

UTILIZATION OF EDTECH PLATFORMS IN IMPROVING ACADEMIC RESPONSIBILITY OF ELEMENTARY SCHOOL STUDENTS

Rohmanuddin Ahmad¹, Gandung Adi Wibawa², Erna Yayuk³

^{1, 2, 3} Magister Pedagogi, Fakultas Pascasarjana, Universitas Muhammadiyah Malang, Indonesia

Email: rohmanuddinahmad@webmail.umm.ac.id¹, adhigandung7@webmail.umm.ac.id²,
ernayayuk17@umm.ac.id³

Received: October 2025

Accepted: October 2025

Published: October 2025

Abstract :

This study discusses the issue of low academic responsibility among elementary school students in managing the learning process in the digital age. The research subjects consisted of 12 fifth-grade students at SD Negeri 4 Jatigunung, a classroom teacher, and three parents. Using a qualitative case study approach, data were obtained through observation, interviews, and documentation. Furthermore, the data were analyzed using Miles and Huberman's interactive model, which includes the stages of data reduction, presentation, and verification. The purpose of this study is to analyze the use of Educational Technology (EdTech) platforms such as Ruang Murid, Google Classroom, Canva Edu, and Quizizz in improving student discipline, independence, and learning time management. The results of the study show that the use of EdTech has a positive effect on students' academic behavior, characterized by increased punctuality of assignment collection, active participation, and self-reflection skills. However, digital distractions and inequality of access to technology are still the main obstacles. This study concludes that EdTech integration plays an effective role as digital scaffolding in shaping academic responsibility, especially when balanced with character education, teacher mentoring, and parental involvement in a collaborative digital learning ecosystem.

Keywords : Educational Technology; Academic Responsibility; Digital Learning; Elementary Education

Abstrak :

Penelitian ini membahas permasalahan rendahnya tanggung jawab akademik siswa sekolah dasar dalam mengelola proses belajar di era digital. Subjek penelitian terdiri atas 12 siswa kelas V SD Negeri 4 Jatigunung, seorang guru kelas, dan tiga orang tua. Dengan menggunakan pendekatan kualitatif berdesain studi kasus, data diperoleh melalui observasi, wawancara, dan dokumentasi. Selanjutnya, data dianalisis menggunakan model interaktif Miles dan Huberman yang meliputi tahapan reduksi, penyajian, dan verifikasi data. Tujuan penelitian ini adalah menganalisis pemanfaatan platform *Educational Technology (EdTech)* seperti Ruang Murid, Google Classroom, Canva Edu, dan Quizizz dalam meningkatkan disiplin, kemandirian, dan manajemen waktu belajar siswa. Hasil penelitian menunjukkan bahwa penggunaan EdTech berpengaruh positif terhadap perilaku akademik siswa, ditandai dengan peningkatan ketepatan waktu pengumpulan tugas, partisipasi aktif, dan kemampuan refleksi diri. Namun, distraksi digital dan ketimpangan akses teknologi masih menjadi kendala utama. Penelitian ini menyimpulkan bahwa integrasi EdTech berperan sebagai scaffolding digital yang efektif dalam membentuk tanggung jawab akademik, terutama bila diimbangi dengan pendidikan karakter, pendampingan guru, serta keterlibatan orang tua dalam ekosistem pembelajaran digital yang kolaboratif.

Kata Kunci: Teknologi Pendidikan; Tanggung Jawab Akademik; Pembelajaran Digital; Sekolah Dasar

INTRODUCTION

The development of the Industrial Revolution 4.0 and the era of digital disruption has affected various areas of life, including the education sector. The application of *Information and Communication Technology* (ICT) in learning activities marks a paradigm shift in education from a conventional system to a more open, flexible, and digital-based system. In this context, *Educational Technology* (EdTech) has become the main catalyst that is revolutionizing the way teachers teach and students learn, by providing various digital learning platforms that enable interactive, collaborative learning processes that can be accessed anytime and anywhere (Beltrán, Guadalupe Beltrán, Parrales De la A, & Guadalupe Coronel, 2024; Langat, 2024).

