

# Behaviour Management and Digital Technology: Strategies for Managing an Effective and Organized Classroom

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## ABSTRACT

The development of digital technology and learner behavior management requires educators to create more effective and organized classroom management strategies. This article discusses the integration of behavior management with digital technology in the context of modern classroom management. The research objective is to identify and analyze effective strategies to create an organized learning environment by utilizing digital technology as a supporting tool for student behavior management. The approach used is qualitative-descriptive through literature review analysis or literature study. The results show that the combination of behavior management with digital technology can improve the effectiveness of classroom management through student behavior monitoring system, the use of gamification in learning and learning personalization. This study concludes that the use of digital technology in behavior management has a positive impact on classroom organization, student engagement, and achievement of learning objectives. The implications of this research provide practical guidance for educators in integrating digital technology to create a more effective and structured learning environment.

**Keywords:** Behavior Management; Technology; Classroom Management; Effective; Organized.

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## 1. Introduction

In the era of globalization and ever-growing digitalization, education faces new challenges in classroom management and student behavior. Effective behavior management is key to creating a conducive and productive learning environment. With the advancement of digital technology, teachers can develop more innovative and organized classroom management strategies. Technology facilitates better communication between teachers and students and allows for real-time monitoring of behavior and learning progress, which contributes to increased student discipline and motivation. Effective classroom management not only focuses on the classroom's physical arrangement but also includes developing positive relationships between teachers and students. By building good communication, teachers can create a sense of mutual trust that encourages students to participate more actively in learning [1]. Effective classroom management is key to creating a productive and enjoyable learning environment. In an ideal classroom atmosphere, students can focus and interact well, so they can understand the material better and achieve optimal learning outcomes [2].

The importance of effective classroom management cannot be ignored, especially in the increasingly complex educational context. A well-managed classroom can increase student motivation and create a positive learning atmosphere. Good classroom management does not only

include the physical arrangement of the classroom but also includes managing social and emotional interactions between students and teachers [3]. By utilizing digital technology, teachers can create systems that support better behavior management, such as using applications to record student attendance, behavior, and learning progress efficiently.

In creating effective learning, teachers must consider various factors that support the teaching and learning process. One important aspect is maintaining the ratio of students to the quality of interaction in the classroom. In addition to creating ideal physical conditions, learning must include elements that can build positive character in students. Teachers must play a role not only as conveyors of information but also as role models in implementing moral and ethical values [4]. Activities carried out by teachers in managing the class include organizing student activities, arranging the learning space, selecting the correct method, utilizing learning media, and continuous assessment [5]. In addition, class management also involves various essential elements, including the roles of teachers, students, parents, and available facilities.

Optimal and effective classroom management is essential to impact student behavior positively. Unfortunately, the quality of education in Indonesia still requires serious attention. One of the factors contributing to the low ranking is teachers' limited classroom management skills [6]. Many teachers struggle to create a conducive learning situation to build student discipline.

Without the ability to observe and adjust the learning process, teachers have difficulty managing the classroom effectively, ultimately affecting student motivation and learning achievement.

Technology integration in education can change classroom dynamics, making the teaching and learning process more interactive and engaging for students [7]. Recent studies have shown that using digital applications in behavior management can help teachers identify problems early and take appropriate action to encourage positive behavior in the classroom [8]. In addition, technology also provides tools for better collaboration between students, which is essential in building a sense of responsibility and engagement in the learning process [9].

