



OPTIMIZING THE ROLE OF PRINCIPAL IN MANAGING FACILITIES AND INFRASTRUCTURE TO IMPROVE THE QUALITY OF ELEMENTARY EDUCATION

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Submit: 22 November 2024., Revision: 9 Desember 2024, Approve: 9 Desember 2024

Abstract

In improving the quality of education, the role of the principal is very much needed to manage facilities and infrastructure. However, in reality there are still schools whose facilities and infrastructure are inadequate. So the role of the principal is very much needed in managing facilities and infrastructure in schools. The purpose of this study is to gain an understanding of the role of the principal in managing facilities and infrastructure towards the quality of education at SD Negeri 8 Pekanbaru. This study uses a qualitative research type. The subjects in this study were the principal and teachers of SD Negeri 8 Pekanbaru. Data collection techniques and instruments used observation, interview and documentation techniques. The validity test of the data in this study used the triangulation technique of source data, techniques and time. The data analysis method used is in accordance with the theory of Miles and Huberman which has stages, namely data reduction, data presentation and drawing conclusions. The results of the study showed that the principal of SD Negeri 8 Pekanbaru plays a very important role in managing facilities and infrastructure towards the quality of education. The principal at Pekanbaru 8th State Elementary School plays a role in planning the budget for procurement, construction, maintenance and repair of school facilities, distribution and making an inventory of procurement of facilities and infrastructure and providing a warehouse for storage and reporting items that are written off.

Keywords: Principal, quality of education, facilities and infrastructure

Quotation: Azzahra, Devina. (2024). Optimizing the Role of Principal in Managing Facilities and Infrastructure to Improve the Quality of Elementary Education. *JMIE: Journal of Madrasah Ibtidaiyah Education*, 8(2), 2024, 219-233. [jmie.v8i2.692](https://doi.org/10.32934/jmie.v8i2.692).

Permalink/DOI: <http://dx.doi.org/10.32934/jmie.v8i2.692>

INTRODUCTION

The achievement of educational goals is very dependent on the skills and leadership wisdom of the principal, who is one of the educational leaders (Manora, 2019). The principal's main role must be able to create a good teaching and learning situation, and be able to manage the "school plant" of special school services and educational facilities, so that teachers and students get satisfaction enjoying working conditions; manage teaching and student personnel; develop a curriculum that meets the needs of children; and manage educational records. The principal as a leader who leads teachers and students at school in his duties as a leader (Latifah, 2022). The principal can make this happen by designing strategic steps in school management (Nafindra & Rifqi, 2022). The principal must be professional and clever in managing human resources so that the teaching staff he leads do not just get trapped or stop at the skills he previously had (Hamzah et al., 2023).

The principal can play many functions, the same person, but different topics. In carrying out his role, the principal must be able to play a role as an educator, manager, administrator, supervisor, leader, innovator, motivator (Nasution, 2021). The principal also plays an important role in managing the facilities and infrastructure in the school, in order to obtain good quality teaching and learning. For that, the management in the school requires stability.

In organizing education to produce an effective and efficient teaching and learning process, facilities and infrastructure are needed (Manurung et al., 2020). Facilities and infrastructure as an integral part of all learning activities in educational units have functions and roles in achieving learning activities according to the curriculum of the educational unit. In order for the provision of facilities and infrastructure to be appropriate and useful (effective and efficient), an appropriate needs analysis is needed in planning its fulfillment (Suranto et al., 2022)

According to Law No. 20 of 2003, Article I paragraph 20, what is meant by educational resources is "everything used in organizing education, including educational personnel, the community, funds, facilities and infrastructure" (Setiawan et al., 2022). Educational facilities and infrastructure management is tasked with organizing and maintaining educational facilities and infrastructure so that they can provide an optimal and meaningful contribution to the educational process. Facilities and infrastructure are equipment and supplies that are directly used in the teaching and learning process, such as buildings, classrooms, chairs, tables, and teaching media (Susilawati, 2020). As for educational facilities and infrastructure, these are facilities that indirectly support the teaching process, such as yards, school gardens, gardens and roads to the school (Herawati et al., 2020). Educational facilities and infrastructure need good management to support teaching and learning activities. Management in a broad sense is the planning, implementation and supervision of organizational resources to achieve goals effectively and efficiently.

By using strategic management properly, schools will be able to realize the expected quality of education. And conversely, if schools do not implement strategic management, the school will not be able to achieve its goals in improving the quality of education (Adilah & Suryana, 2021). The quality of education also has an impact on the facilities and infrastructure in schools because the more the needs of facilities and infrastructure are met in a school, the

higher the level of success and value of the school will be. As is known, if the facilities and infrastructure are inadequate, it can disrupt the learning process so that the quality of education will be low. School facilities and infrastructure such as toilets, school buildings, classroom equipment and others are very important, because if the facilities and infrastructure are adequate, it will support learning activities to obtain the desired results. From optimizing it, it is hoped that it will be able to facilitate the achievement of effective learning, so that it can improve the quality of student learning (Rizandi et al., 2023).

