap sains dan teknologi. Keterbatasan interaktivitas dan visualisasi dalam model tradisional mendorong perlunya inovasi pembelajaran berbasis digital. Penelitian ini bertujuan untuk mengidentifikasi dampak model pembelajaran digital terhadap minat dan hasil belajar siswa dalam mata pelajaran sains. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus. Subjek penelitian terdiri dari guru sekolah di SD Cangkreg II Lenteng Sumenep. Data dikumpulkan melalui wawancara mendalam, observasi, dan*

*dokumentasi, kemudian dianalisis menggunakan model analisis Miles dan Huberman yang mencakup kondensasi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa model pembelajaran digital memiliki potensi besar dalam meningkatkan kualitas pembelajaran sains di sekolah dasar. Penggunaan media interaktif, simulasi, dan visualisasi yang menarik dapat membantu siswa membangun pemahaman yang lebih baik terhadap konsep-konsep sains yang bersifat abstrak. Penelitian ini berkontribusi pada pengembangan teori pembelajaran digital dengan menunjukkan efektivitas model pembelajaran berbasis teknologi dalam meningkatkan motivasi dan pencapaian belajar siswa. Implikasi bagi praktik pembelajaran adalah pentingnya integrasi teknologi digital ke dalam proses pembelajaran sains untuk menciptakan lingkungan belajar yang lebih menyenangkan dan efektif.*

**Kata Kunci:** *Pembelajaran Digital, Sekolah Dasar, Minat Siswa*

## **Introduction**

The rapid development of digital technology has fundamentally reshaped the world landscape, including in the field of education. The digital era we live in today demands individuals who are not only technologically literate, but also have the ability to think critically, creatively and collaboratively. Digital literacy, especially in science and technology, is becoming increasingly crucial. The ability to access, evaluate and utilize digital information effectively has become a core competency required in various aspects of life (Naufal 2021). In the context of education, the demand for individuals who have high digital literacy is increasingly urgent. The rapid development of information and communication technology has led to innovations in learning methods. Digital learning, with all its interactive and engaging features, offers great potential to increase students' interest in learning, especially in science and technology fields that are often considered difficult and abstract. However, amidst the rapid development of technology, there are still many challenges faced in the implementation of digital learning. One of the main challenges is the digital divide. Not all students have equal access to technological devices, stable internet connections and supportive learning environments. This can widen the academic achievement gap between students who have access to technology and those who do not.

Previous research has shown that traditional learning methods are often less effective in generating students' interest in science and technology (Sayangan, Una, and Beku, 2024). Lack of interactivity is one of the main obstacles. Teacher-centered learning and the use of monotonous textbooks make students feel bored and less actively involved in the learning process. As a result, understanding abstract concepts becomes difficult and interest in learning decreases. In addition, the lack of relevance of the material to everyday life is also a problem. The subject matter is presented in isolation and not linked to real contexts, making it difficult for students to see the benefits of studying science and technology. This further exacerbates students' low interest in learning. Digital learning model comes as an innovative solution to overcome

these problems. By utilizing various interactive features such as simulations, videos and educational games, learning becomes more interesting and relevant. Students can actively engage in the learning process by conducting virtual experiments, collaborating with peers and finding answers to their own questions.

Although the potential of digital technology in science learning has been widely recognized, there are still a number of challenges that need to be overcome. One of the main challenges is the lack of teacher readiness in adopting digital technology in learning (Fitri and Dilia 2024). In addition, the limited infrastructure and accessibility of technology in some schools is also an obstacle. Students' low interest in science and technology has significant long-term impacts (Wati, S, and Sah 2023). If not addressed immediately, this could hinder the development of competent human resources in science and technology in the future. Therefore, this research aims to find solutions to these problems through the development and application of digital learning models that are effective in increasing elementary school students' interest in science and technology. It can be stated that there are many positive values for students, especially those who are in elementary school and also greatly affect the success of teachers in educating their students.