## 2. Method

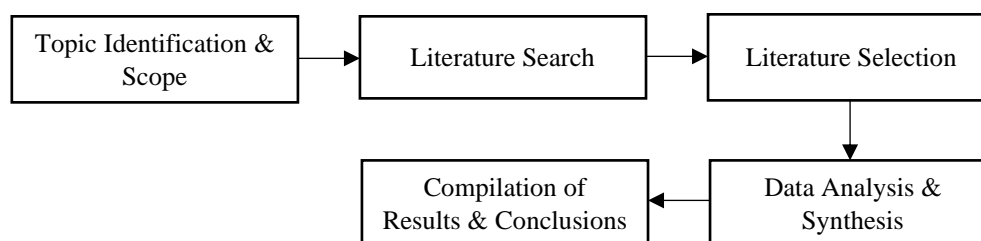


Figure 1. Flow chart Research

The research method used is the literature study method. This literature study aims to identify and analyze various theories, concepts, and research results related to classroom behavior management and the use of digital technology in supporting effective and organized classroom management. The data sources consist of journal articles, books, and academic references relevant to classroom management, educational technology, and behavior management. Where these data sources have inclusion criteria, including being published in the last 10 years. Data collection procedures through databases such as Google Scholar, Google Books, Scopus, and others. The initial step in this study is to find relevant literature sources, after which several articles are selected.

## 3. Result and Discussion

### a. The Role of Technology in Classroom Management

Educational technology refers to the study and practice of supporting schools' teaching and learning processes. This includes the development of teaching methods that utilize available technology to enhance students' learning experience. With the presence of sophisticated tools, the position of teachers in the learning process can change, where they are expected to encourage students to utilize technology to implement the knowledge they have acquired. Although technology has a function to facilitate learning, the role of teachers remains crucial and cannot be replaced entirely. Teachers

Using technology in behavior management can improve students' social skills, with studies showing that learning environments that support collaboration and communication contribute to such development [10]. Classroom behavior management has become more complex in the digital era, demanding innovative approaches. Using digital technology, teachers can create more effective and organized classroom management strategies. Digital tools and applications improve student communication and collaboration and facilitate real-time behavior and learning progress monitoring. Therefore, educators need to integrate technology in behavior management to create a dynamic and responsive learning environment, improving students' discipline, motivation, and readiness to face the challenges of a connected world.

still need to guide students in the learning process in the classroom.

Along with the development of the times, technology has brought significant changes, especially in education. In this context, the world of education needs to continue to innovate comprehensively. Given the vital role of education in determining the success of the teaching and learning system, continuous innovation is the key to facing challenges and taking advantage of existing opportunities. By implementing the latest technology, educational institutions can improve the quality of teaching and learning and prepare students to face an increasingly complex world.

Technology is an effective tool in delivering teaching and achieving learning objectives [11]. In education, technology is a facilitator that allows students to expand their knowledge. The use of technology in education can support educators and students during the learning process at school. With technology, educators can explain material more efficiently without spending extra energy to check student learning outcomes. This allows for more interactive teaching and makes it easier for students to understand the lessons.

The potential of technology in education is enormous, especially in promoting accessibility, adapting learning, and increasing student engagement. In addition, technology also strengthens the role of teachers and prepares students to face an increasingly digital world. Education can create a more productive, inclusive, and relevant learning environment by utilizing the ever-

growing technological advances. In this digital era, all stakeholders (teachers, students, parents, and educational institutions) must collaborate to make technology a tool that supports innovative and quality learning. With this approach, education can meet the needs and challenges of the times [12].

Technology is increasingly vital in classroom management and creating an effective and efficient learning environment. Technology allows teachers to integrate various learning aids to increase student interaction and engagement. For example, educational software and interactive applications can help students understand the material more interestingly and enjoyably. In addition, technology also facilitates better communication between teachers and students, as well as between students themselves, both through online learning platforms and social media. Thus, technology not only functions as a tool in the learning process but also as a means to manage classroom dynamics, support collaboration, and encourage students to participate in learning activities actively. Appropriate technology can help teachers manage the classroom more effectively, adjust learning methods to student needs, and create a more conducive learning atmosphere.

