

# Application of Digital Technology in Educational Administration at Madrasah Mu'allimin Mu'allimat Bahrul Ulum Jombang

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## Keywords

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## Abstract

Education is the foundation of a quality civilization. The importance of technology in the world of education is increasingly felt as the times develop. This article discusses the application of technology and administrative systems at Mu'allimin Mu'allimat Bahrul Ulum Jombang school which still holds tight to its traditional culture but still strives to adapt to technological advances. The research used is qualitative which aims to explore the strategies applied in integrating technology, such as the development of the SIM (Madrasah Information System) website and the Mu'alliminEnamTahun.Net website to be able to improve administrative efficiency and communication between schools and student guardians. The results show that the application of technology not only speeds up and simplifies the process, but also increases data security and information transparency. However, challenges in teacher motivation and lack of training remain. Overall, the application of technology has had a positive impact on improving school quality.

## 1. Introduction

Education is a foundation for creating a quality civilization. Without a good education, it will be difficult to prepare human resources that are ready to compete with the global world. As stated in Law no. 20 of 2003 which states that the function of national education is to develop the ability and shape the character and civilization of a dignified nation in order to educate the nation's life, aims to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, become a democratic and responsible society.

As time goes by, technology develops more and more rapidly. In today's digital era, information and communication technology has become something that cannot be separated from everyday life. The same applies to education. The application of technology in education will increase opportunities to improve the quality of learning, share information, and simplify administration in schools. The more sophisticated technology is, of course, it also needs to be balanced with a good attitude. The emergence of the industrial revolution 4.0 has a major impact on the work field so that most of it will be controlled by technology (Paramansyah, A. 2020).

In the world of education, teachers should not be blind to technological developments because teachers have a very important role in the continuity of teaching and learning. Teachers should not be left behind from their students in responding to the existing times. Asari A., et al (2023) in his book say teachers should not ignore technology but must try to familiarize themselves with technology so as not to be left behind. The impact of technology on teacher performance includes that teachers can manage administrative tasks more efficiently, increase interaction and collaboration with students and parents, and can adopt innovative and personalized learning approaches (Sholeh, 2023). Therefore, schools should not allow teachers to be blind to technological developments. Schools must facilitate teachers to progress and develop. In order to continue to grow, schools need to innovate continuously.

One of the school's efforts in developing the quality of education is to use and follow the development of technology and digitalization. Using technology in managing institutions is one alternative that can be used to help improve the quality of education by presenting a digital-based

education system in both administration and learning. Administration is all the processes and integration of everything related to educational goals. In the process of educational administration, all the people involved in achieving educational goals are integrated, organized, and coordinated effectively, all the necessary and existing materials are used efficiently (Qurtubi, 2019).

Departing from this background, the researcher wants to examine how the application of technology in the administration system of Madrasah Mu'allimin Mu'allimat Bahrul Ulum Jombang. Madrasah Mu'allimin Mu'allimat became the object of research because the school is known to still very closely hold the traditional culture that has been passed down, but Madrasah Mu'allimin Mu'allimat continues to develop itself and does not close its eyes from technological developments. Although it still uses classical teaching methods, the school has begun to implement the use of technology in its administration. The school even received an award as the best category of website management in the PWI Jombang Awards 2023. In addition, the school also created a website called SIM (Madrasah Information System) which contains the development of the madrasah curriculum, administrative management, counseling guidance, homeroom teachers, and teachers. This website is also used to monitor student learning, discipline, and tuition fees. The utilization of information technology in educational administration can provide convenience in various aspects, such as student data management, curriculum preparation, communication between educators and parents, and the provision of digital materials (Zakiah, 2024a). This research aims to explore the various strategies implemented by Madrasah Mu'allimin Mu'allimat in integrating technology in administrative management. Through this research, it is hoped that it can provide an overview of how technological developments can be integrated in any school in coloring and facilitating the educational process.