Several previous studies have revealed the effectiveness of using digital technology in improving student interest and learning outcomes (Rosmana et al. 2024). However, most of these studies focus more on the application of specific technologies, such as the use of simulation software or educational games. This study attempts to make a broader contribution by comprehensively examining the impact of implementing an overall digital learning model on students' interest in science and technology. Previous research also shows the Implementation of Science Literacy in Science Learning in Elementary Schools (Fetra Bonita Sari, Risda Amini 2020). Science literacy is an individual's ability to understand, use, and evaluate science information in making decisions and taking actions related to personal, social, and environmental life. Most of the research that has been conducted previously focuses more on improving the cognitive aspects of science learning, namely increasing knowledge and understanding of concepts. This is reflected in many studies that measure learning success through written tests that test students' understanding of science facts, concepts and principles. However, affective aspects such as interest, attitudes and values related to science are often overlooked. In fact, interest and positive attitudes towards science are important factors that can encourage students to continue learning and explore the field of science further. When students have a high interest in science, they tend to be more active in learning, more easily remember complex concepts, and more willing to face challenges in learning. Therefore, it is important for future research to give more balanced attention to cognitive and affective aspects in science learning.

Learning media theory is the theory used in conducting this research. Learning media has a very important role in improving the quality of learning (Magdalena et al. 2021). By utilizing various types of media such as video, animation, simulation, and online learning platforms, the learning process can become more interactive,

interesting, and effective. Well-designed learning media can increase students' learning motivation by presenting the subject matter in a more interesting format and relevant to everyday life. In addition, learning media can also facilitate the understanding of complex concepts through clear and interactive visualization. With learning media, students can learn actively by conducting virtual experiments, interacting with simulations, and completing challenging tasks. Flexibility in learning is also one of the advantages of learning media (Melati et al. 2023). Students can learn at their own pace and learning style, and access learning materials anytime and anywhere. Thus, learning media is not only a learning tool, but also a bridge for students to explore a wider world of knowledge.

The novelty of this research lies in identifying the most effective digital learning model in stimulating elementary school students' interest in science and technology. This research not only measures the increase in interest, but also explores further the factors that influence the successful implementation of digital learning models. Thus, this research is expected to make a significant contribution to the development of more innovative and relevant learning practices. In addition, this research will also deeply analyze student characteristics, teacher support, and optimal infrastructure availability in supporting the implementation of digital learning models. By understanding these factors, it is expected to gain a more comprehensive understanding of the challenges and opportunities in implementing digital learning in elementary schools. The results of this research will not only be useful for educators, but also for education policy makers in formulating appropriate strategies to improve the quality of science and technology education in Indonesia. Based on this, the researcher intends to examine more deeply the Digital Learning Model to Increase Elementary School Students' Interest in Science and Technology.

## **Method**

This research is qualitative research with a case study approach. The research examines the digital learning model to increase elementary school students' interest in science and technology. Qualitative research is conducted with characteristics that describe an actual situation, but the report made is not just a report of an event without a scientific interpretation (Matthew B. Miles 2014). In this case, the research subject provides comprehensive information about the research topic, while the suitability shows the close relationship of the research subject with the chosen research topic. Based on this, the subject in this study is a teacher with the code (R1) at Cangkreng II Lenteng Sumenep State Elementary School, on March 7, 2024. In this study, the researcher acts as the main instrument in collecting data by using a guide to conduct in-depth interviews. The researcher also used a voice recorder and a list of interview questions to support data recording and collection.

The data in this study are divided into primary data and secondary data. Primary data was obtained by means of in-depth interviews with teachers at SD Negeri Cangkreng II Lenteng Sumenep. Meanwhile, secondary data was obtained through information contained in documents or records related to the research. As well as data

also obtained from journals, theses and books related to digital learning models. The data analysis technique in this study uses the analysis technique of the data obtained.

Data analysis is systematically compiling the data obtained so that it can be easily understood. In conducting data analysis, the authors used the Miles and Huberman data analysis model, namely by conducting data condensation, data display, and conclusion drawing (Matthew B. Miles 2014). Data reduction is analyzing the digital learning model to increase elementary school students' interest in science and technology. Then the results of the analysis are presented sequentially and then conclude and mention the advantages and disadvantages of the results of the analysis.