SD Negeri 8 is a public school located on Jalan Paus, Limbungan Baru Village, Rumbai Pesisir District, Pekanbaru City, which was operational in 1961 and currently has 358 students and 25 education staff. It has an A (Very Good) accreditation. The facilities and infrastructure available at SD Negeri 8 Pekanbaru also greatly influence the quality of education because the school standardizes all aspects including facilities and infrastructure in order to improve the quality of education. Then for proof, the researcher needs to conduct further and in-depth research to collect data at SD Negeri 8 Pekanbaru.

From initial observations in the field plus the results of the researcher's initial interview with the principal, Mr. AM, that 1) the facilities and infrastructure at the school have several shortcomings such as only 7 classrooms available while 12 classrooms are needed. 2) lack of toilets at the school, there is only 1 toilet that covers teachers and students because of damage to other toilets. 3). The library space is inadequate because the space is quite small, so all the books in the library are not arranged properly.

This research was conducted at SD Negeri 8 Pekanbaru because this school faces challenges in managing facilities and infrastructure to support learning. As one of the state schools with a fairly large student population, the role of the principal is very important in ensuring that the available facilities can be managed and utilized optimally. In addition, the support of the school and openness to this research provide an opportunity for researchers to identify relevant and applicable solutions. This research is important to do because the principal has great authority and responsibility in ensuring that facilities and infrastructure are used effectively to achieve educational goals. By understanding how the principal manages existing facilities, solutions or recommendations can be found to improve the quality of education in this school.

Based on data from the Ministry of Education, Culture, Research, and Technology, around 40% of elementary schools in Indonesia still face problems in providing adequate facilities and infrastructure. The main problems that are often encountered include damaged classroom conditions, minimal access to educational technology, and limited books and learning aids. Many classrooms are damaged, such as leaking roofs, unsuitable floors, and cracked walls, so they do not meet student safety and comfort standards. In addition, in the current digital era, most elementary schools still do not have access to technological facilities such as computers, projectors, or internet networks, which are important to support modern learning methods. Only around 20% of elementary schools have full access to educational technology, while the rest rely on traditional methods that are less varied. Limited textbooks are also a serious challenge, where students have to use books alternately, while learning aids such as science demonstration tools, maps, or globes are almost unavailable, especially in remote areas.

This problem has a direct impact on the learning process. An uncondusive learning environment often reduces student motivation, making it difficult for them to focus and feel comfortable. In addition, limited technological facilities and aids cause learning to be monotonous, so that teachers cannot apply interactive or innovative methods. As a result, student learning outcomes are less than optimal, which contributes to the overall low quality of education.

Although SD Negeri 8 Pekanbaru is located in an urban area, similar problems are also found in this school. Several classrooms need repairs to create a more comfortable learning atmosphere, while the available technological facilities are not sufficient for digital-based learning needs. The management of facilities and infrastructure in this school has also not been running optimally, both in terms of planning, utilization, and maintenance. Therefore, this study aims to analyze the role of the principal in managing facilities and infrastructure, with a focus on efforts to improve the quality of education. The results of this study are expected to provide strategic recommendations so that facilities and infrastructure in SD Negeri 8 Pekanbaru can be utilized more effectively to support learning

The success of an educational program through the learning process is greatly influenced by many factors, one of which is the availability of adequate educational facilities and infrastructure accompanied by optimal utilization and management (Sinta, 2019). In line with research conducted by (Widiansyah, 2018) that the role of the principal in improving the management of educational facilities and infrastructure, is carried out by the principal in improving the management of facilities and infrastructure divided into five parts, namely planning is done by preparing a procurement plan, preparing a proposal, and coordinating with related parties; procurement is done by analyzing the needs of facilities and submitting an APBS proposal; regulation is done by forming a special inventory officer, routine communication, procurement of storage space, use by communicating with all school residents, deletion by making a deletion proposal.

This study is also in line with that conducted by (Fatthum & Mustika, 2021) at SDN 39 Pekanbaru, namely the researcher found obstacles in the lack of procurement of school construction such as classrooms where around 18 classes are needed but only 14 classes are available, then the lack of school toilets and also the concerning condition of the teacher's room. This happened because the budget needed was greater than the budget owned by the school at that time. Then Fatthum found that the principal of SDN 39 Pekabaru created a program to supervise the implementation of facilities and infrastructure in the school, but the principal was not directly involved in the supervision process. Therefore, this proves that there is still a lack of school responsibility in carrying out its role in the school in order to achieve the success and smoothness of the school.

