



Class Management Strategy With Digital Technology

¹Linda Lestari, ²Gita Salamah Munthe, ³Dini Rahmayani, ⁴Muhammad Zulham Munthe.

¹²³⁴Sekolah Tinggi Ilmu Tarbiyah Al-Bukhary Labuhanbatu Sumatera Utara

e-mail: ¹lindansr9@gmail.com ²gitamunthe061@gmail.com ³dinirahmayani310@gmail.com

⁴zulhamstita99@gmail.com.

Article Info

Keyword:

Pengelolaan kelas, teknologi digital, pembelajaran interaktif, keterampilan abad ke-21, Madrasah Ibtidaiyah, teknologi pendidikan.

©2024 Linda Sari, dkk. This is an open-access article under the This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).



ABSTRACT

This research aims to investigate the extent to which the implementation of digital technology and effective classroom administration enhances the quality of education at Madrasah Ibtidaiyah. Establishing a learning environment conducive to learning necessitates the implementation of rules and procedures, regulating student behavior, and the physical configuration of the classroom. Furthermore, digital technology is instrumental in facilitating the learning process, as it enables access to information and interactive learning through hardware such as computers and devices, as well as software and internet-based applications. This research indicates that integrating digital technology into classroom management can improve student engagement in learning, facilitate more active participation, and promote the development of 21st-century skills, including digital literacy, collaboration, and problem-solving. Digital technology enables the development of a dynamic and more effective learning environment by allowing learning to be more interactive, flexible, and customized to the unique requirements of each student. The significance of incorporating digital technology to develop learning pertinent to the requirements of technological advancement in the digital age is underscored by the implications of this research.

1. INTRODUCTION

As digital technologies evolve, various aspects of life, including education, undergo substantial changes. Digital technologies do not merely alter the manner of communication and interaction; they also significantly impact the learning process in schools. In the educational context, digital technology has created an opportunity for teachers and students to collaborate more effectively, facilitate access to learning resources, and establish a dynamic and interactive learning environment. The purpose of technology integration in school planning is to enhance efficiency and optimize students' learning potential, particularly in the increasingly diverse school environment.

Classroom management is a critical component of the educational process designed to foster a collaborative learning environment and student engagement. Good school management necessitates effective planning, proficiency in facilitating interaction, and the use of appropriate tools and methods to streamline the learning process. One of the most frequently employed strategies in school selection is digital technology. This involves using educational management applications, interactive learning environments, and online communication platforms that enable students and teachers to engage in discussions beyond the classroom.

The implementation of digital technology in the classroom offers numerous benefits, including the ease of monitoring student behavior and performance, the flexibility of assigning and collecting tasks, and expanded access to learning material. Digital technology also enables educators to provide feedback in real-time, which can enhance students' motivation and understanding of the subject matter. However, using technology in selecting students also poses challenges, including infrastructure, teacher digital competence, and technology accessibility to students.

This study concentrates on implementing a school-wide curriculum strategy that incorporates digital technologies and analyses its impact on student retention and learning outcomes. With a population of approximately 200 students and a sample of approximately 50 students, it employs quantitative survey sampling to investigate the relationship between the use of digital technology and the efficiency of school operations.

Based on the above, the purpose of this study is to address several primary questions:

1. What is an effective school enrolment strategy that uses digital technology?
2. What factors influence the success of school enrolment based on digital technology?
3. What is the relationship between digital technology and student motivation in the learning process?

This study's results will likely benefit educators and educational institutions by helping them develop more effective classroom management strategies through digital technology. Additionally, the results will serve as a foundation for enhancing the teacher's technological proficiency, thereby establishing a learning environment responsive to the changing needs of the 21st century, including critical thinking, collaboration, and digital literacy.