## Results and Discussion

### Digital Learning Model in Elementary School Towards Science and Technology

The rapid development of digital technology has brought significant changes in various aspects of life, including education. The implementation of digital learning models in elementary schools is one of the efforts to improve the quality of learning, especially in science and technology subjects. By integrating digital technology into the learning process, it is expected to stimulate students' interest in learning, improve concept understanding, and develop 21st century skills needed by students to face future challenges. The implementation of digital learning models in primary schools offers various benefits (Aziz and Zakir 2022). First, this model can make learning more interesting and interactive, so students are not easily bored. The use of diverse learning media such as videos, simulations, and games can help students more easily understand abstract concepts in science and technology. Second, the digital learning model allows students to learn independently and at their own pace. Third, this model can also facilitate collaboration between students, so they can learn from each other and share knowledge.

Digital learning models have opened new horizons in education, especially at the elementary school level. The implementation of this model offers great potential to increase students' interest in science and technology (Yuda Al-fadilah, Alifa Rafli Akbar 2024). By utilizing various software, online platforms, and interactive media, learning becomes more interesting and relevant to students' daily lives. Students showed higher interest in science and technology subjects after the implementation of the digital learning model. They are more active in participating in learning activities and often ask questions. In this case, R1 revealed that "The evaluation results showed that students' understanding of science and technology concepts improved significantly after using the digital learning model". In this case, students are trained to think critically and creatively through activities in digital learning, such as problem solving and project creation.

The implementation of digital learning models in elementary schools promises many benefits, but unfortunately, it is still faced with a number of complex challenges. The gap in access to technology is one of the main obstacles. Interviewee R1 said "not all students, especially those from remote areas or underprivileged families, have devices such as computers or tablets, as well as stable internet connections". This

results in inequality in obtaining learning materials and actively participating in teaching and learning activities. In addition, teachers' competence in utilizing digital technology is also a crucial factor (Nurhayati and , Langlang Handayani 2020). Although many trainings have been provided, there are still many teachers who feel less confident or even do not have sufficient knowledge about various software and digital learning platforms. As a result, the process of technology integration in learning becomes less effective and optimal. Limited supporting facilities and infrastructure also complicate the situation. Slow or unstable internet networks, as well as insufficient number of computer devices in schools, become major obstacles in the implementation of digital learning. This condition often occurs in schools in rural areas or schools with limited budgets.

The implementation of digital learning models has brought significant transformation to students' 21st century skills development. Extensive access to digital information sources has changed the way students learn and think. They no longer just passively receive information from teachers, but actively search, evaluate and filter various relevant information sources from the internet. These strong digital literacy skills enable students to become independent learners, able to find answers to their own questions and develop a high sense of curiosity. In addition, collaborative learning facilitated by digital technology has encouraged students to work together and communicate effectively (Achyandia 2023). Through online platforms such as Google Classroom, Zoom, or various other collaboration apps, students can discuss, share ideas, and complete group tasks efficiently. This not only improves their verbal and written communication skills, but also trains them to work together in teams, respect different opinions, and achieve common goals. Furthermore, digital learning also facilitates the development of critical thinking and problem-solving skills. Through simulations, educational games and problem-based projects, students are encouraged to analyze situations, evaluate alternative solutions and make informed decisions. These skills are essential to prepare students to face challenges in an increasingly complex and dynamic world of work.

### **Factors Influencing Students' Science and Technology Learning Interest in Elementary School Digital Learning Models**

The rapid development of digital technology has significantly changed the educational landscape. Digital learning models are increasingly popular and adopted by many schools, including elementary schools. There are several factors that influence student interest in digital learning models in elementary schools including internal student factors. Students' interests and abilities are a strong foundation in the success of digital learning (Halim 2024). Students who already have an innate interest in science and technology tend to be more motivated to dig deeper into digitally presented learning materials. They will be more enthusiastic in conducting virtual experiments, watching educational videos, or participating in online discussions related to the topic. In addition, the visual and kinesthetic learning styles that most students have are also very relevant to the interactive and dynamic characteristics of digital learning. Data

visualization, simulation, and attractive animation will be easier for students with visual learning style to understand and remember. Meanwhile, students with kinesthetic learning style will be more motivated by activities that allow them to interact directly with learning materials, such as conducting simulation experiments or creating technology-based projects. Students' ability to operate technological devices is also a determining factor in the success of digital learning (Wulandari, Khusaini, and Syamiya 2022). Students who are already accustomed to using computers, tablets or smartphones will find it easier to adapt to various online learning platforms. They will be more confident in exploring the various features and tools available, and more effective in completing the assigned tasks. However, not all students have the same level of ability in using technology. Therefore, it is important for educators to provide adequate guidance and support to students who are still struggling.