In line with what was conveyed by (Lisnawati et al., 2023) The condition of facilities and infrastructure in elementary schools still receives less attention from the school and the government. Lack of facilities and infrastructure can also be a inhibiting factor in learning for students. With the availability of facilities and infrastructure, teachers can provide better quality learning because teachers and students will be more comfortable and also enthusiastic if facilities and infrastructure are available at school. Sometimes in some schools there are still inadequate facilities and infrastructure, especially in remote areas.

This study aims to answer whether the principal has an important role in managing/organizing school facilities and infrastructure in order to create a school situation and condition that can make educators and students get good and quality facilities in order to achieve the quality of education. The purpose of this study is to gain an understanding of the role of the principal in managing facilities and infrastructure for the quality of education at SD Negeri 8 Pekanbaru. The novelty in this study is the focus on the local perspective (the context of SD Negeri 8 Pekanbaru) which has not been widely discussed in previous studies.

METHODS

The research method used in this study is to use a qualitative method with a descriptive approach. Qualitative descriptive research uses an inductive flow and a simple qualitative approach and generally does not aim to test a hypothesis. The steps of descriptive qualitative research in this study begin with identifying the problem to determine the main focus, namely the role of the principal in managing facilities and infrastructure for the quality of education. Continued with a literature review to understand relevant concepts and choose the location and research subjects purposively, such as the principal, teachers, and staff. Data were collected through in-depth interviews, observations, and documentation related to the management of facilities and infrastructure. Data were analyzed using thematic analysis, including data reduction, data presentation, and drawing conclusions. Validation was carried out by triangulation, member checks, and audit trails to ensure the validity of the data. Finally, the results of the study were presented descriptively with relevant recommendations.

The primary data source for this data was the principal of SD Negeri 8 Pekanbaru. The secondary data source for this study was two teachers at SD Negeri 8 Pekanbaru, namely Mrs. LH and Mrs. RS. In this study, the researcher used data collection techniques with observation, structured interviews, and documentation. The instruments to help researchers obtain data and information in this study are observation sheets, structured interview sheets and documentation reviews.

In the data validity test, this study uses a triangulation test, namely, a triangulation test of sources, techniques and time. In the research process, of course, a lot of data will be obtained so that the purpose of using data analysis can simplify, select data that can support the research so as to find conclusions. The data analysis technique in this study uses the Miles and Huberman model with data reduction techniques, data presentation and drawing conclusions. In conducting data reduction, researchers need to select and simplify the data obtained when the research is carried out. Researchers present data in narrative form, where researchers will be presented in a structured manner to make it easier to understand, this narrative description will contain planning, implementation and evaluation of the principal in managing facilities and infrastructure for the quality of education at SD Negeri 8 Pekanbaru. After all the data and information obtained by the researcher, the conclusion will be continued regarding the role of the principal in managing facilities and infrastructure for the quality of education at SD Negeri 8 Pekanbaru.

RESULTS AND DISCUSSION

Educational Facilities and Infrastructure Planning

Based on the results of observations, interviews and documentation with the principal and teachers at SD Negeri 8 Pekanbaru, it states that the principal has a very important role in budget planning for the construction, maintenance, and repair of facilities at the school. As a leader, the principal is responsible for identifying the need for facilities needed to support an optimal learning process. This includes evaluating the physical condition of the school and discussing with teachers, staff, and students to determine the priority of facilities that need to be built or repaired. After that, the principal must prepare a realistic budget, consider various funding sources, and ensure efficient and accountable use of funds. The principal also plays an active role in submitting the budget to the authorities, as well as coordinating with various related parties such as contractors, school committees, and the community so that the construction or repair of facilities can run smoothly. In addition, the principal must monitor and evaluate the construction or repair project of facilities to ensure that the budget is used according to plan and the facilities built meet the needs of the school. No less important, the principal must also plan long-term routine maintenance to keep facilities in good condition, reduce major repair costs, and ensure the sustainability of the quality of education. With all these responsibilities, the principal must maintain transparency and accountability in the management of the facility budget, so that all parties feel involved and know how the funds are used for the benefit of education.

In his interview, the principal explained that the role of the principal in planning facilities and infrastructure is very strategic in supporting the quality of education.

"As the principal, I am responsible for identifying facility needs, proposing budgets, and coordinating with the education office, school committee, and teachers," he said. He explained that planning begins with an evaluation of existing facilities through a survey with the management team. "We use the results of this survey to prepare the School Activity and Budget Plan (RKAS), which then becomes a reference for developing facilities according to priority needs," he added.

Procurement of Educational Facilities and Infrastructure

Based on the results of observations, interviews and documentation with the principal and teachers at SD Negeri 8 Pekanbaru, it states that the principal is responsible for assessing and selecting the facilities and infrastructure that best suit the needs of the school, taking into account the available budget, curriculum development, and physical and social conditions at the school. This decision must support the achievement of educational goals and create a safe, comfortable, and effective environment for all students and educators. In addition, the principal needs to evaluate existing facilities and hold discussions with teachers, staff, and students to find out the shortcomings and urgent needs related to facilities and infrastructure that can support the education process.