2. THEORETICAL FRAMEWORK

a. Class Management

Classroom management is a linguistic term that is composed of two words: management, which denotes the process of organizing and directing activity to achieve a specific objective, and classroom, which represents the room or location where learning activities are conducted, as well as a group of students who learn collaboratively. Consequently, classroom management can be defined as organizing and controlling learning activities in the classroom to establish an environment that facilitates the learning process. (Erwinsyah, 2017)

Classroom management refers to a series of actions and strategies implemented by instructors to create a conducive learning environment. This encompasses the physical arrangement of the classroom, the establishment of norms and procedures, the regulation of student behavior, and the provision of support to enhance student engagement and participation (Yunita et al., 2024)

There are numerous expert opinions regarding the definition of classroom management:

Burden and Byrd define classroom management as the measures educators implement to establish and sustain optimal learning environments and encourage positive student

conduct. These measures encompass the enforcement of rules, the organization of physical space, and the management of behavior.(Ambarwati et al., 2021)

Martin, Yin, and Baldwin assert that classroom management encompasses the teacher's endeavors to regulate the classroom environment and influence student behavior to achieve learning objectives. They emphasize the importance of regulations, behavioral control, and the establishment of a conducive learning environment.

Djamarah defines classroom management as the endeavour to establish a learning environment that facilitates students' learning. This includes the development of positive interactions between students and instructors and among students.

Classroom management, as defined by Uno, is the capacity of the teacher to establish a learning environment conducive to learning. This includes managing time, materials, and teaching techniques to improve students' motivation. (Endang 2021)

Classroom management is the ability of the instructor to organize and regulate student behavior, structure an effective classroom environment, and manage learning tasks to establish a productive learning environment and maintain student focus, as defined by Emmer and Stough. (Halim 2016)

The definitions above suggest that classroom management is a methodical endeavor by educators to establish a supportive and conducive learning environment. The process of classroom management entails the adequate provision of learning support, the management of behavior, the implementation of standards, and the arrangement of the space to optimize positive interactions and the learning experience. Teachers can maximize learning objectives by ensuring students remain motivated and focused through effective classroom management.

b. Digital Technology in Education

"Digital technology in education" comprises three words: technology, digital, and education. The Greek phrase *techne*, which means "skill" or "art," and *logos*, which means "science" or "knowledge," are the sources of technology. Systems or devices that utilize binary numbers to store, process, and transmit information are called digital. On the other hand, education is the process of teaching and learning designed to cultivate students' intellectual abilities, skills, and morals. Consequently, digital technology in education uses digital-based devices and systems to facilitate and enhance the learning process from a linguistic perspective. (Yusa 2016)

The utilization of digital devices, software, and technology-based platforms to facilitate and improve the learning process is referred to as digital technology in education. This technology encompasses interactive learning applications, web-based learning, and e-learning, enabling more dynamic interactions and providing broad and flexible access to information. (Dewi et al. 2023)

Roblyer and Doering, experts in digital technology in education, define it as a combination of electronic and digital tools that facilitate the classroom learning process to enhance student engagement and effectiveness. This is significantly influenced by using technological devices, including tablets, computers, and internet-based applications. (Fathoni et al. 2023)

Heinich, Molenda, and Russell elucidate that technology in education encompasses media, tools, and techniques that facilitate active and collaborative learning, such as the utilization of computers and other digital devices. (Yaumi 2018)

Januszewski and Molenda assert that learning technology encompasses devices, methods, and processes designed to enhance the delivery of educational materials. This technology enhances the quality and accessibility of education by offering students more interactive and meaningful learning experiences. (Rahayu 2024)

Bates also defines digital technology in education as integrating digital-based tools and applications into the learning process, including online platforms and hardware such

as computers and software. He believes that digital technology in education enhances the student experience and enables more flexible learning access. (Rusydiyah, 2019)

Garrison and Anderson define learning technology as the use of technology-based communication tools to establish an interactive learning environment. This technology is a tool for learning and a means for students to develop critical thinking skills and collaborate. (Yusrizal, Misnawati, and Hariyadi, 2023)

The conclusion can be drawn from the definitions above of digital technology in education by utilizing digital-based tools, media, and platforms that support and enrich the teaching and learning process. Digital technology encompasses hardware, including computers and devices, and software and internet-based applications that facilitate more interactive, collaborative, and flexible learning. Students can more readily access information, actively engage in the learning process, and develop relevant skills for the digital era, such as digital literacy, collaboration, and problem-solving, with the help of digital technology. Integrating digital technology into education fosters the cultivation of 21st-century skills and establishes a dynamic learning environment.