Besides internal factors, external factors also play a significant role in influencing students' interest in digital learning. The quality of relevant, interesting, and up-to-date learning materials is the main key in attracting students' attention. Materials presented with easy-to-understand language, interesting visuals, and real-life examples will make students more motivated to learn. In addition, creative and varied learning design is also very important. The use of various digital media such as videos, animations, simulations, and educational games can make the learning process more fun and interactive (Aziz and Zakir 2022). Teacher support as a learning facilitator is equally important. Teachers who are able to create a positive learning atmosphere, provide appropriate guidance, and provide constructive feedback will greatly motivate students. The availability of adequate school facilities is also a determining factor for the success of digital learning. Well-functioning technology devices, such as computers, tablets and projectors, as well as a stable internet connection are absolute prerequisites. In addition, a supportive family environment is also very influential. Parents' support in providing access to technology and creating a conducive learning atmosphere at home will greatly assist students in achieving optimal learning performance (Suhartono, Marlina, Suwandi 2024). Finally, social interaction with peers also plays an important role. Through discussion and collaboration with friends, students can share knowledge, ideas and experiences, and feel more motivated to learn. In summary, external factors such as material quality, learning design, teacher support, school facilities, family environment and social interaction complement each other and influence students' interest in digital learning. By creating a conducive and supportive learning environment, schools can maximize students' learning potential through digital technology.

Educators generally recognize the potential of digital learning in increasing students' motivation to learn. They see how interactivity and variety in material delivery through technology can make learning more interesting and meaningful. Based on observation, students who are accustomed to using technology are more active in participating in learning activities. They tend to complete tasks faster and are more creative in utilizing the various features available. In addition, well-designed,

interesting and relevant learning materials to daily life can increase student engagement. However, there are still many learning materials that are less interactive and monotonous. In this case teacher R1 revealed “many students feel more interested in digital learning because the materials presented are more interactive and fun than traditional learning. They also like the flexibility in managing their study time”. Teachers generally agree that digital learning can increase students' learning motivation. However, in practice, teachers are often faced with various challenges. Limited mastery of technology is one of the main obstacles. Not all teachers have a strong background in technology, so it takes extra time and effort to learn various digital learning platforms and tools. In addition, designing effective and relevant learning materials also requires careful consideration. Not all existing learning materials can be directly adapted into digital formats. The lack of adequate technology infrastructure in some schools is also a significant barrier. Slow internet access, limited devices and lack of technical training can hinder the optimal implementation of digital learning.

Based on the findings of this study, it can be concluded that to maximize the potential of digital learning, comprehensive efforts involving various parties are needed. Schools need to provide adequate infrastructure, teachers need to be provided with ongoing training, and learning materials need to be designed innovatively. In addition, it is also important to involve parents in supporting their children's digital learning process. Thus, digital learning can be an effective tool to improve the quality of education and prepare students to face challenges in the digital era. The implications of these findings are widespread. First, schools need to evaluate the existing technological infrastructure and make efforts to improve it. Second, it is necessary to carry out continuous training for teachers to improve their competence in utilizing technology in learning. Third, the development of quality learning materials that are relevant to the needs of students needs to be a priority. Finally, there needs to be close cooperation between schools, teachers, parents, and students to create a conducive digital learning ecosystem.