The use of EdTech in primary education provides a great opportunity to create more interactive, contextual, and student-centered learning. In line with the findings of Yayuk et al., (2021), the application of technology-based and multimedia learning media has been proven to increase the effectiveness of material delivery and learning motivation. In addition, EdTech supports self-directed learning, where students can learn independently at their own pace and using their own strategies (Mingot & Marín, 2024). However, its application still tends to focus on cognitive achievements, while the formation of academic character traits such as discipline, responsibility, and independence has not received adequate attention.

The low level of learning responsibility among elementary school students in Indonesia is reflected in 2023 national data, which shows that 61.53% of students have not reached the reading literacy standard and 46.67% have not met basic numeracy competencies (Nadda, 2025). Another study found that only 35% of students were able to understand reading content effectively, even though they were fluent readers (Juariah, 2024). Research on 382,257 students in Bali also identified post-pandemic learning loss due to a lack of learning support and facilities (Teristonia, Widian, & Bayu, 2023). In addition, the majority of fifth-grade students are still at a basic level in understanding statistical data (Hasanah, Putrawangsa, Setiawati, & Purwanta, 2024). This condition shows the need for pedagogical innovation and the integration of learning technology to strengthen academic responsibility and learning engagement among elementary school students in Indonesia.

Although digital technology improves learning effectiveness, its excessive use without proper guidance can have a negative impact on students' academic

character. Research shows that uncontrolled use of technology can reduce discipline, concentration, and academic responsibility, as students are more easily distracted by non-educational platforms and rely on instant features such as auto answer or AI content, which weakens critical thinking skills and independent learning (Carrión et al., 2025; Wang, 2024; Yunita & Masriadi, 2025). In addition, high intensity of gadget use correlates with low learning motivation among elementary school students (Nuryati, Harsono, Wulandari, Rahmawati, & Widayarsi, 2025). This shows that the implementation of EdTech without a focused pedagogical strategy actually risks lowering the quality of academic character.

One aspect of character that is most affected by technological advances is academic responsibility. Academic responsibility includes students' awareness, willingness, and ability to manage their learning process independently and consistently. Indicators include completing assignments on time, discipline in participating in learning activities, the ability to make decisions when facing academic challenges, and integrity in completing assignments without plagiarism (Susanti, 2021). In the context of basic education, academic responsibility is not only a cognitive skill but also a moral value that must be formed early on so that students can become independent learners with good character in the future.

Teachers play a strategic role in integrating technology with character education. EdTech-based learning not only emphasizes academic achievement but also instills values such as responsibility, discipline, and independence. Teachers play a role in creating a structured and supportive learning environment, encouraging student responsibility through consistent expectations and support (Matsibora, 2024). For example, through project-based learning on digital platforms such as Canva Edu and Nearpod, students are trained in cognitive skills as well as responsibility for group work (Zulfan & Fadjar, 2025). LMS provides opportunities for teachers to monitor student learning progress and provide direct feedback, making the learning process more open, measurable, and character-oriented.

In addition to teachers, the involvement of parents and schools is a key element in the successful implementation of character-oriented digital learning. Effective communication between schools and parents is essential for monitoring students' online activities and strengthening character education at home (Octavia, Septiani, Rachma Alya Maulidhia, & Desi Rahmawati, 2021).

Collaboration between teachers and parents in supervising online learning activities is essential to maintain a balance between academic and moral aspects (Herak, 2025). With synergy between the three parties—teachers, students, and parents—the implementation of EdTech can be optimized as a means of improving the quality of learning while also fostering academic responsibility in students from an early age.

Previous studies have shown that the use of EdTech can improve student learning outcomes, motivation, and participation (Arteaga & Valeriano, 2025; Hia, Wulandari, & Rahmayani, 2025). However, most of these studies still focus on cognitive aspects, while the impact of EdTech on the formation of academic responsibility, especially at the elementary school level, has rarely been studied. In fact, academic responsibility plays a crucial role in supporting long-term learning success and preparing students to face the challenges of the 21st century. Based on this, this study attempts to fill this gap by empirically examining how the use of digital platforms such as Ruang Murid, Google Classroom, Canva Edu, and Quizizz can foster students' academic responsibility through innovative, collaborative, and character-oriented learning strategies.