#### b. Effective Classroom Management Strategies with Digital Technology

The digital technology revolution has presented a new paradigm in classroom management that requires educators to adopt innovative methods. In today's era, where information can be widely accessed via the internet, learning management involves combining conventional management skills and implementing digital technology. The digitalization era is also known as the 4.0 era, which is marked by internet networks, big data processing, and electronic devices. Humans use existing technology to carry out daily tasks such as working, socializing, and studying. This digital transformation has penetrated various sectors of life, including the world of education. Consequently, educators must continue developing their digital competencies to keep up with the dynamics of technological change. It should be understood that classroom management in the digital era is not just about using software or online learning platforms but instead covers a much more comprehensive spectrum in creating an effective learning environment. Here are some strategies for managing classes with digital technology:

##### 1) Use of gamification in learning

Gamification is a learning strategy that adapts elements of games and video games to increase students' learning motivation [13]. This concept has been widely adopted in various disciplines, especially education, to create a more enjoyable learning experience. Teachers are required to design dynamic and engaging learning systems to avoid student boredom. Several popular gamification platforms, such as Wordwall, Kahoot, and Genially, have effectively supported the learning process. This is supported by research [14], which reveals the

positive impact of the wordwall platform on the teaching and learning process. The study showed that 70% of students responded positively to wordwall-based learning. This platform is effective because it allows educators to create easy, attractive, and interactive learning evaluations, thus contributing positively to students' processes and learning outcomes.

##### 2) Monitoring Student Behavior

Monitoring activities are a series of systematic processes that include collecting, analyzing, documenting, reporting, and utilizing management information related to implementing learning activities [15]. Currently, several educational institutions still rely on traditional methods of monitoring students. Research conducted by [16] revealed that recording attendance and grade data is still done manually in face-to-face books, which has the potential to cause the risk of data damage or loss. In addition, the limitations of this conventional system make it difficult for parents or guardians to monitor their children's development due to the ineffectiveness of information delivery. Implementing technology such as websites and SMS gateways can be utilized in student monitoring systems as a solution. In conventional and online learning, digital-based monitoring systems allow teachers and parents to monitor student activities directly. The use of this digital technology ensures the creation of efficient and transparent communication between schools and parents.

##### 3) Personalized Learning

Personalized learning is a method that presents learning experiences tailored to each student's characteristics, including learning patterns, competencies, and individual aspirations. Technological advances facilitate educators to present a variety of learning alternatives, including adaptive assignments, interactive content, and learning flows that students can manage independently. The main goal of personalized learning is to optimize engagement and academic achievement by giving students greater autonomy in directing their learning process. Integrating technology with customized learning creates breakthroughs in improving the quality of education. Artificial intelligence technology in personalized learning can create a more adaptive, responsive, and directed learning experience, helping students optimize their academic potential [17].

By implementing these strategies, digital technology functions not only as a learning aid but also as a means to create an organized, inclusive, and enthusiastic classroom environment. This allows teachers to manage student behavior more effectively while maximizing each individual's potential.

#### c. Challenges and Solutions in Using Technology for Classroom Management

Technology in classroom management offers many possibilities, including increasing the effectiveness of education, expanding access to learning resources, and facilitating communication between teachers, students, and parents. However, its implementation also presents many challenges that require special attention. One of the biggest challenges is that digital devices such as smartphones and tablets often cause distractions through social media and non-academic applications, affecting student concentration. To overcome this, teachers must implement strict rules around device use and use classroom management applications that allow them to control student activities. In addition, the technological access gap is a serious problem, especially in areas with poor infrastructure. Therefore, an integrated approach is needed, including offline-based learning materials and shared devices in the classroom.

Another challenge is the lack of digital literacy among teachers and students, which can prevent them from making the most of technology. A practical solution is to provide intensive training and technical support to increase their confidence and understanding of technology. In addition, information overload often occurs when teachers need to manage large amounts of data such as grades, attendance, and student activity reports generated by various platforms. Software with automation features and a simple user interface can filter out important information and reduce teachers' workload. The next challenge is relying on technology, especially in technical issues like network problems or broken devices. Therefore, educational institutions need a backup plan in the form of manual learning methods that can be used in emergencies.

On the other hand, data security and student privacy are becoming increasingly important as digital data collection increases. Platforms with strong security systems and digital privacy education are important to protect student data from potential breaches. Understanding and addressing these challenges through a strategic and flexible approach will help make optimal use of technology to make classroom management more effective, efficient, and responsive to the needs of the times.

