



# Optimizing Educational Facility Management: Key Strategies for Bridging the Quality Gap

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## ABSTRACT

**Keywords:**

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The study aims to understand how effective management impacts the quality of education and the challenges faced by educational institutions in managing these resources. This research adopts a qualitative approach, utilizing interviews and document analysis to gather data from educational institutions. The study examines the role of facilities and infrastructure in creating a conducive learning environment and investigates the obstacles faced, such as budget constraints, lack of competent human resources, and disparities between urban and rural schools. The findings reveal that optimal management of facilities and infrastructure directly contributes to improving the quality of education. Strategic efforts, including efficient use of space, submitting proposals for government assistance, and collaborating with the school committee, are critical in overcoming existing challenges. Additionally, the study highlights the importance of needs analysis in facility procurement to ensure resources are appropriately allocated. The study highlights that effective management of educational facilities requires the involvement of all school members. Schools should emphasize collaboration, strategic planning, and efficient resource use. Bridging the facility gap between urban and rural schools is crucial for improving education quality and achieving educational goals..

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## INTRODUCTION

Management in the field of education tends to be easier to implement, because the basic principles and functions are relatively the same as management in general. The difference lies in the substance that is the focus of management, namely things related to the world of education. The term used is not always "management"; in the context of education, the term often used is "administration", so it is known as educational administration. Although the terms are different, both have the same goal, namely to organize and manage

activities so that the educational process runs effectively and efficiently(Rodríguez, Velastequí, 2019).

Education is a conscious process to help everyone develop their potential through learning; almost everyone is educated and undergoes education. Schools play an important role in education because they affect the child's soul. With schools, the government educates its people to become experts according to the talents and fields of the students, which are beneficial to themselves, their country, and their nation(Nurstalis et al., 2021).

Education is a conscious and planned effort to carry out and realize the teaching and learning process continuously and structured in a previously planned learning program. The availability of educational resources, such as educational facilities and infrastructure, is one of the important factors that can support the implementation of education in schools(Alwi et al., 2021).

In English, management means manage, which is to manage or control. While in a special sense, management functions as the science and art of arranging, patterning, directing, harmonizing and supervising human resources with the support of tools to achieve predetermined targets(Nasrudin & Maryadi, 2019).

Educational facilities and infrastructure are various devices that play a role in supporting the teaching and learning process, both directly and indirectly. Based on the Regulation of the Minister of National Education Number 24 of 2007 concerning Standards of Facilities and Infrastructure for Elementary and Junior High School levels, educational facilities include tools and equipment used directly in learning activities, such as textbooks, learning media, and learning technology.

## RESEARCH METHOD

This study uses a qualitative approach with data collection techniques through literature studies and interviews. Literature studies were conducted to explore theories related to the management of facilities and infrastructure in education, as well as to seek references related to their influence on improving the quality of education. In addition, interviews were conducted with related parties, such as principals, teachers, and staff managing facilities and infrastructure, to obtain information on the implementation of facility management in schools.

Data obtained from literature studies and interviews will be analyzed descriptively to describe how facility management and infrastructure can support the achievement of quality education goals. This analysis also includes an evaluation of the obstacles faced in facility management and efforts that can be made to optimize the role of facilities and infrastructure in supporting learning effectiveness.

This research method is expected to provide a clear picture of the importance of facility management and its influence on improving the quality of education in schools, while also highlighting the challenges and strategic efforts needed to overcome obstacles in managing educational resources effectively

## RESULT AND DISCUSSION

### **The Essence of Facilities and Infrastructure Management**

Management is a social process that involves all human efforts with the support of other people and other resources. This process utilizes efficient and effective methods to achieve previously set goals (Ummah, 2019b) Management is a social activity that involves cooperation between two or more people in a formal structure. In its implementation, management utilizes various resources, such as human resources, materials, funds, and information. The managerial process is carried out with an organized work approach that is efficient and effective, both in terms of manpower, time, and cost. The main purpose of management is to achieve previously formulated goals.