The problems arising from this phenomenon indicate a gap between the potential and reality of EdTech utilization at the elementary education level. Although educational technology is designed to support active and independent learning, in practice, many students are still unable to use technology responsibly. Some students still show low discipline in completing assignments, lack of independence in learning, and a tendency to rely on instant technological assistance without going through a critical thinking process. This condition indicates that the use of EdTech has not been fully able to foster the values of academic responsibility, which are an important foundation in shaping students' learning character.

This study conceptually aims to analyze and describe the use of EdTech platforms in improving the academic responsibility of elementary school students. In practical terms, the findings of this study are expected to assist teachers and educational institutions in designing technology-based learning that focuses not only on cognitive achievement but also on the development of strong character and personality in the digital age. In addition, the results of this study are expected to serve as a reference for policymakers in formulating digital education strategies and policies that emphasize strengthening students' academic and moral character from the elementary school level onwards.

RESEARCH METHOD

This study uses a qualitative approach with a case study design that focuses on the use of EdTech in developing the academic responsibility of elementary school students. The selection of case studies aims to enable researchers to gain a deep and comprehensive understanding of the influence of EdTech implementation on discipline, independence, and academic responsibility of students during the learning process.

Research Location and Presence

This study was conducted at SD Negeri 4 Jatigunung, Pacitan Regency, East Java Province, in the odd semester of the 2025/2026 academic year. This school was chosen because it has consistently implemented various digital learning platforms since the post-pandemic period. The researcher was present at the location as a participatory observer, interacting with teachers and students during the digital and blended learning process. The researcher's presence was to obtain authentic data and ensure that each research finding reflected the dynamics and reality of learning that occurred in the school environment in a factual and contextual manner.

Research Subjects and Informants

The subjects in this study included 12 fifth-grade students, a classroom teacher, and three parents who actively used digital platforms such as Ruang Murid, Google Classroom, Canva Edu, and Quizizz in teaching and learning activities. Informants were selected using purposive sampling techniques, considering that they were directly involved in the application of EdTech in the school environment. In addition, parents were also involved as supporting informants to obtain information about supervising their children's learning at home and the development of their academic responsibilities outside of school.

Data Collection Techniques

Data collection in this study was conducted using three methods, namely observation, in-depth interviews, and documentation studies. Observations were conducted directly to observe student behaviour during the EdTech-based learning process, including punctuality in collecting assignments, activity in group projects, and the ability to manage study time independently. In-depth interviews were conducted with teachers, principals, students, and several parents to explore their perceptions, experiences, and challenges faced in implementing EdTech as a means of shaping students' academic responsibility. Meanwhile, documentation included collecting student reflection notes, digital

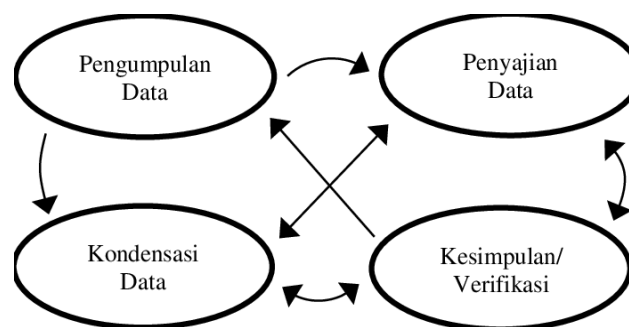
assignment results, online learning activity reports, and school policies related to technology-based learning. All data collection activities were carried out over a month, namely October 2025, through observation and follow-up interviews to obtain in-depth, authentic, and verified information.

Data Analysis Techniques

In this study, data analysis was conducted using Miles and Huberman's interactive model, which consists of three stages: data reduction, data presentation, and conclusion drawing and verification. The reduction stage involves filtering, grouping, and simplifying data from observations, interviews, and documentation into themes relevant to the research focus. The data was then presented in the form of narratives, tables, or thematic matrices to visualize patterns of student academic responsibility behaviour. In the final stage, conclusions were drawn and verified on an ongoing basis to ensure accurate interpretation and consistency between empirical findings and the theoretical framework used.