### **Changes in Students' Perception of Science and Technology in Digital Learning Models**

Digital learning has brought a breath of fresh air in the world of education, especially in changing students' perceptions of science and technology. Through a more interactive and interesting approach, digital learning has succeeded in arousing the interest of students who may have previously felt bored with conventional learning methods. By utilizing various technology features such as simulations, interactive videos, and online learning platforms, students are invited to actively participate in the learning process. They not only become passive recipients of information, but also active explorers of knowledge. One of the most significant impacts of digital learning is the increasing interest of students in science and technology (Hasnah Fadiyah, Endang M. Kurnianti 2024). When the subject matter is presented with engaging visualizations, interactive virtual experiments, and real-life examples from everyday

life, students can more easily understand abstract concepts. For example, by using simulations, students can observe the photosynthesis process in person, or conduct virtual chemistry experiments without having to worry about hazards in the laboratory. This more real and relevant learning experience makes students feel more connected to the subject matter and encourages them to find out more. In addition to increasing interest, digital learning can also increase student confidence (Agung Prabowo 2023). When students successfully complete a challenging task or project with the help of technology, they will feel more confident in their abilities. This success will motivate them to continue learning and exploring new fields. Digital learning also helps students understand the relevance of science and technology in everyday life. Through problem-based projects, students are invited to find solutions to real problems around them. Thus, students not only acquire knowledge, but also develop critical thinking and problem-solving skills that are much needed in the 21st century.

The implementation of digital learning, although it brings many benefits, also holds a number of challenges that can have a negative impact on the student learning process. One of the main challenges is the emergence of excessive reliance on technology. When students rely too often on digital devices to complete tasks, they have the potential to lose the ability to think critically and creatively independently. This dependence can hinder the development of problem-solving skills and the ability to analyze information in depth. Additionally, digital learning that is too individual-centric can also reduce students' opportunities to interact socially with peers. Healthy social interaction is very important for students' social and emotional development (Deni Okta Nadia, Neviyarni Suhaili 2023). Through discussions, debates, and group cooperation, students can learn to value differences of opinion, work together in teams, and develop effective communication skills. The problem of the digital divide is also a significant challenge in the implementation of digital learning (Subroto et al. 2023). Not all students have the same access to technological devices, a stable internet connection, and a supportive learning environment. This can widen the academic achievement gap between students who have access to technology and those who don't. Students who are disadvantaged in terms of access to technology will find it difficult to keep up with digital learning and potentially fall behind in their academic development. In addition, the lack of direct interaction with teachers can also be an obstacle for students who have difficulty understanding the subject matter.

The digital learning model has triggered a paradigm shift in science and technology education. The results of the observations made by students looked more enthusiastic and active in participating in digital learning compared to traditional learning. They interact more often with learning materials and provide more diverse responses. Students easily adapt to a variety of digital learning tools and platforms. They show good skills in searching for information and processing data. One of the R1 teachers said, "Students who previously may have felt bored or had difficulty understanding concepts in science, now show high enthusiasm in participating in learning". They feel more confident in experimenting and problem-solving, and more

motivated to delve deeper into topics that interest them. This indicates that digital learning has succeeded in changing students' views on science and technology from just subjects to be studied to relevant and interesting fields. Support from parents further reinforced these findings, with parents reporting that their children talked more often about science and technology at home, as well as showing greater interest in participating in science-related extracurricular activities. This shows that the positive impact of digital learning is not only felt in the school environment, but also extends to the family environment.

Based on this, it can be concluded that the implementation of digital learning has brought significant transformations in the educational landscape, especially in the fields of science and technology. Research shows that this more interactive and technology-based approach to learning has successfully aroused students' interest in learning, boosted confidence, and developed relevant 21st-century skills. Students become more active, creative, and able to think critically in facing the challenges of the modern world. However, the implementation of digital learning is also faced with a number of challenges, such as the digital divide, excessive dependence on technology, and lack of social interaction. To maximize the potential of digital learning, joint efforts from various parties are needed, including schools, teachers, the government, and industry.