## 2. Method

The researcher uses qualitative research which aims to describe a situation more deeply with a thorough understanding based on the situation that exists in the phenomenon to be studied (Yusanto, 2020). The type of research is descriptive qualitative, in which the researcher will describe the results of the research that has been collected.

The research was conducted at Madrasah Mu'allimin Mu'allimat Bahrul Ulum Jombang on Friday, September 20, 2024. In this study, the object of research is the application of technology in the school. The subjects of the research are teachers and education personnel in the media section of madrasah Mu'allimin Mu'allimat Bahrul Ulum Jombang. The research technique is by conducting interviews with the subject and documentation. The data analysis technique uses descriptive qualitative, namely by collecting data, selecting data, presenting data, and concluding data.

## 3. Results and Discussion

Based on the interview results, the researcher learned about the application of technology in school administration and obtained the following data.

**Table 1. Technology applied in managing school administration**

Technology	Coverage	Role
Website madrasahnamtahun.net	School profile and student, teacher and staff data.	Provide school-related information to the community at large and promote the school.
Website SIM (Madrasah Information System)	School program School announcement News and articles about the school.	All guardians, teachers, staff and principals can access and know the school curriculum. Not yet implemented. Students who have, have not, or have underpaid can be known via the web by the student's guardian. Whenever there is a damaged item that needs to be replaced, the facilities department can report it
	Curriculum	
	Counseling guidance Administration	
	Facilities and infrastructure	

Student attendance

through the web so that it is directly communicated and promptly repaired. Student attendance is recorded in real-time so that teachers and parents can monitor discipline.

The use of technology in the administration system of the Mu'allimin Mu'allimat Bahrul Ulum Jombang madrasah has been in place for approximately one year. In its implementation, it has already begun to show significant impacts in improving the efficiency and effectiveness of educational management in schools. The use of technology-based educational management systems facilitates automation such as student registration, grade processing, and student data management. This can reduce the administrative burden for educators and educational staff, allowing them to focus more on teaching. (Zakiah, 2024a).

The Mu'allimin Mu'allimat Bahrul Ulum Jombang School has two websites with different purposes. One website called Mu'alliminEnamTahun.Net is used as a school media that can be accessed by the entire community, containing school news, curriculum, announcements, and all information regarding the school. The website is managed by the school media team. In its implementation, the purpose of this website has been successfully achieved because the website has greatly helped the school in promoting itself. In addition, this website also provides convenience for parents and the general public to access all information related to the school. So that the community can easily know every development and new policy at the school. Thus, it can increase public trust in the school.

The second website, called SIM (Sistem Informasi Madrasah), is used to integrate all office administrative tasks and student learning developments so that they can be directly monitored by the principal, teachers, staff, and parents. Unlike the first website, this website is specifically intended for educators, educational staff, school principals, and parents to monitor the students' learning process and the school's administrative affairs. With the existence of the SIM, it can facilitate administrative staff and parents in knowing whether students have paid, have not paid, or have underpaid. Additionally, this website also provides convenience to teachers and parents in monitoring students' progress and discipline because it uses a real-time system, allowing teachers, school principals, and parents to directly monitor whether students are present or not, the lessons taught by teachers in class, student grade updates, and students' achievements at school. The efficiency of the administrative process using SIM not only saves time but also resources. By reducing the administrative burden, teachers can focus more on student learning and development.

Easy access to information through the SIM Mu'allimin Mu'allimat Bahrul Ulum Jombang website creates great transparency in communication between the school and parents. Timely and accurate information can help parents become more involved and support their children at school. Parents can participate in monitoring students' educational expenses as well as their classroom activities. In addition, data security is one of the major advantages of implementing technology in the administration of Mu'allimin Mu'allimat Bahrul Ulum Jombang, thereby reducing the risk of data loss or misuse.