During the analysis process, triangulation of sources, methods, and time is carried out to maintain data credibility. The researchers also compiled an audit trail and reflective notes to ensure the dependability and confirmability of the research results. The results were validated through a member checking process with key informants to ensure that the interpretations obtained were in line with the reality in the field.

Figure 1. Miles & Huberman's Interactive Data Analysis Model (2014)



Thus, this research method was systematically designed to comprehensively describe how the application of the EdTech platform contributes to shaping the academic responsibility of elementary school students through a reflective, disciplined, and independent learning process

FINDINGS AND DISCUSSION

Research Findings

This study reveals three main findings that demonstrate the important role of EdTech in shaping the academic responsibility of elementary school

students. First, the use of EdTech contributes to improving students' discipline and time management skills. Second, educational technology encourages independence and self-reflection in the learning process. Third, EdTech increases students' active participation and sense of responsibility for their learning outcomes.

Based on observations and interviews, the use of four main digital platforms – Ruang Murid, Google Classroom, Canva Edu, and Quizizz – showed a pattern of improvement in positive academic behaviour. Most students showed improvement in the timeliness of submitting assignments, consistently following their study schedules, and showing initiative in seeking additional materials.

Teachers reported that the real-time feedback and progress tracking features on these platforms helped them assess the extent to which students' academic responsibility had developed. Meanwhile, students assessed that EdTech-based learning was more enjoyable and challenging because they could manage their time, choose assignments, and collaborate with peers online.

Table 1. Summary of Improvements in Student Academic Responsibility through EdTech

Aspect	Behavioral Indicators	Conditions Before EdTech	Conditions After EdTech	Dominant Platform
Discipline and Time Management.	Punctuality in submitting assignments.	65% of students are late in submitting assignments.	85% of students are punctual and manage their own study schedules.	Google Classroom, Ruang Murid
Independence and Self-Reflection.	Learning without teacher encouragement, taking reflective notes.	Students depend on teacher instructions.	Students actively create digital reflection notes and seek additional resources.	Ruang Murid, Canva Edu

Participation and Academic Responsibility.	Collaboration, responsibility for work results.	50% students are passive in group projects.	of 90% of students are actively participate and take responsibility for their roles.	Canva Edu, Quizizz
---	---	---	--	--------------------

Analysis and Theoretical Relevance

EdTech as a Medium for Independent Learning and Self-Regulation

Research findings show that EdTech plays a major role in developing *self-regulated learning* (SRL) that is, the ability of students to set their own learning goals, strategies, and evaluations. This is in line with the theory of self-directed learning, which emphasizes that independent learning grows when learners have access to immediate feedback and control over their learning experiences (Olajide, 2023).

Students who use the Ruang Murid platform show an increase in SRL behaviour. They are able to prioritize tasks, reflect on learning outcomes, and seek additional resources independently without direct guidance from teachers. This shows that technology not only serves as a learning aid, but also helps instill academic responsibility through the development of metacognitive awareness. Deep learning is achieved when students are given the space to work together in groups, discuss, and make decisions together, thereby strengthening their emotional and cognitive involvement in the learning process (Sari, Ristiana, & Yayuk, 2025).

EdTech and Discipline Building through Gamification

Platforms such as Quizizz and Canva Edu feature gamification that encourages student discipline and responsibility. Game-based learning can strengthen student engagement and responsibility for academic tasks because it involves the principle of positive reinforcement (Fernandes et al., 2024).

The leaderboard and digital badges features in Quizizz provide intrinsic motivation for students to continuously improve their performance. Students feel proud when they successfully complete tasks on time and earn high scores. This positive reinforcement leads to the formation of disciplined behaviour and a consistent learning ethic – two key components of academic responsibility.

EdTech as Scaffolding for Academic Character Building

Based on Vygotsky's *Zone of Proximal Development* (ZPD) theory, effective learning is achieved when students receive support or scaffolding from a

learning environment that encourages them towards independence. EdTech provides a form of digital scaffolding through automatic scheduling features, real-time feedback, and self-assessment, all of which help students recognize mistakes, correct them, and improve academic self-awareness (Mane & Jagtap, 2024).