In procuring facilities and infrastructure at SD Negeri 8 Pekanbaru, the facilities and infrastructure needed are that the principal needs to ensure that there are sufficient classrooms and are equipped with learning equipment such as tables, chairs, whiteboards, and projectors. In addition, to support extracurricular activities, such as a decent sports field can foster students' interests and talents. In terms of physical infrastructure, the principal needs to

consider facilities such as toilets, UKS (School Health Service) rooms, canteens, as well as stable internet connections, digital devices for learning, and interactive learning media.

The principal explained that the provision of educational facilities and infrastructure is an important part of efforts to improve the quality of education in schools. *"As the principal, I am responsible for ensuring that the procurement of facilities is carried out in accordance with learning needs and is carried out transparently, effectively, and efficiently,"* he said. The procurement process, according to him, begins with identifying needs based on the results of the evaluation of existing facilities and input from teachers and the school management team.

The principal must choose facilities and infrastructure that can support effective learning, create a safe and comfortable environment, and meet health and safety standards. All of these decisions must be based on a thorough needs analysis and consideration of the available budget, with the aim of creating an optimal learning environment for students and supporting the development of their potential to the fullest. According to (Fadillah & Aliyyah, 2024), Planning school facilities and infrastructure is very important to facilitate educational activities and create a safe and supportive learning environment. This will improve the quality that is characterized by implementing learning objectives and student learning welfare and allowing them to organize their educational activities more effectively and achieve the goals that have been set (Boko, 2020).

Maintenance of Educational Facilities and Infrastructure

Based on the results of observations, interviews and documentation with the principal and teachers at SD Negeri 8 Pekanbaru, the principal has a very important role in preparing and implementing periodic maintenance plans to ensure that school facilities remain in good condition and can support the learning process optimally. In this case, the principal must plan long-term maintenance that includes routine checks on all facilities and infrastructure in the school, such as classrooms, laboratories, sports fields, electrical systems, and others.

The Principal of SD Negeri 8 Pekanbaru explained that maintenance of facilities and infrastructure is an important element in supporting the quality of education. *"As the principal, I am responsible for ensuring that the existing facilities and infrastructure continue to function well and can be used optimally to support the learning process,"* he said. The maintenance process begins with conducting a periodic inventory of facilities to evaluate conditions and determine repair priorities.

However, he acknowledged that the main challenge in maintenance is budget constraints. *"Often, the available funds are allocated more for the procurement of new facilities, so that funds for maintenance are limited,"* he explained. In addition, the lack of awareness of some users, both students and teachers, in maintaining facilities is also an obstacle. To overcome this, the Principal of SD Negeri 8 Pekanbaru mentioned several strategies that were implemented, such as providing education to school residents about the importance of maintaining facilities, as well as involving them in community service and joint maintenance programs. *"We also utilize school operational assistance (BOS) funds to the maximum for routine maintenance, such as repainting, minor repairs, and replacing damaged equipment,"* he said.

Good maintenance, according to him, greatly influences the quality of education. "If the facilities are well maintained, students can study comfortably and safely, while teachers are also more assisted in delivering learning materials," he said. In addition, well-maintained facilities give a positive impression to the community and foster a sense of pride in the school.

Maintenance in the form of checking, prevention, minor repairs and major repairs. In terms of maintenance time, namely: daily maintenance (cleaning the room and its equipment), and periodic maintenance such as painting walls, checking benches, tiles and other furniture. (Fatmawati et al., 2019).

Distribution of Educational Facilities and Infrastructure

Based on the results of observations, interviews and documentation with the principal and teachers at SD Negeri 8 Pekanbaru, the principal plays a role in the distribution of educational facilities and infrastructure by compiling a complete list of the types of facilities and infrastructure to be distributed. The first action taken by the principal is to identify the need for facilities and infrastructure based on the school's conditions and the curriculum applied, such as classrooms, technology equipment, and sports and arts facilities. After that, the principal compiles a detailed list of the types and number of facilities needed, prepares a budget, and submits the list to the authorities, such as the education office or school committee. Furthermore, the principal coordinates with the goods provider to ensure that the procurement of facilities and infrastructure is carried out according to the correct procedures and on time. After the goods are received, the principal ensures that the distribution and utilization are according to needs, and carries out maintenance so that the facilities remain in good condition. The principal is also responsible for monitoring the use of facilities and infrastructure, and reporting the results to the authorities as a form of accountability.

According to the Principal of SD Negeri 8 Pekanbaru, the distribution of facilities and infrastructure that are right on target greatly affects the quality of education. "If facilities are distributed and used according to needs, the teaching and learning process becomes more effective, and students can learn comfortably," he said. In the future, the Principal of SD Negeri 8 Pekanbaru hopes to implement a digital monitoring system to oversee the distribution and use of facilities.