3. RESEARCH METHOD

This study employs a qualitative-descriptive methodology to investigate the digital-based classroom administration strategies at Madrasah Ibtidaiyah. The primary objective of this research is to delineate effective classroom management strategies facilitated by technology and evaluate their influence on student skills and the learning process.

The survey encompasses all 200 students at Madrasah Ibtidaiyah. A sample of 50 students was selected from this population. Purposive sampling techniques were employed to select the sample, which consisted of students who had engaged in the learning process with digital technology. This was done to ensure that the data provided was pertinent to the research objectives.

Numerous methodologies were implemented to gather data, including Interviews: In-depth interviews were conducted with educators to ascertain the impact and their experiences during the learning process, as well as with students to comprehend classroom management strategies that utilize digital technology.

Direct observation was conducted in the classroom to document the use of technology in the interaction between instructors and students, as well as to observe how this technology aids in the management of the class and the enhancement of students' skills.

Documentation: The Lesson Plan (RPP), student project results, and photos or recordings of pertinent class activities are included to substantiate the data collected from interviews and observations.

The collected data are analyzed thematically through the following stages: Data Reduction: The primary aspects associated with technology-based classroom management strategies are highlighted through the simplification and summarisation of data from interviews, observations, and documentation.

Categorization: Subsequently, the data is categorized into primary themes, including the challenges encountered, the impact of technology on student skills, the implementation of technology in the classroom, and the planning strategies employed.

Drawing of the Conclusion: Based on the categorized findings, the researcher concludes the practices of digital technology-based classroom management and provides interpretations regarding its efficacy and impact on student skills development.

Through this approach, the research is anticipated to enhance comprehension of the implementation of digital technology in classroom management and its implications for the teaching and learning process and student skills at Madrasah Ibtidaiyah.

4. RESULTS AND DISCUSSION

1. Research Results

This research aims to ascertain the influence of digital technology on classroom management strategies in Madrasah Ibtidaiyah and to comprehend the perspectives of students and teachers on using technology in classroom management. The following are the research findings, which were derived from questionnaire data, interviews, and observations of 50 students and multiple teachers:

Student Engagement in Learning: The questionnaire results indicate that 76% of students are more intrigued and engaged in learning activities when digital technology is used in the classroom. According to the data analysis, 76% of the students (38 out of 50) report being more engaged in their learning when using digital technology. Nevertheless, 12 students (24%) have yet to experience increased engagement. Students are more motivated and focused when using technology, including computers, projectors, and learning applications. Teachers also recognize that technology contributes to preserving classroom order by enhancing the interactive nature of learning activities.

Collaborative and Communication Skills Development: The results indicate that using applications such as Zoom and Google Classroom enables pupils to collaborate on group activities. Technology has been reported to benefit the exchange of ideas and discussion, both in person and online, by as many as 70% of students. Additionally, educators have noted that students' communication abilities have enhanced as a result of technology's ability to facilitate more effective collaboration on group assignments.

Easy Access to Learning Resources: Eighty-two percent of students reported that they found it effortless to locate information and access learning resources online because of the integration of technology. Teachers also recognize that technology provides supplementary materials, such as educational videos or online modules, that students can access outside of school hours. This assists students in expanding their knowledge and deepening their comprehension of the material covered in class.

Enhancement of Students' Digital Proficiency: The integration of digital technology into classroom administration facilitates the acquisition of pertinent digital skills for contemporary times. As many as 84% of students report that they are more comfortable using digital devices, including laptops and presentation applications. Teachers have reported that students are more self-assured in their ability to utilize technology to complete assignments, a critical skill for their future.