According to Yayuk et al., (2024), teachers' activities in providing scaffolding questions to students require reflective and contextual thinking processes. In the context of digital learning, this principle can be applied through the provision of digital scaffolding in the form of feedback and reflective guidance provided by the EdTech platform. Through this mechanism, students not only receive cognitive assistance but are also trained to optimize their critical thinking skills and take responsibility for their own learning process.

Thus, EdTech is not only a technological instrument but also a pedagogical mediator that builds character through a structured and reflective learning process. This process supports Piaget & Bruner's constructivism theory that students build knowledge and values through direct experience.

The Role of Teachers as Character Facilitators in the Digital Age

Teachers have a strategic role in directing the use of educational technology so that its use remains in line with character values, creating an interactive learning environment, fostering critical thinking skills, and encouraging students to actively find solutions to the problems they face. In designing tasks or questions, teachers also need to pay attention to the diversity of students' abilities so that the learning process is more inclusive and effective (Yayuk et al., 2024). Therefore, the role of teachers is not only limited to imparting knowledge, but also as facilitators and role models who foster academic responsibility.

Teachers implement various strategies to foster students' academic responsibility, such as the use of digital reflection logs, group project-based learning assignments, and monitoring individual progress through a *Learning Management System* (LMS). These strategies are in line with the concept of *Social Emotional Learning* (SEL), which emphasizes the importance of balancing academic ability with emotional intelligence (Mittal, 2020). In practice, teachers guide students to develop digital self-awareness, maintain ethics in online activities, and control the use of devices in order to remain focused on academic goals.

Implementation Challenges: Digital Distractions and Access Inequality

Although this study shows a significant increase in academic responsibility, several obstacles remain. First, digital distractions from non-educational applications are still a major problem. Some students sometimes open games or social media during online learning sessions. Second, the gap in technology access between students from different socioeconomic backgrounds causes variations in participation.

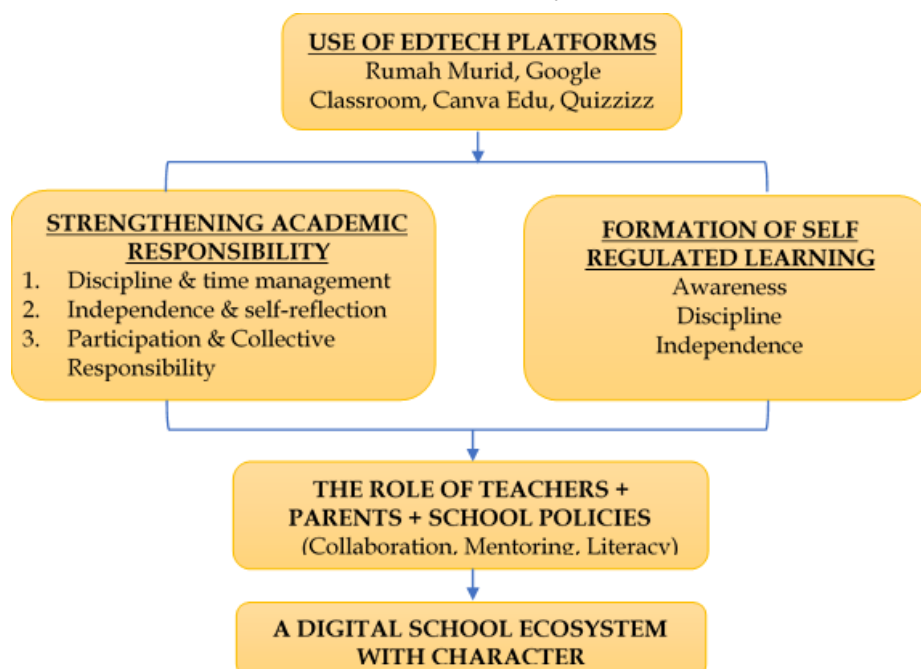
These findings reinforce the warning by Yunita & Masriadi, (2025), that uncontrolled gadget use can reduce motivation and focus on learning. Therefore, EdTech integration must be balanced with school digital literacy policies and parental involvement in supervising learning at home.