According to (Maila et al., 2024), The transfer of goods and storage responsibilities to units or individuals who need the goods is the distribution of goods. The distribution process has three steps, including allocation preparation, shipping of goods, and delivery of goods.

Inventory of Educational Facilities and Infrastructure

Based on the results of observations, interviews and documentation with the principal and teachers at SD Negeri 8 Pekanbaru, the principal plays a role in the inventory of educational facilities and infrastructure, the principal is tasked with recording all facilities and infrastructure received in the inventory system, including information on storage locations and conditions of goods and storing information on the status of ownership of goods, whether owned by the school, rented, or borrowed. This is important to ensure transparency and accountability in the management of school assets. Once recorded, the principal must ensure that this inventory system is updated regularly, for example by routinely checking the

condition of the goods and conducting inventory audits to find out if there are any items that are missing, damaged, or unused.

According to the Principal of SD Negeri 8 Pekanbaru, good inventory greatly affects the quality of education. *"With complete inventory data, schools can find out the need for facilities more accurately, so that procurement and maintenance can be better planned. This certainly has a positive impact on the smooth running of the learning process,"* he said. In the future, he hopes to improve the inventory system based on more sophisticated technology so that the management of facilities and infrastructure becomes more effective and efficient. *"With good management, I am sure schools can provide better quality education services,"* he concluded.

With a good inventory system, principals can ensure more effective management of facilities and infrastructure, prevent misuse, and plan maintenance or replacement of items that are no longer suitable for use. Inventory is an activity to carry out management, organization, arrangement, recording and registration of inventory items (Annisa et al., 2023).

Storage of Educational Facilities and Infrastructure

Based on the results of observations, interviews and documentation with the principal and teachers at SD Negeri 8 Pekanbaru, it can be seen that in managing facilities and infrastructure to improve the quality of education, the principal must provide a place for storage in maintaining and storing educational facilities and infrastructure that have been given to the school to support the quality of education at the school.

During the observation and interview, the principal said that the storage must pay attention to security and order factors. For example, equipment that is prone to damage or loss, such as computers, projectors, or laboratory equipment, must be stored in a closed room with a secure locking system. For larger facilities or those used together, such as sports equipment, the principal can provide a warehouse or open space that has good supervision and is easily accessible. In addition, the principal also ensures that the storage facilities have a clear arrangement system, such as shelves or cabinets that are organized with easy-to-read labels, so that items can be found quickly and are not damaged due to careless arrangement.

The Principal of SD Negeri 8 Pekanbaru explained that the storage of educational facilities and infrastructure is an important part of managing school facilities. *"As the principal, I am responsible for ensuring that all school facilities and infrastructure are stored properly, safely, and easily accessible when needed,"* he said. According to him, good storage aims to keep facilities in prime condition and extend their useful life. *"We have provided a special storage room equipped with shelves and labels to facilitate the organization of facilities,"* he added.

According Marif (Hasnadi, 2021), Storage of school equipment and supplies needs to take into account several principles, including: (1) all tools and supplies are stored in a place that is free from factors that cause damage, for example; safe and clean, away from heat, wet and damp, (2) stored in a place that is easy to access, (3) easy to obtain, (4) equipped with storage administration, (5) regular recording is carried out.

Elimination of Educational Facilities and Infrastructure

Based on the results of observations, interviews and documentation with the principal and teachers at SD Negeri 8 Pekanbaru, the principal also plays a role in recording all items to

be removed from the school inventory, whether due to damage, obsolescence, or no longer being used. In addition, the principal must also record the reasons why the items were removed, whether because they were damaged, expired, or no longer suitable for use. After the items to be removed have been verified, the principal must record them in the inventory system with the status "removed" or "issued". This information must be accompanied by a signature or approval from an authorized party, such as the school committee or education office, to ensure that the removal process is carried out according to legitimate and accountable procedures. With good documentation, the principal can ensure transparency and avoid errors or misuse in the management of school assets.

According to the Principal of SD Negeri 8 Pekanbaru, the proper removal of facilities and infrastructure is very important to maintain the quality of education. *"By removing unsuitable items, we can make room for new facilities that are more relevant and support learning. In addition, the school environment becomes tidier and more comfortable,"* he said.

According to (Setiyadi et al., 2024) There are several objectives of eliminating educational facilities and infrastructure that can be described as follows: 1. Prevent or at least minimize losses and waste associated with maintaining damaged, poor condition, or unusable infrastructure and facilities. 2. Reduce the effort required to inventory products. 3. Clean up space from increasingly useless objects. 4. Release some things from the scope of work management.