#### 4. Conclusion

This article shows that technology can be an effective solution when dealing with the complexities of classroom behavior management in the digital age. Integrating digital tools and applications allows teachers to improve communication, collaboration, and real-time student behavior and progress monitoring. With this approach, the learning environment becomes more dynamic and responsive, improving student discipline and motivation while preparing them for the challenges of an increasingly connected world.

#### Reference

- [1] WH, E. H., Anisa, L. N., Meilani, A. R., Munasyifa, A., Sari, L. N., & Bashoriyah, R. (2023). Manajemen Kelas yang Efektif pada Kelas Indoor dengan Menggunakan Discovery Learning. *BIOFAIR*, 128-154.
- [2] Santoso, W. T., Haryanto, S., & Muhibbin, A. (2023). Implementasi Pengelolaan Kelas Efektif dalam Meningkatkan Mutu Pendidikan di Sekolah Seni Pertunjukan. *Didaktika: Jurnal Kependidikan*, 12(4), 881-888.
- [3] Kadir Fatimah, A. (2014). Effective Classroom Management: Strategies for Teachers. *Indonesian Journal of Education*, 10(1), 25-40.
- [4] Purnomo, E., Wahyudi, A. B., & Sawitri, S. (2021). Nilai Kemandirian dalam Wacana Ungkapan Hikmah di SD Se Karesidenan Surakarta. *Jurnal Pendidikan*, 30(1), 73-80.
- [5] Purnomo, B., & Aulia, F. (2018). Pelaksanaan Pengelolaan Kelas Di Sekolah Dasar. *Jurnal Gentala Pendidikan Dasar*, 3(1), 73-91.
- [6] Sukatin, S., Subha, H. A., Putri, S. A., & Irawan, R. (2023). Strategi Pengelolaan Kelas yang Efektif dalam Menumbuhkan Sikap Disiplin Siswa. *KOLONI*, 2(4), 189-200.
- [7] Smith, J., & McMahon, T. (2015). The Impact of Technology on Classroom Management. *Journal of Education Technology*, 12(3), 45-60.
- [8] Johnson, L. (2018). Digital Tools for Behavior Management in the Classroom. *International Journal of Educational Technology*, 14(1), 23-37.
- [9] Williams, R. (2020). Collaboration and Responsibility in Digital Learning Environments. *Journal of Learning Sciences*, 15(2), 78-92.
- [10] Rustan, M., Halimah, S., & Fatimah, K. (2019). The Role of Technology in Developing Social Skills in Students. *Journal of Educational Psychology*, 22(4), 301-315.
- [11] Nurillahwaty, E. (2022, December). Peran Teknologi dalam Dunia Pendidikan. In *Seminar Nasional Program Pascasarjana Universitas Pgri Palembang* (Vol. 1, pp. 81-85).
- [12] Nasir, M., Mahmudinata, A. A., Ulya, M., & Firdaus, F. A. (2023). Strategi pemberdayaan sekolah sebagai upaya peningkatan manajemen pendidikan. *Journal of International Multidisciplinary Research*, 1(2).
- [13] Jusuf, H. (2016). Penggunaan gamifikasi dalam proses pembelajaran. *Jurnal TICom*, 5(1), 1-6.
- [14] Putra, S. D., Aryani, D., & Ariessanti, H. D. (2021). Pemanfaatan Aplikasi Gamifikasi Wordwall Di Era Pandemi Covid-19 Untuk Meningkatkan Proses Pembelajaran Daring. *Terang*, 4(1), 83-90.
- [15] Kasaming, A. 2018. *Monitoring dan Evaluasi dalam Pembelajaran*. Media Nusa Creative : Malang
- [16] Putri, M. E., & Wulandari, D. A. N. (2016). Sistem informasi monitoring siswa berbasis web dan sms gateway pada SMK Negeri 37 Jakarta. *Jurnal Teknik Komputer*, 2(2), 49-55.
- [17] Zebua, N. (2024). Optimalisasi Potensi dan Pemanfaatan Artificial Intelligence (AI) dalam Mendukung Pembelajaran di Era Society 5.0. *Pentagon: Jurnal Matematika dan Ilmu Pengetahuan Alam*, 2(4), 185-195.