The word "management" comes from the term to manage which means to organize. This arrangement is carried out through a structured process based on the sequence of managerial functions. According to G.R. Terry, management is a unique process that includes planning, organizing, directing, and controlling activities, all of which are carried out to determine and achieve certain goals by utilizing human resources and other resources. Thus, management can be understood as a process that aims to realize predetermined goals (Muhammad et al., 2020)

Management has a close relationship with organization and administration. Both administration and management cannot be separated and should be viewed as a unit, although their activities differ based on their respective points of view. Administration has a narrower scope than management, because administration is included in the scope of management. More specifically, administration is one of the areas of management, which consists of six main aspects, namely: production, marketing, finance, personnel, human relations, and administrative management.

Educational facilities and infrastructure management is a collaborative process in utilizing all educational facilities optimally and efficiently. This emphasizes that various equipment and infrastructure available in schools must be arranged and used as well as possible to support learning activities. This management aims to ensure that the use of facilities and infrastructure in the school environment can take place effectively and efficiently(Yamin et al., 2020)

Educational facilities and infrastructure are all movable and immovable objects needed to support the implementation of teaching activities, both directly

and indirectly(Ibrahim et al., 2022)

Infrastructure management is the entire process starting from planning, procurement, utilization, and supervision of infrastructure effectively and efficiently as a goal of school education (Wasik, 2022)

Educational facilities have a very important role in supporting the success of the teaching and learning process. The existence of adequate facilities and infrastructure, such as comfortable classrooms, laboratories, libraries, learning media, and technology facilities, are the main supporting elements in creating a conducive learning environment. The more complete and available educational facilities are in a school, the higher the opportunity to achieve educational goals effectively and efficiently (Purnamaningsih & Purbangkara, 2022)

Not only supporting teaching and learning activities, good facilities can also increase student learning motivation and make it easier for teachers to deliver learning materials. Therefore, investment in the development and maintenance of educational facilities is something that cannot be ignored in efforts to improve the quality of education(Darmastuti, 2014).

Facilities and infrastructure management is a collaborative process in utilizing all educational facilities optimally, both in terms of effectiveness and efficiency. The basic philosophy in facility management starts from small things, such as managing the cleanliness of bathrooms, which reflects the success of other facility management in schools. Given the important role of facilities in supporting the smooth running of the education process and providing decent services to students in order to achieve educational goals, a structured and good facility management system is needed. This is because the existence of facilities and infrastructure is a very vital component in the ongoing education process(Tambunan & Manalu, 2021)

Facilities and infrastructure management can be defined as a process of joint activities in managing all educational facilities and infrastructure so that they can provide benefits effectively and efficiently. This implies that the utilization and management of facilities and infrastructure are important for the success of the learning process. This management is intended so that the utilization of facilities and infrastructure runs effectively and efficiently (Sio Khalik et al., 2022)

I can conclude that Infrastructure Management is a process of planning, organizing, implementing, and supervising all forms of physical facilities and equipment used to support the smooth running of activities, both in educational environments, organizations, and other agencies. In my opinion, this management is very important because it aims to ensure that all equipment and facility needs are available, maintained, and used effectively and efficiently so that the goals of the organization or institution can be achieved optimally.

## **A. The Role of Infrastructure Management in Supporting the Learning Process**

Educational institutions act as a place to form a quality generation. Therefore, these institutions are required to create a quality education system in order to be able to produce superior generations. To achieve the expected quality of education, educational institutions need to manage their education system well. One way that can be done is to increase the effectiveness of infrastructure management (Asy'ari, 2020)

With these complete facilities, it can encourage students to be able to develop their potential and be able to compete with others. In addition, it makes the learning atmosphere more lively, students are more active and enthusiastic even though the learning is very difficult but students are very enthusiastic when learning. This is different when there are no such facilities, students are less enthusiastic considering the difficult learning, which in the end only makes students confused (Nurstalis et al., 2021)

In learning activities, an educator certainly needs adequate facilities and infrastructure to support the student learning process. In addition to the teacher's competence in carrying out learning, the existence of facilities and infrastructure also has an important role in helping the smooth running of the teacher's duties. The more complete the educational facilities are, the easier it will be for teachers to carry out their roles as teachers (Di & Pendidikan, 2024)