DISCUCSSION

Basically, facilities and infrastructure consist of two elements, namely facilities and infrastructure. Educational facilities are equipment and supplies that are directly used and support the educational process, especially the teaching and learning process, such as buildings, classrooms, tables and chairs, as well as teaching tools and media. What is meant by educational infrastructure is a facility that indirectly supports the running of an educational or teaching process, such as a yard, garden, school park, road to school, but if it is used directly for the learning and teaching process, such as an Islamic school garden for biology teaching, an Islamic school yard as a sports field, these components are educational facilities (Nasution, 2021).

SD Negeri 8 Pekanbaru faces various challenges in terms of facilities and infrastructure that have a major impact on the quality of education. One of the main problems is the limited physical facilities, such as classrooms that need renovation. Several classrooms do not meet comfort standards, with furniture such as tables and chairs that are starting to break down and inadequate ventilation and lighting. This condition creates a less than ideal learning environment, which can reduce students' focus and comfort during the learning process.

In addition, access to educational technology is still very limited. This school does not have enough technological devices, such as computers, projectors, or other digital learning tools, to support technology-based learning processes. This makes it difficult for teachers to implement interactive learning methods that are relevant to current developments. Students also lose the opportunity to develop basic technological skills that are important for their future.

Another problem lies in the less than optimal utilization of facilities. For example, the collection of books in the library is still limited and does not fully support the needs of the curriculum. In addition, spaces such as simple laboratories or sports facilities are often underutilized due to the lack of strategic planning and management.

These challenges have a significant impact on the quality of education. A less supportive learning environment can reduce students' enthusiasm and limit their opportunities to develop their potential to the fullest. Teachers also find it difficult to apply variations in teaching methods, so that the teaching and learning process becomes monotonous and less interesting. As a result, student learning outcomes are less than optimal, both in academic aspects and in the development of 21st century skills.

Therefore, an active role is needed by the principal in managing facilities and infrastructure at SD Negeri 8 Pekanbaru. With good management, the principal can ensure that the available facilities are repaired, utilized effectively, and upgraded according to needs. This step will create a more supportive learning environment and help improve the overall quality of education.

The principal is one of the components of education that plays the most important role in improving the quality of education, therefore the principal plays a very active role in managing facilities and infrastructure effectively and efficiently. The principal must optimize the provision, utilization, maintenance and control of educational facilities and infrastructure at each type and level of education, it is necessary to adjust facilities and infrastructure that refer to the quality of education (Syafuddin, 2023).

According to (Kinanti et al., 2022), in the context of education, principal management is very important to create a conducive and productive school environment. The principal has an important role in creating a positive school culture, managing available resources, managing teaching and learning activities, and fostering good relationships between teachers, students, and parents of students. Principal management also involves the ability to make the right and strategic decisions to achieve educational goals in schools. In carrying out management, the principal needs to have good communication skills, leadership, and interpersonal skills in order to lead and foster all members of the school.

Based on what was conveyed by (Banamtuan & Baun, 2021), that because of the existence of the principal as an infrastructure development planner, planning here plays a very strategic role in efforts to achieve the success of the learning process and educational service efforts in schools. Thus, the planning process carried out must refer to the steps that have been taken previously, including the following steps: 1). Determining goals; 2). Determining targets; 3). Identification of options; 4). Comparative assessment; 5). Selected package; 6). Implementation; and 7). Evaluation. When these steps are implemented, determining educational goals and targets based on an analysis of weaknesses, strengths, opportunities and threats, it is necessary to determine the choice of development actions based on the environment that will greatly affect the implementation process in the future.

According to (Lubis & Fadli, 2024) Elements such as buildings, land, administrative equipment, and facilities used directly in teaching and learning activities are all vital components. In addition, educational facilities and infrastructure function to facilitate students' understanding of the material by providing appropriate facilities, so that teaching and

learning activities become more effective and efficient. The presence of adequate facilities and infrastructure makes the learning process more meaningful, quality, and enjoyable. To achieve optimal educational goals, all factors that support the success of the learning process must be considered (Widayati et al., 2022).

In addition, the principal at SD Negeri 8 Pekanbaru faces several obstacles in managing facilities and infrastructure, including budget constraints that hinder the repair and maintenance of facilities, lack of trained human resources for facility management, and low participation of all school parties in maintaining facilities and infrastructure. In addition, coordination with external parties, such as the government, is often hampered by time-consuming bureaucratic procedures. Technical problems, such as limited storage facilities, also affect the effectiveness of management. To overcome these obstacles, more mature planning, training for staff, and better cooperation with related parties are needed to ensure that facilities and infrastructure can be managed optimally to support improving the quality of education.

In line with research conducted by (Marzuqi et al., 2020) The main obstacle faced by the Head of Madrasah is of course the budget problem. Without the encouragement of funds, no matter how small the activity cannot run optimally, while the management of educational facilities and infrastructure is very broad in scope, therefore the principal always calculates the funds maximally, with various solutions the principal tries to be able to meet the needs of the school in terms of readiness of facilities and infrastructure even with a limited budget.