## Conclusion

This study examines the impact of the application of digital learning models on students' interests and learning outcomes in science subjects in elementary schools. The results of the study show that digital learning has significant potential in improving the quality of science learning. Through the use of engaging interactive media, simulations, and visualizations, students can build a better understanding of abstract science concepts. In addition, digital learning is also able to increase students' motivation to learn, develop critical thinking skills, and facilitate collaboration between students. The study also identifies several challenges in the implementation of digital learning, such as the digital divide and lack of teacher competence. Several solutions can be offered namely; Schools need to ensure all students have equal access to technology devices and stable internet connections, continuous training is needed for teachers to improve their ability to utilize technology in learning, Learning materials must be designed to be attractive, relevant, and in accordance with the characteristics of students, There needs to be collaboration between schools, teachers, parents, and policymakers to create an environment that supports learning digital. This research contributes to the development of digital learning theory by demonstrating the effectiveness of technology-based learning models in increasing student motivation and learning achievement. In addition, this study also provides practical recommendations for teachers and schools in implementing digital learning.

This study provides recommendations for teachers in implementing digital learning models to enhance elementary school students' interest in science and technology, focusing on several key aspects. *First*, teachers should design interactive

learning experiences by utilizing various digital media such as videos, simulations, and games to make lessons more engaging. *Second*, it is essential to facilitate collaboration by providing opportunities for students to work together in completing tasks, allowing them to share ideas and deepen their understanding. Additionally, teachers should provide constructive feedback by offering specific and meaningful guidance to help students continuously improve. *Lastly*, in a digital learning model, teachers should act as facilitators who guide students in discovering answers to their questions rather than being the sole focus of the learning process. By implementing these strategies, digital learning can become more effective and enjoyable for students.

## References

- Achyanadia, Septy. 2023. "Peran Teknologi Pendidikan Dalam Meningkatkan Kolaboratif Siswa." *Jurnal Teknologi Pendidikan* 5 (1): 97–106. <https://doi.org/10.32832/tek.pend.v5i1.486>.
- Agung Prabowo, Rita Milyartini Yudi Sukmayadi. 2023. "Pembelajaran Berbasis Proyek Dalam Kegiatan Ekstrakurikuler Ansambel: Membangun Kepercayaan Diri Siswa Di Era Digital." *DEWANTECH : Jurnal Teknologi Pendidikan*.
- Aziz, Abdul, and Supratman Zakir. 2022. "Integrasi Teknologi Dalam Pendidikan: Tantangan Dan Peluang Pembelajaran Digital Di Sekolah Dasar." *IRJE Indonesian Research Journal on Education* 2 (3): 1030–37.
- Deni Okta Nadia, Neviyarni Suhaili, Irdamurni. 2023. "Peran Interaksi Sosial Dalam Perkembangan Emosional Anak Sekolah Dasar." *Pendas : Jurnal Ilmiah Pendidikan Dasar* 08 (1): 2727–38.
- Fetra Bonita Sari, Risda Amini, M. 2020. "Implementasi Literasi Sains Dalam Pembelajaran IPA Di Sekolah Dasar." *Jurnal Basicedu* 5 (5): 3(2), 524–32. <https://journal.uii.ac.id/ajie/article/view/971>.
- Fitri, Wildani Aulia, and Muqita Hanifah Hasanah Dilia. 2024. "Optimalisasi Teknologi AI Dalam Meningkatkan Efektivitas Pembelajaran." *Cendekia Pendidikan* 4 (4): 50–54.
- Halim, Amar. 2024. "Menumbuhkan Minat Dan Keterampilan Literasi Pada Siswa Kelas IV MIN 19 Bireuen Amar Halim Universitas Muhammadiyah Yogyakarta." *Mutiara: Multidisciplinary Scientific Journal* 2 (6): 1–8. <https://mutiara.al-makkipublisher.com/index.php/al/article/view/211/288>.
- Hasnah Fadiyah, Endang M. Kurnianti, Uswatun Hasanah. 2024. "Studi Litertur: Peningkatan Kemampuan Berpikir Kritis Siswa Sekolah Dasar Melalui Media Digital." *Didaktik : Jurnal Ilmiah PGSD FKIP Universitas Mandiri* 4: 2020–25.
- Magdalena, Ina, Alif Fatakhatu Shodikoh, Anis Rachma Pebrianti, Azzahra Wardatul Jannah, Iis Susilawati, and Universitas Muhammadiyah Tangerang. 2021. "Pentingnya Media Pembelajaran Untuk Meningkatkan Minat Belajar Siswa Sdn Meruya Selatan 06 Pagi." *EDISI : Jurnal Edukasi Dan Sains* 3 (2): 312–25. <https://ejournal.stitpn.ac.id/index.php/edisi>.