Infrastructure and Teacher Skills Restrictions: Despite technology's numerous advantages, its implementation needs to be improved. Up to 52% of students indicated that the devices available at school are occasionally restricted. Furthermore, 60% of educators perceive that they require further training to optimize the utilization of technology in the classroom. These constraints suggest that the efficacy of digital technology utilization can be improved by providing enhanced facilities and technical support.

2. Discussion

The implementation of digital technology-based classroom management strategies at Madrasah Ibtidaiyah presents various challenges and benefits, as demonstrated by this research. The implementation of digital technology has been shown to have a beneficial influence on classroom management, as evidenced by the following findings:

Enhanced Student Engagement: Implementing digital technology contributes to the development of a more interactive and engaging learning environment. Student

engagement can be improved through the use of digital devices and applications, as students can easily access information and actively engage in educational activities. Technology also offers the flexibility to adapt teaching methods, which motivates students and prevents them from feeling bored while learning.

Collaborative Skills and Problem-Solving Development: Technology integration enables students to learn collaboratively through online applications and direct discussions. This is consistent with the 21st-century competencies encompassing communication, collaboration, and problem-solving. In technology-based classroom management, students are motivated to collaborate in teams and utilize technology to complete assignments, enhancing their capacity to communicate and share information. Technology enables students to access a wide range of learning resources, including the Internet and other educational applications, on a more widespread scale. This offers advantages in terms of comprehending more intricate concepts and expanding their understanding of the subject matter. Students can learn more independently, and the convenience and rapid access to information enhance their comprehension of the material.

Enhancement of Digital Skills: In the technological era, technology-based classroom management indirectly aids students in developing essential digital skills. Students must possess these abilities, including the capacity to use collaborative applications and presentation software to confront global challenges in the future. Technology assists students in comprehending the prudent use of devices for academic purposes and other skills that contribute to their learning.

Lack of Technological Skills and Infrastructure Constraints among Teachers: Despite the significant benefits, implementing technology in classroom management still faces limited infrastructure constraints, such as an insufficient number of devices for all students. On the other hand, some teachers feel the need to receive training to use technology optimally. These limitations emphasize the need for adequate facility support and teacher training to enhance their skills in using digital technology in the classroom. Implications for Digital Skills Development and Effective Classroom Management: integrating digital technology in classroom management at Madrasah Ibtidaiyah shows promising results in developing students' skills in the digital era. Students are more familiar with technology, can learn independently, and develop collaborative and communication skills that benefit their lives. By optimizing the use of technology, teachers can create a dynamic learning environment that supports the comprehensive development of students' skills.

However, improvements in technological facilities and teacher training programs are necessary to implement technology in classroom management effectively and achieve optimal results. This effort will ensure that digital technology can be maximally utilized so all students have equal opportunities in technology-based learning.

5. CONCLUSION

Teachers are actively involved in the organization and management of various aspects of learning, which is essential for establishing a conducive learning environment. Effective classroom management is a critical component of this process. Effective classroom management encompasses the control of student behavior, the establishment of clear standards, the provision of support to promote student engagement in the learning process, and the physical arrangement of the classroom. Furthermore, effective classroom management necessitates the establishment of positive interactions between students and

instructors, as well as among the students themselves. This is crucial to foster a supportive learning environment and encourage students to engage in active learning activities.

The efficacy of classroom management is significantly influenced by digital technology in education. Teachers can generate more interactive, flexible, and engaging learning experiences by incorporating digital devices, including computers, tablets, and internet-based learning applications. Digital technology facilitates more comprehensive access to information, as well as the opportunity for students to learn independently, collaborate, and cultivate digital skills pertinent to the digital age's requirements. Digital technology is employed in classroom administration to enhance students' learning experiences and develop 21st-century skills, including digital literacy, collaboration, and problem-solving.