CONCLUSION

Based on the results of the study at SD Negeri 8 Pekanbaru, it shows that the principal has an important role in managing facilities and infrastructure, from budget planning to maintenance and inventory of assets, which contribute to improving the quality of education. However, obstacles such as budget constraints, lack of trained human resources, low participation of school residents, and slow bureaucracy are the main challenges. Proposed solutions include careful planning, staff training, and better cooperation with related institutions.

REFERENCES

- Adilah, H. G., & Suryana, Y. (2021). Manajemen Strategik Dalam Meningkatkan Mutu Pendidikan Madrasah Ibtidaiyah. *Jurnal Isema : Islamic Educational Management*, 6(1), 87–94. <https://doi.org/10.15575/isema.v6i1.11037>
- Andini, L. S., & Kurniasari, K. (2021). Bullying berhubungan dengan kejadian gangguan cemas pada pelajar SMA. *Jurnal Biomedika dan Kesehatan*, 4(3), 99–105. <https://doi.org/10.18051/JBiomedKes.2021.v4.99-105>
- Annisa, R., Rahayuningsih, P. A., Universitas Bina Sarana Informatika, Anna, A., & Universitas Bina Sarana Informatika. (2023). Perancangan Sistem Informasi Inventaris

- Sarana dan Prasarana Sekolah Berbasis Web. *Infotek : Jurnal Informatika dan Teknologi*, 6(1), 60–70. <https://doi.org/10.29408/jit.v6i1.7356>
- Banamtuan, M. F., & Baun, S. (2021). Kolaborasi Kepemimpinan Antara Kepala Sekolah Dan Komite Sekolah Dalam Pengembangan Sarana Dan Prasarana di SMKN 1 Kupang. *Jurnal Dinamika Pendidikan*, 14(1), 168–177 | . <https://doi.org/10.51212/jdp.v14i1>
- Boko, Y. A. (2020). Perencanaan Sarana Dan Prasarana (Sarpras) Sekolah. *Jurnal Pendidikan dan Ekonomi*, 1(1), 44–52. <https://doi.org/10.5281/zenodo.4435225>
- Fadillah, R., & Aliyyah, R. R. (2024). Pengelolaan Sarana dan Prasarana Sekolah. *Karimah Tauhid*, 3(3), 3164–3176. <https://doi.org/10.30997/karimahtauhid.v3i3.12248>
- Fatmawati, N., Mappincara, A., & Habibah, S. (2019). Pemanfaatan Dan Pemeliharaan Sarana Dan Prasarana Pendidikan. *Jurnal Ilmu Pendidikan*, 3(2), 115–122. <https://doi.org/10.26858/pembelajar.v3i2.9799>
- Fatthum, S., & Mustika, D. (2021). Peran Kepala Sekolah dalam Proses Perencanaan Manajemen Sarana Dan Prasarana di Sekolah Dasar. *Jurnal Pendidikan Tambusai*, 5(3), 8732–8739.
- Hamzah, Syafrianti, T., Susanto, B. W., Wismanto, & Adilah, R. T. (2023). Peran Kepala Sekolah Dalam Meningkatkan Manajemen Mutu Pendidikan Di Sekolah Dasar Islam Al-Rasyid Pekanbaru. *Journal on Education*, 06(01), 4652–4663. <https://doi.org/10.31004/joe.v6i1.3617>
- Hasnadi. (2021). Manajemen Sarana Dan Prasarana Pendidikan. *Bidayah : Studi Ilmu-Ilmu Keislaman*, 12(2), 153–154. <https://doi.org/10.47498/bidayah.v12i2.728>
- Herawati, S., Arafat, Y., & Puspita, Y. (2020). Manajemen Pemanfaatan Sarana Dan Prasarana Pembelajaran. *Attractive : Innovative Education Journal*, 2(3), 21. <https://doi.org/10.51278/aj.v2i3.68>
- Kinanti, K. A. A., Asrori, A., & Murtafiah, N. H. (2022). Manajemen Kepala Sekolah Dalam Mengembangkan Sarana Prasarana Pendidikan Di SMK Utama Kecamatan Enggal Kota Bandar Lampung. *Unisan Jurnal: Jurnal Manajemen Dan Pendidikan*, 02(02), 212–224.
- Latifah, N. (2022). Peran Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan. *Educator : Jurnal Inovasi Tenaga Pendidik dan Kependidikan*, 2(2), 157–166. <https://doi.org/10.51878/educator.v2i2.1307>
- Lisnawati, A., Adhari, F. N., Hanipah, R., & Rostika, D. (2023). Problematika Sarana Prasarana dalam Pembelajaran di Sekolah Dasar. *Jurnal Pendidikan Tambusai*, 7(3), 30987–30993.
- Lubis, M. K., & Fadli, M. (2024). Implementasi Manajemen Sarana Dan Prasarana Di Sekolah Dasar Negeri 102071 Dolok Masihul. *Ta'dib : Jurnal Pendidikan Islam*, 13(2), 371–384. <https://doi.org/10.29313/tjpi.v13i2.14098>
- Maila, M., Dalimunthe, M. T., Kismadani, N. D., Setiyani, R., Oktavianda, R., & Setiyadi, B. (2024). Penyaluran Sarana Prasarana Pendidikan. *Jurnal Ilmiah Universitas Batanghari Jambi*, 24(1), 466. <https://doi.org/10.33087/jiubj.v24i1.4819>
- Manora, H. (2019). Peranan Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan. *Edification Journal*, 1(1), 119–125. <https://doi.org/10.37092/ej.v1i1.88>