The availability of adequate facilities in schools is one of the main factors in improving the quality of learning. To support a quality learning process, schools need to make efforts to provide various complete facilities(Ivan Septiani Sufi et al., 2024)

The availability of adequate facilities and infrastructure plays a very important role in increasing the effectiveness of the learning process. Quality facilities can create a more comfortable learning atmosphere and support teaching and learning activities better. In order for facilities and infrastructure to function optimally, their management must be carried out with the right strategy, including careful planning, procurement of facilities according to needs, and routine maintenance to ensure that facilities are always in a condition suitable for use. Thus, effective management is one of the important factors in improving the quality of education in an institution(Pradana, 2023)

## **Constraints Faced in Managing Educational Facilities and Infrastructure**

Some of the main challenges include limited funds, changing policies, and minimal community involvement. These obstacles can have a negative impact on the quality of education and the learning process experienced by students(Ananda et al., 2023).Limited tools and lack of facilities and infrastructure are major challenges for schools throughout Indonesia. This

problem also widens the gap in the quality of education, especially in rural areas far from city centers, such as madrasas. Many students in villages cannot enjoy complete and comfortable facilities like those available to students in cities (Maulido et al., 2024)

As a result, the quality of education between urban and rural areas is very unequal. Education in rural areas is also increasingly lagging behind when compared to urban areas. This shows that many educational institutions still do not have adequate facilities

Another obstacle is that there are still a number of staff who have not mastered information technology, even though along with the development of the times, the management of facilities and infrastructure is now based on a computerized system. In addition, obstacles also arise in the process of deleting goods, where every time the school submits a request for deletion, it often fails. This results in the accumulation of goods and increased maintenance costs in the storage warehouse. Therefore, the school tries to reduce the burden of maintaining the accumulated goods by maximizing the use of available facilities, for example by lending them to other institutions, even though the goods are still recorded as school inventory (Sio Khalik et al., 2022) Although there are special officers tasked with organizing and managing facilities and infrastructure in schools, it is also important for all stakeholders to understand and support the management process. Awareness from teachers and all school residents has an important role, especially in terms of maintaining school infrastructure. Lack of supervision and apathy can have serious impacts, such as many school facilities that are not maintained, damaged, and ultimately cannot be used. The damaged and uncomfortable condition of the facilities makes students reluctant to use them (Hisham, et al., 2024).

Lack of competent workers is one of the obstacles in managing facilities and infrastructure in schools. In fact, the existence of human resources who have expertise is very important and needed to support the effectiveness of the implementation of facilities and infrastructure management (Nauraida & Triwiyanto, 2024) Having competent human resources is very important to support the management of school facilities and infrastructure efficiently and effectively. If faced with limited human resources, the principal can take strategic steps such as recruiting professional staff, or if not possible, can direct existing staff to take training. As part of efforts to advance education, a commitment to providing quality facilities and infrastructure is very important to support an optimal learning process for future generations (Harahap, 2019).

## **Efforts Made in Managing Educational Facilities and Infrastructure**

Due to limited storage space for all educational facilities and infrastructure owned, the school took the initiative to utilize existing spaces such as the teacher's room, library, classroom, and warehouse. Several media and learning aids are placed directly in the classroom to make it easier for teachers to teach. Regarding budget constraints, the school tries to overcome them by submitting assistance proposals to the government and, under certain conditions, establishing communication and cooperation with parents through the school committee (Ardiansyah et al., 2024)

Planning is a very important initial stage in the management of educational facilities and infrastructure. The Vice Principal (Waka) for facilities and infrastructure is responsible for preparing the planning by first conducting a needs analysis. This analysis includes identification of various aspects, such as overall school needs, teacher and student needs, learning needs, and facility needs in each class. This needs data is obtained through reports from homeroom teachers, members of the facilities and infrastructure team, and from the results of coordination with each working group that conveys their respective needs.

In the context of media or learning material planning, the Waka for facilities and infrastructure also provides direction to teachers to prepare learning plans systematically. The plan must include the learning objectives to be achieved and the selection of appropriate media that are relevant to the material to be taught. All of this information is listed in the teacher's learning planning book.