Synergy between EdTech, Character Education, and the Digital School Ecosystem

The results of the study show that the effectiveness of EdTech in shaping academic responsibility does not only depend on the technology, but also on the surrounding educational ecosystem. The synergy between teachers, students, parents, and school policies creates a collaborative and character-building learning environment (Herak, 2025).

The conceptual model of this integration can be seen in the following figure:

Figure 2. Conceptual Model of EdTech Integration in the Formation of Academic Responsibility



This model shows that EdTech is not merely a technological medium, but a learning ecosystem that involves character, behaviour, and social dimensions. The integration of EdTech with character building and institutional support is

key to the successful formation of sustainable academic responsibility.

Table 2. Comparison of This Study with Previous Studies

Researcher	Focus of Study	Main Findings	Contribution of This Research
Arteaga & Valeriano (2025)	Interactive platform for improving academic results	Increasing student participation	Adding aspects of responsibility and independence in learning.
Subekti et al. (2025)	The Impact of EdTech on Elementary School Learning Quality	Increasing Student Engagement	Demonstrating the relationship between engagement and academic character building.
Hia et al. (2025)	Effectiveness of educational technology in elementary schools	Improvement in learning achievement	Developing the concept of digital character learning based on responsibility.
Penelitian ini (2025)	The use of EdTech in shaping academic responsibility.	EdTech improves discipline, self-reflection, and responsibility.	Providing an integrative conceptual model based on character and the digital ecosystem.

Synthesis and Implications

Conceptually, this study emphasizes that EdTech can be an effective instrument for academic character education when applied through pedagogical strategies that balance technology and values. Technology is not the ultimate goal, but rather a means of building discipline, independence, and academic self-awareness.

The practical implications of this study for basic education encompass various parties. Teachers need to design technology-based learning activities that integrate cognitive, affective, and moral aspects so that learning does not only focus on knowledge but also on character building. Schools are expected to provide adequate digital infrastructure and establish ethical guidelines for the use of technology to create a healthy learning environment. Meanwhile, policymakers need to formulate a digital curriculum that explicitly includes academic character education as an integral part of the learning process in the digital age. Thus, the results of this study show that EdTech integration not only

improves academic performance but also builds strong and responsible academic character, making it relevant to the direction of 21st-century education based on technology and human values.

CONCLUSION

This study confirms that the use of *Educational Technology* (EdTech) contributes significantly to shaping the academic responsibility of elementary school students. Through digital platforms such as Ruang Murid, Google Classroom, Canva Edu, and Quizizz, students not only improve their learning outcomes but also develop discipline, independence, and academic self-awareness. Features such as progress trackers, real-time feedback, and gamification systems play an important role in accustoming students to managing their time, setting priorities, and reflecting independently on their learning process.

In addition to functioning as a cognitive aid, EdTech also acts as digital scaffolding that encourages the growth of *self-regulated learning* (SRL) skills. Through this approach, students learn to manage their learning goals and strategies continuously, so that technology serves as a means of shaping academic character based on moral values. The successful implementation of EdTech depends on character-based learning design, teachers' digital competence, and the support of a collaborative school ecosystem, including parental involvement in supervising and balancing the use of technology at home.

However, challenges such as digital distractions and technological access inequality need to be addressed through inclusive education policies and improved digital literacy for all parties. With synergy between teachers, students, parents, and schools, EdTech can be a transformative tool for building a generation of learners who are not only academically intelligent, but also have character, responsibility, and integrity in the digital age.

RECOMMENDATION

Based on the findings of the study, it is recommended that teachers and schools optimize the use of EdTech not only as a learning medium, but also as a means of character building. Teachers need to integrate cognitive, affective, and moral aspects into technology-based learning through digital reflection activities, collaborative projects, and continuous monitoring of learning progress. Digital literacy training for teachers is also important so that they are able to use technology creatively and ethically. Schools are expected to provide equitable

digital infrastructure, establish guidelines for ethical use of technology, and strengthen collaboration with parents to monitor the development of students' academic responsibility.