- Matthew B. Miles, A. Michael Huberman and Johnny Saldana. 2014. *Qualitative Data Analisis A Methods Sourcebook*. Edited by Kalie Koscielak and Laura Barrett Helen Salmon, Kaitlin Perry. SAGE Publications, Inc. Vol. 6. London ECY ISP United Kingdom: SAGE Publications Asia-Pacific Pte. Ltd.
- Melati, Eka, Ayyesha Dara Fayola, I Putu Agus Dharma Hita, Andi Muh Akbar Saputra, Zamzami Zamzami, and Anita Ninasari. 2023. "Pemanfaatan Animasi Sebagai Media Pembelajaran Berbasis Teknologi Untuk Meningkatkan Motivasi Belajar." *Journal on Education* 6 (1): 732–41. <https://doi.org/10.31004/joe.v6i1.2988>.
- Naufal, Haickal Attallah. 2021. "Literasi Digital." *Perspektif* 1 (2): 195–202. <https://doi.org/10.53947/perspekt.v1i2.32>.
- Nurhayati, Hermin, and Nuni Widiarti, Langlang Handayani. 2020. "Analisis Kompetensi Digital Guru Sekolah Dasar." *Jurnal Basicedu* 5 (5): 3(2), 524–32. <https://journal.uui.ac.id/ajie/article/view/971>.
- Rosmana, Primanita Sholihah, Sofyan Iskandar, Ayang Ranisa Rahma, Salsa Maria, Supriatna Supriatna, and Tri Wahyuningtyas. 2024. "Efektivitas Penggunaan Media Pembelajaran Digital Pada Hasil Belajar Siswa Kelas 5 SDN 6 Nagrikaler." *Jurnal Sinektik* 6 (1): 10–17. <https://doi.org/10.33061/js.v6i1.8205>.
- Sayangan, Yohanes Vianey, Luxcya Martir Una, and Veronika Yuliana Beku. 2024. "Penerapan Model Pembelajaran Discovery Learning Dalam Meningkatkan Kemampuan Berpikir Kritis Siswa Sekolah Dasar Pada Pembelajaran IPAS." *Jurnal Pendidikan MIPA* 14 (3): 757–66.
- Subroto, Desty Endrawati, Supriandi, Rio Wirawan, and Arief Yanto Rukmana. 2023. "Implementasi Teknologi Dalam Pembelajaran Di Era Digital: Tantangan Dan Peluang Bagi Dunia Pendidikan Di Indonesia." *Jurnal Pendidikan West Science* 1 (07): 473–80. <https://doi.org/10.58812/jpdws.v1i07.542>.
- Suhartono, Marlina, Suwandi, Dika Permana. 2024. "Analisis Faktor Lingkungan Keluarga Dalam Membentuk Kemandirian Belajar Siswa." *Al Itibar: Jurnal Pendidikan Islam* 11 (3): 232–41.
- Wati, Ririt Indah, Suharsiwi S, and Retno Wahyu Arian Sah. 2023. "Siswa Sekolah Dasar Menggunakan Game 'New Family 100' Untuk Mengembangkan Vocabulary, Bagaimana Kegiatan Implementasinya?" *Jurnal Penelitian Tindakan Kelas* 1 (2): 124–31. <https://doi.org/10.61650/jptk.v1i2.220>.
- Wulandari, Debi, Khusaini Khusaini, and Estu Niana Syamiya. 2022. "Literasi Digital Sebagai Faktor Penentu Prestasi Akademik." *SAP (Susunan Artikel Pendidikan)* 6 (3). <https://doi.org/10.30998/sap.v6i3.11925>.
- Yuda Al-fadilah, Alifa Rafli Akbar, Gusmanela. 2024. "Strategi Desain Pembelajaran Adaptif Untuk Meningkatkan Pengalaman Belajar Di Era Digital." *Jurnal Pendidikan Sains Dan Teknologi Terapan* 01 (04): 354–62.