Procurement of facilities and infrastructure is adjusted to the priority level and allocation of program activities implemented by the school (Rahayu & Sutama, 2016). Thus, the management of facilities and infrastructure can be interpreted as a series of comprehensive activities that include the procurement and utilization of various components that play a direct or indirect role in supporting the educational process, in order to achieve educational goals optimally, effectively, and efficiently (Aziz et al., 2022)

## **CONCLUSION**

Management of facilities and infrastructure is a very important process in supporting the achievement of educational goals. This process includes planning, procurement, utilization, and supervision of all physical facilities used in learning activities. The existence of adequate facilities and infrastructure can create a conducive learning environment, increase student motivation, and make it easier for teachers to deliver materials. Therefore, this management must be carried out effectively and efficiently so that the available facilities are truly able to provide optimal contributions to the learning process.

However, in its implementation, the management of educational facilities and infrastructure is inseparable from various obstacles such as limited funds, lack of professional staff, and minimal support from various parties. To overcome these challenges, strategies and innovations are needed, such as maximum utilization of space, preparation of planning based on needs analysis, and establishing cooperation with the government and the community. With the right efforts and collaboration from all parties, the management of educational facilities and infrastructure can run better and more sustainably in order to improve the quality of education.

## REFERENCES

Alwi, A., Sarbini, M., & Kohar, A. (2021). Peran manajemen sarana dan prasarana dalam meningkatkan mutu pembelajaran di SMK Bina Sejahtera 4 Kota Bogor. *Cendikia Muda Islam: Jurnal Ilmiah*, 1(02), 245–260.

Ananda, R., Irmawan, B., Juanda, S., & Aswadi, M. K. (2023). Analisis pengelolaan sarana dan prasarana pendidikan di sekolah dasar. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(12), 9672–9678. <https://doi.org/10.54371/jiip.v6i12.3297>

Ardiansyah, D. (2024). Pengelolaan sarana prasarana pendidikan dalam meningkatkan prestasi siswa (Studi kasus SDN Bantarsari Kabupaten Cilacap). 6(1), 183–195. <https://doi.org/10.37216/badaa.v6i1.1571>

Asy'ari, R. O. (2020). Peran manajemen sarana dan prasarana dalam meningkatkan mutu pendidikan. *Al-Afkar*, 3(01), 68–79.

Aziz, M. F., Zelni, Z., & Asiyah, A. (2022). Pengelolaan sarana dan prasarana dalam pembelajaran tatap muka di masa pandemi COVID-19. *Jurnal Isema: Islamic Educational Management*, 7(1), 75–86. <https://doi.org/10.15575/isema.v7i1.15787>

Darmastuti, H., & K. (2014). Manajemen sarana dan prasarana dalam upaya peningkatan kualitas pembelajaran pada Jurusan Teknik Komputer dan Informatika di SMK Negeri 2 Surabaya. *Inspirasi Manajemen Pendidikan*, 3(3), 9–20.

Di, M., & Pendidikan, L. (2024). Sarana prasarana pendidikan sebagai penunjang kegiatan belajar. 06(3), 346–362.

Lestari, D., Pratama, R. A. A., & Anggraeni, S. D. (2023). Pengelolaan sarana dan prasarana pendidikan dalam meningkatkan kualitas pendidikan mahasiswa Fakultas Ilmu Sosial Universitas Negeri Jakarta. *Dharma Acariya Nusantara: Jurnal Pendidikan, Bahasa Dan Budaya*, 1(1), 101-113.

Harahap, S. (2019). *Dalam peningkatan mutu sekolah di MTs PAB 2 dalam peningkatan mutu sekolah di MTs PAB 2*. Universitas Islam Negeri Sumatera Utara, 1, 2–131.