For the government and policymakers, it is necessary to develop education programs and policies that integrate technology with character education in the national curriculum. These efforts can be strengthened through support for further research on the application of digital pedagogy, including the use of artificial intelligence and adaptive systems in learning. Through these strategic steps, EdTech can serve as an effective and sustainable tool for shaping a generation of learners who are intelligent, have good character, and are ready to face the challenges of the 21st century.

REFERENCES

- Arteaga, J. A. M., & Valeriano, W. T. M. (2025). Plataformas interactivas para el refuerzo académico en estudiantes con rezago escolar. *DISCE. Revista Científica Educativa y Social*, 2(2), 125–145. <https://doi.org/10.69821/DISCE.v2i2.26>
- Beltrán, G. E. S., Guadalupe Beltrán, J. H., Parrales De la A, G. M. J., & Guadalupe Coronel, E. G. (2024). Del Aula Tradicional a la Educación Digital: La Innovación como Eje Central de la Transformación. *Ciencia Latina Revista Científica Multidisciplinar*, 8(5), 13739–13753. https://doi.org/10.37811/cl_rcm.v8i5.14822
- Carrión, L., Cisne, M. del, Laz, S. A., María, E., Sancho Aguilera, D., & Romero Paguay, J. A. (2025). El Impacto de la Sobreexposición a la Tecnología en el Compromiso Académico de los Estudiantes Universitarios. *Estudios y Perspectivas Revista Científica y Académica*, 5(2), 478–489. <https://doi.org/10.61384/r.c.a.v5i2.1135>
- Fernandes, A. B., Da Silva, C. K., Guimarães, C. D., Rodrigues, I. de M., Klauch, J. J., De Souza, J. L., ... Martins, P. W. A. (2024). Affectivity in distance education. *Cuadernos de Educación y Desarrollo*, 16(2), e3334. <https://doi.org/10.55905/cuadv16n2-024>
- Hasanah, U., Putrawangsa, S., Setiawati, F. A., & Purwanta, E. (2024). Statistical literacy in primary education: An analysis of Indonesian fifth-graders' data interpretation and analysis skills. *Journal on Mathematics Education*, 15(4), 1335–1356. <https://doi.org/10.22342/jme.v15i4.pp1335-1356>
- Herak, R. (2025). Character Education in the Digital Age: Challenges and Opportunities Amidst Technological Developments. *MSJ: Majority Science Journal*, 3(2), 245–252. <https://doi.org/10.61942/msj.v3i2.367>
- Hia, A. F. A., Wulandari, T., & Rahmayani, T. R. (2025). Efektivitas Penggunaan Teknologi Pendidikan dalam Meningkatkan Prestasi Belajar Siswa Sekolah Dasar. *TSAQOFAH*, 5(4), 3618–3628. <https://doi.org/10.58578/tsaqofah.v5i4.6409>