Digital technology also offers students the flexibility to access educational materials at their convenience, regardless of their learning style or tempo, at any time and from any location. This results in a more effective and personalized learning experience. Furthermore, digital technology facilitates a more collaborative learning experience, enabling students to engage with one another through various digital platforms, broaden the purview of discussions, and share knowledge more dynamically.

In conclusion, this research demonstrates that implementing digital technology in conjunction with effective classroom administration can foster learning motivation, increase student engagement, and establish a more productive environment. This will affect attaining more optimal learning objectives and equip students with the necessary skills to confront the challenges of the constantly changing digital world. Digital technology can be a highly effective instrument for establishing a learning environment that is both relevant and innovative, provided that it is implemented correctly.

6. DAFTAR PUSTAKA

- Ambarwati, Dewi, Udik Budi Wibowo, Hana Arsyiadanti, And Sri Susanti. 2021. "Studi Literatur: Peran Inovasi Pendidikan Pada Pembelajaran Berbasis Teknologi Digital." *Jurnal Inovasi Teknologi Pendidikan* 8 (2): 173–84.
- Dewi, Anita Candra, Abdurrahman Arfah Maulana, Adelia Nururrahmah, Ahmad Ahmad, And A Muh Farid Naufal. 2023. "Peran Kemajuan Teknologi Dalam Dunia Pendidikan." *Journal On Education* 6 (1): 9725–34.
- Endang, Septiana. 2021. "Implementasi Pengelolaan Kelas Oleh Guru Terhadap Motivasi Belajar Anak Usia Dini Usia 5-6 Tahun Di Tk Taruna Jaya Prumnas Way Halim Bandar Lampung." Uin Raden Intan Lampung.
- Erwinsyah, Alfian. 2017. "Manajemen Kelas Dalam Meningkatkan Efektifitas Proses Belajar Mengajar." *Tadbir: Jurnal Manajemen Pendidikan Islam* 5 (2): 87–105.
- Fathoni, Anang, Bayu Prasodjo, Winarni Jhon, And Dewanto Muhammad Zulqadri. 2023. "Media Dan Pendekatan Pembelajaran Di Era Digital: Hakikat, Model Pengembangan & Inovasi Media Pembelajaran Digital."
- Halim, Abdul. 2016. "Pengaruh Komitmen Kerja Dan Efikasi Diri Terhadap Manajemen Kelas Guru Di Lp Ma'arif Nu Miftahul Ulum Desa Bago Pasirian Lumajang." Universitas Airlangga.
- Hariyadi, Hariyadi, Misnawati Misnawati, And Yusrizal Yusrizal. 2023. "Mewujudkan Kemandirian Belajar: Merdeka Belajar Sebagai Kunci Sukses Mahasiswa Jarak Jauh." *Badan Penerbit Stiepari Press*, 1–215.

- Rahayu, Sri. 2024. *Media Pembelajaran Konsep Dasar, Teknologi Dan Implementasi Dalam Model Pembelajaran*. Umsu Press.
- Rusydiyah, Evi Fatimatur. 2019. “Teknologi Pembelajaran: Implementasi Pembelajaran Era 4.0.” Uin Sunan Ampel Press Surabaya.
- Yaumi, Muhammad. 2018. *Media Dan Teknologi Pembelajaran*. Prenada Media.
- Yunita, Marsya Indah, Hesti Iswandayani, Nita Dwi Rahayu April, Fingka Wahyu Anggraini, Sela Rizki Azkiyah, And Bahtiyar Heru Susanto. 2024. “Analisis Implementasi Pengelolaan Kelas Dan Pengelolaan Peserta Didik.” *Journal Innovation In Education* 2 (3): 23–41.
- Yusa, I Made Marthana. 2016. *Sinergi Sains, Teknologi Dan Seni: Dalam Proses Berkarya Kreatif Di Dunia Teknologi Informasi*. Stimik Stikom Indonesia.