Ibrahim, I., Adi Prasetyo, Choirun Niswah, & Zulkipli, Z. (2022). Sarana dan prasarana pendidikan di Madrasah Ibtidaiyah. *Khatulistiwa: Jurnal Pendidikan dan Sosial Humaniora*, 2(3), 170–181. <https://doi.org/10.55606/khatulistiwa.v2i3.578>

Septiani Sufi, I., Tinambunan, F. S., & Suharyati, H. (2024). Peran manajemen sarana dan prasarana dalam menunjang mutu pembelajaran. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 7(9), 10860–10865. <https://doi.org/10.54371/jiip.v7i9.5658>

Maulido, S., Karmijah, P., & Sekolah, P. L. (2024). Upaya meningkatkan pendidikan masyarakat di daerah terpencil Vinanda Rahmi. *Jurnal Sadewa: Pembelajaran dan Ilmu Sosial*, 2(1), 3021–7377. <https://doi.org/10.61132/sadewa.v2i1.488>

Muhammad, O., Faruk, I., & Pd, M. I. (2020). *Jurnal Al-Rabwah Vol. XIV No. 2 November 2020 ISSN: 2252-7670. Jurnal Al-Rabwah, XIV(2)*, 90–115.

Nasrudin, N., & Maryadi, M. (2019). Manajemen sarana dan prasarana pendidikan dalam pembelajaran di SD. *Manajemen Pendidikan*, 13(2), 15–23. <https://doi.org/10.23917/jmp.v13i2.6363>

Nauraida, I. D., & Triwiyanto, T. (2024). Hambatan dalam implementasi manajemen sarana dan prasarana di sekolah: Sebuah meta-analisis. 2(4), 35–45.

Nurstalis, N., Ibrahim, T., & Abdurrohim, N. (2021). Peran manajemen sarana dan prasarana dalam meningkatkan mutu pembelajaran di SMP Islam Cendekia Cianjur. *Jurnal Isema: Islamic Educational Management*, 6(1), 63–76. <https://doi.org/10.15575/isema.v6i1.6579>

Pradana, sandi. (2023). Dampak Integrasi Nilai-Nilai Islam dalam Pengajaran Bahasa Inggris di Sekolah Islam; Studi Kasus. *Jurnal Ilmu Tarbiyah*, 2(1), 27–35.

Rahayu, S. M., & Sutama, S. (2016). Pengelolaan sarana dan prasarana pendidikan sekolah menengah pertama. *Jurnal VARIDIKA*, 27(2), 123–129. <https://doi.org/10.23917/varidika.v27i2.1724>

Rodríguez, Velastequí, M. (2019). Hubungan lingkungan belajar di sekolah dengan hasil belajar IPS di SMP. 1–23.

Khalik, S. A., Basri, S., & Ansar. (2022). Pemanfaatan sarana dan prasarana dalam pembelajaran di SD Negeri 1 Utilization of facilities and infrastructure in learning at State Elementary School 1 Nggulanggula Siompu District South Buton Regency. *Pinisi Journal of Health & Sport Science*, 1–9.

Tambunan, A., & Manalu, E. (2021). Peran ilmu manajemen sarana dan prasarana dalam upaya meningkatkan kreativitas generasi milenial. *Jurnal Analisa Pemikiran Insaan Cendikia*, 4(2), 18–28.  
<https://doi.org/10.54583/apic.vol4.no2.61>

Ummah, M. S. (2019). Manajemen sarana dan prasarana. In *Sustainability (Switzerland)*, 11(1).

Wasik, M. A. (2022). Manajemen sarana dan prasarana dalam meningkatkan efektivitas layanan administrasi sekolah di MA Bahrul Ulum Besuk. *Jurnal Mahasiswa*, 4(4), 3.

Yamin, M., Tobari, T., & Missriani, M. (2020). Manajemen sarana dan prasarana dalam meningkatkan hasil belajar siswa di SD IT Kautsar Ilmi Tanjung Raja. *Jurnal Intelektualita: Keislaman, Sosial Dan Sains*, 9(1), 139–148.  
<https://doi.org/10.19109/intelektualita.v9i1.5585>

Hisham, M. F., Sarpin, N., Omar, R., Mohamed, S., Gharip, N. H. M., & Ismayatim, N. (2024). Impact of poor maintenance work of air-conditioning in UTHM lecture hall towards the user comfort. *Research in Management of Technology and Business*, 5(1), 1439-1451.