- Juariah, A. S. (2024). Membaca Tanpa Memahami: Tantangan Keterampilan Membaca Pemahaman Di Sekolah Dasar. *Garuda: Jurnal Pendidikan Kewarganegaraan Dan Filsafat*, 2(4), 157-163. <https://doi.org/10.59581/garuda.v2i4.4514>
- Langat, A. K. (2024). *Transition From Analogue to Digital Technology*. <https://doi.org/10.4018/979-8-3373-0025-2.ch004>
- Mane, P. A., & Jagtap, D. S. (2024). AI-Enhanced Educational Platform for Personalized Learning Paths, Automated Grading, and Real-Time Feedback. *Interantional Journal of Scientific Research in Engineering and Management*, 08(12), 1-7. <https://doi.org/10.55041/IJSREM39921>
- Matsibora, N. (2024). Responsibility of Primary School Students as a Social and Personal Virtue. *Pedagogical Education: Theory and Practice. Psychology. Pedagogy*, 2(42), 102-110. <https://doi.org/10.28925/2311-2409.2024.4213>
- Mingot, S. G., & Marín, V. I. (2024). Digital educational platforms in primary education: the case of Catalonia. *Technology, Pedagogy and Education*, 33(4), 475-493. <https://doi.org/10.1080/1475939X.2024.2337346>
- Mittal, N. (2020). Sosial Emotional Learning and Education Technology. *International Journal of Engineering Applied Sciences and Technology*, 04(10), 163-166. <https://doi.org/10.33564/IJEAST.2020.v04i10.031>
- Nadda, N. Q. (2025). Membangun Fondasi Pendidikan : Solusi Atas Minimnya Kemampuan Membaca dan Berhitung di Sekolah Dasar Indonesia. *Jurnal Arjuna : Publikasi Ilmu Pendidikan, Bahasa Dan Matematika*, 3(5), 206-215. <https://doi.org/10.61132/arjuna.v3i5.2359>
- Nuryati, N., Harsono, H., Wulandari, M. D., Rahmawati, L. E., & Widayarsi, C. (2025). Pengaruh Intensitas Penggunaan Gadget Terhadap Motivasi Belajar Siswa Sekolah Dasar. *Cetta: Jurnal Ilmu Pendidikan*, 8(3), 512-522. <https://doi.org/10.37329/cetta.v8i3.4578>
- Octavia, A. D., Septiani, Q., Rachma Alya Maulidhia, & Desi Rahmawati. (2021). Analisis Implementasi Pendidikan Karakter dalam Pembelajaran Daring Di SDN Menteng Dalam 07. *Risenologi*, 6(2), 48-52. <https://doi.org/10.47028/j.risenologi.2021.62.199>
- Olajide, A. E. (2023). *Educational Technology in Advancing SDL in Higher Education Curricula*. <https://doi.org/10.4018/978-1-6684-6772-5.ch002>
- Sari, L., Ristiana, Y., & Yayuk, E. (2025). Optimalisasi Penggunaan Teknologi Dalam Pembelajaran Deep Learning Untuk Meningkatkan Kolaboratif Siswa Paud. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 10.
- Susanti, R. H. (2021). *The Application of Self-Management Technique and the Improvement Student's Learning Responsibilities*. <https://doi.org/10.2991/assehr.k.210413.007>
- Teristonia, N. L. P., Widiani, I. W., & Bayu, G. W. (2023). Fenomena Learning Loss pada Siswa Sekolah Dasar Pasca Pandemi Covid-19. *Jurnal Imiah Pendidikan Dan Pembelajaran*, 6(3), 477-487.

<https://doi.org/10.23887/jipp.v6i3.57469>

- Wang, J. (2024). The impact of modern technology on student learning outcomes. In *Addressing Global Challenges - Exploring Socio-Cultural Dynamics and Sustainable Solutions in a Changing World* (pp. 514–519). London: Routledge. <https://doi.org/10.1201/9781032676043-71>
- Yayuk, E., Deviana, T., & C3, I. W. (2024). Teacher Thinking Process in Providing Scaffolding in the form of Questions in Mathematics Learning. *Jurnal Pemikiran Dan Pengembangan Sekolah Dasar*, 12(1), 137–151.
- Yayuk, E., Restian, A., & Ramadhani, N. F. (2021). Penggunaan Adobe Flash Cs3 untuk Mengembangkan Media Pembelajaran Berbasis Animated Video Pada Materi Tematik Kelas ISD. *JP2SD (Jurnal Pemikiran Dan Pengembangan Sekolah Dasar)*, 9, 144–157.
- Yunita, T., & Masriadi, M. (2025). Pengaruh Penggunaan Gadget Dalam Menurunkan Kemampuan Belajar Siswa. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(2), 7359–7365. <https://doi.org/10.31004/riggs.v4i2.1866>
- Zulfan, M. A., & Fadjar, D. N. M. (2025). Penguatan Karakter melalui Media Digital: Kolaborasi Guru, Orang Tua, dan Siswa dengan Canva dan Nearpod. *Jurnal Pendidikan Dirgantara*, 2(3), 205–215. <https://doi.org/10.61132/jupendir.v2i3.594>