- Manurung, R., Harapan, E., & Suharyadi, A. (2020). Manajemen Sarana Prasarana di Sekolah Dasar Negeri 1 Kota Prabumulih. *urnal Manajemen Pendidikan Jurnal Ilmiah Administrasi, Manajemen dan Kepemimpinan Pendidikan*, 2(2), 168–177. <https://doi.org/10.21831/jump.v2i2.33747>
- Marzuqi, A., Julaiha, S., & Romainur. (2020). Strategi Kepala Sekolah Dalam Mengelola Sarana Dan Prasarana Pendidikan Di Madrasah Tsanawiyah Negeri Samarinda. *Jurnal Tarbiyah & Ilmu Keguruan (JTIK) Borneo*, 2(1).
- Nafindra, I. B., & Rifqi, A. (2022). Strategi Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan Pada Jenjang Sekolah Dasar Dan Menengah. *Inspirasi Manajemen Pendidikan*, 10(551–565). <https://ejournal.unesa.ac.id/index.php/inspirasi-manajemen-pendidikan/article/view/48626>
- Nasution, M. R. (2021). Peran Kepemimpinan Kepala Sekolah Dalam Meningkatkan Sarana Dan Prasarana Pendidikan Di SDN 135564 Kota Tanjungbalai. *ALACRITY: Journal Of Education*, 1(1), 26–32.
- Rizandi, H., Muhammad Arrazi, Asmendri, & Milya Sari. (2023). Pentingnya Manajemen Sarana dan Prasarana Dalam Meningkatkan Mutu Pendidikan. *Akademika: Jurnal Manajemen Pendidikan Islam*, 5(1), 47–59. <https://doi.org/10.51339/akademika.v5i1.745>
- Setiawan, M. R., Sudrajat, A., & Tedjawiani, I. (2022). Manajemen Berbasis Sekolah (MBS) dalam Meningkatkan Mutu Sekolah (Studi Deskriptif tentang Peran Kepala Sekolah dalam MBS Pada SMPN 3 dan SMPN 4 Malangbong). *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 5(5), 1335–1346. <https://doi.org/10.54371/jiip.v5i5.553>
- Setiyadi, B., Ramadhan, B., Ulfa, M., Rosdiati, R., & Putri, T. H. (2024). Penghapusan Sarana Prasarana Pendidikan. *Jurnal Ilmiah Dikdaya*, 14(1), 162. <https://doi.org/10.33087/dikdaya.v14i1.618>
- Sinta, I. M. (2019). Manajemen Sarana Dan Prasarana. *Jurnal Islamic Education Manajemen*, 4(1), 77–92. <https://doi.org/DOI:10.15575/isema.v3i2.5645>
- Suranto, D. I., Annur, S., Ibrahim, & Alfiyanto, A. (2022). Pentingnya Manajemen Sarana Dan Prasarana Dalam Meningkatkan Mutu Pendidikan. *Jurnal Kiprah Pendidikan*, 1(2), 59–66. <https://doi.org/10.33578/kpd.v1i2.26>
- Susilawati, E. (2020). Manajemen Pemanfaatan Sarana Dan Prasarana Pembelajaran. *Jurnal Manajemen Pendidikan Islam*, 6(1), 21. <https://doi.org/10.51278/aj.v2i3.68>
- Syafruddin, M. A. (2023). Peran Kepala Sekolah Dalam Manajemen Sarana Prasarana Untuk Meningkatkan Mutu Proses Pembelajaran di SMP Muhammadiyah Simpang Empat. *Diklat Review: Jurnal Manajemen Pendidikan dan Pelatihan*, 7(1), 74–82. <https://doi.org/10.35446/diklatreview.v7i1.1315>
- Widayati, S., Suryanti, S., & Wiryanto, W. (2022). Strengthening the Relationship with Parents; School Creativity to Overcome School's Infrastructure Problems. *AL-ISHLAH: Jurnal Pendidikan*, 14(4), 6805–6816. <https://doi.org/10.35445/alishlah.v14i4.2298>
- Widiansyah, A. (2018). Peran Kepala Sekolah dalam Meningkatkan Sarana dan Prasarana Pendidikan di SDIT Insani Islamia Bekasi. *Cakrawala*, 18(1).