Overall, the implementation of technology in school administration systems and school websites not only enhances operational efficiency but also strengthens communication and engagement between the school and the community. Although technology is not the main focus, the school still strives to use technology in school management. With the right approach, the Mu'allimin Mu'allimat Bahrul Ulum Jombang madrasa can continue to develop a better administrative system to improve the quality of education. More efficient data management with the help of information technology allows schools to have an accurate and up-to-date database. Organized student data supports the school in making faster and better decisions. Additionally, good data storage allows for systematic monitoring of student development, which can be used to design appropriate and effective educational interventions. (Zakiah, 2024).

The organization of school administration involves several factors that can affect the quality of education. These factors, such as organizational structure, human resource management, team formation, and how they contribute to creating an effective learning environment. (Rodiya dkk.,

2024). In this case, the implementation of technology in the administration of the Mu'allimin Mu'allimat Bahrul Ulum Jombang madrasa has involved these key factors in its execution. This organizational structure includes the division of responsibilities and hierarchy among staff and administrators. In addition, human resource management plays a key role in influencing the quality of education. Therefore, the school conducts training for teachers to actively use the madrasah website as a means to monitor student progress and facilitate student data management. Additionally, educational staff are also given training to maximize the use of the website so that all learning administration and school management are well-documented and school management is made easier. An equally important factor is the formation of a work team.

The formation of an effective team involves a clear understanding of the goals and responsibilities of each member, as well as open communication. (Rodiyah dkk., 2024). In the use of this technology, the school formed a special team specifically to manage the website. The administrators are responsible for creating, controlling, and assisting other teachers and staff who encounter difficulties. The interconnection between these three factors can form a solid foundation for administration. A clear and effective organizational structure forms the foundation for optimal human resource management. Next, with effective human resource management, it can also strengthen the formation of a solid work team. (Rodiyah dkk., 2024).

### **3.1. Supporting and inhibiting factors in the implementation of technology in educational administration**

As has been explained above, the Mu'allimin Mu'allimat Bahrul Ulum Jombang school has made efforts to keep up with existing technological developments. However, challenges in the implementation of technology at the school still exist; this technology has not yet been fully utilized by teachers or staff. The motivation of teachers to enhance technology-based innovation is still minimal due to the lack of interest among teachers to learn about digital-based innovation, and they have limited time to study it. Furthermore, the school has not yet fully socialized it and is still gradually focusing on the homeroom teachers first.

Until now, the school's media and IT development team is still working hard to develop both websites. With the continuous development of this digital-based administration system and technology, it is hoped that in the future all teachers and staff can make the most of the website, so that the school management and learning system can be well-documented. In addition, the principal can easily monitor and ensure that all learning and school administration activities run smoothly and as they should.

Therefore, the school management needs to provide adequate training for all teachers so that the website can be utilized more optimally. Moreover, in order for it to run smoothly, all components of the institution such as the principal, teachers, and educational staff must be actively involved in quality transformation. Teachers and educational staff are empowered to improve quality by collaborating in a comfortable and adaptable workflow to solve problems and enhance the educational process. (Asari, A., dkk. 2023).

### **3.2. Conclusion**

Madrasah Mu'allimin Mu'allimat Bahrul Ulum Jombang has tried to utilize the rapid development of technology to improve the quality of the school. This school has two websites, one website contains news and announcements related to school development and can be accessed by the public and one website contains the administration of the institution both administration, infrastructure and student development that can be accessed by teachers, principals, and student guardians. The application of technology in the school administration system provides convenience to teachers and staff in the efficiency of data collection time. In addition, by applying technology in its administration, it is easier for schools to provide information related to student learning activities to student guardians in real-time as well as any information related to schools to the wider community. However, in its application there are still some teachers who experience problems in using technology. This is because some teachers still have little motivation to

try using something new. Based on the research and results that have been obtained, the researcher concludes that the use of digital technology in this administration is very helpful and has a positive impact on the development of Mu'allimin Mu'allimat Jombang school.

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