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## Quality Management Of Facilities And Infrastructure At Madrasah

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### Abstract:

Facilities and infrastructure are important components of an efficient educational process in schools. The management of educational facilities and infrastructure must be done in order to guarantee the smooth operation of the madrasah's facilities and infrastructure. The purpose of this study is to describe the quality management of facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu, Lampung, Indonesia. The principal of Madrasah Aliyah Negeri 1 Pringsewu, the administrative staff, the committee, and the vice principal of facilities and infrastructure are the study's sources of data. Observation, documentation, and interviews were used to collect the data. The analysis of the study's data included data reduction techniques, data visualization, and conclusion drawing or verification. Triangulation was used to check the validity of the data in the interim. Planning, doing, checking, and action is all used to manage the quality of the facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu, Lampung, Indonesia, based on the research's findings. After determining the needs through analysis, procurement is done by offering opportunities to partners. Maintenance of facilities and infrastructure is done by collecting data on the facilities and infrastructure owned, then organizing and taking special care of electronic objects. Finally, follow-up is done by using and removing facilities and infrastructure.

**Keywords:** Quality Management; Facilities; Infrastructure

## Introduction

Educational facilities are all sets of equipment used directly in the educational process at school, such as classrooms, books, blackboards, and others. While educational infrastructure is a basic completeness device that indirectly supports the implementation of the educational process in schools, such as location, school buildings, sports fields, and others (Pakpahan & Hidayati, 2021; Pohan, 2018). Educational facilities and infrastructure are important to achieving educational goals in schools (Giç & Tuzun, 2020). The success of the educational program organized by the school depends on the availability of facilities and infrastructure and the ability of teachers to optimize the use of these facilities and infrastructure (Krismadinata et al., 2020). Facilities and infrastructure are one of the factors that influence teachers' considerations in choosing learning strategies (Burhaein et al., 2021).

Facilities and infrastructure are very important to develop and implement because they affect the optimization of regulations, partnerships, student needs, and motivation in schools (Cindy et al., 2022). The infrastructure that supports the educational process in schools must be relevant to the needs of students so that whenever school personnel is always ready to use (Rapanta et al., 2021). The availability of facilities and infrastructure based on the ratio of students can improve school quality and affect student learning achievement, so it needs to be one of the factors that model school effectiveness (Murillo & Román, 2011; Nurabadi et al., 2020).

Facilities and infrastructure can have a positive influence on the critical thinking of students (Rifai & Imron Rosadi, 2022). As a result, facilities and infrastructure must be utilized and managed for the benefit of the learning process so that they can be used effectively and efficiently. Things that arise unexpectedly and require urgent repairs to facilities, a lack of user knowledge, partners who are often less sensitive, and cultural differences between individuals in the use of facilities and infrastructure can be obstacles in the process and technology faced in managing facilities and infrastructure (Ahmad, 2021; Pangestu & Hariri, 2022).

Facilities and infrastructure affect learner achievement (Tokan & Imakulata, 2019). The less-than-optimal carrying capacity of facilities and infrastructure is a challenge in the learning process (Angraini et al., 2019). The good availability of facilities and infrastructure in schools can improve quality and support graduation programs (Wiranto & Slameto, 2021). The poor condition of facilities and infrastructure will result in educational inequality due to a lack of access to quality education (du Plessis & Mestry, 2019). In addition, inadequate school facilities and infrastructure can hinder students from practicing clean and healthy living habits and become an inhibiting factor for teachers in providing learning materials (Abante et al., 2014; Poague et al., 2022).

The existence of facilities and infrastructure is one of the supporting factors for school personnel in improving the quality of education to meet the demands of the times (Rahmania et al., 2020; Uline & Tschannen-Moran, 2008). Facilities and infrastructure that are managed by paying attention to the principles of right time, right target, and right use can maximize the learning process in schools (Sachs et al., 2019). Complete and well-organized educational facilities must be used as well as possible to support the quality teaching and learning process so that education in schools can run effectively (Bojović et al., 2020). Management of educational facilities and infrastructure can be done through structuring activities, starting from the needs, procurement, inventory, storage, maintenance, use, and storage, and a complete arrangement of land, buildings, equipment, and school supplies available (Kitila & Woldemikael, 2019).

The existence of facilities and infrastructure is crucial or urgent for achieving learning achievement (Abbas, 2020). For this reason, it is necessary to utilize and manage learning facilities in order to achieve their goals (Almaiah et al., 2020). A workforce that has the advantage of applying technology is needed in the use of educational facilities and infrastructure in the 4.0 era so that schools can provide the infrastructure that follows the development of science and technology in order to achieve a level of learning achievement in

accordance with the objectives (Bal & Erkan, 2019). The success of education in schools is largely determined by the expertise and managerial skills of the school principal (Al-Kurdi et al., 2020). The ability to manage facilities and infrastructure is no exception and is directly proportional to the school's program success (Baviskar, 2019).

Quality management is needed to manage facilities and infrastructure so that they are maintained and can be utilized properly (Ammar et al., 2021). The existence of quality management can make it easier for school personnel to handle the maintenance of educational facilities and infrastructure (Asiyai, 2022). As previously stated, this research is critical to understanding the quality management of educational facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu.

## **Methods**

This research seeks to describe the quality management of facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu, Lampung, Indonesia. The research procedure begins with the stage of field exploration of the research setting to find preliminary data and information, as well as making scientific confirmation efforts through searching book literature and supporting research references. then continued at the stage of field research, data analysis, and reporting. The data sources in this research are the principal of Madrasah Aliyah Negeri 1 Pringsewu, the administrative staff, the committee, and the deputy head of the madrasah in the field of facilities and infrastructure. Data collection was carried out through the processes of interviews, observation, and documentation. The data in this study were analyzed through the procedures of data reduction, data display, and conclusion drawing or verification. Meanwhile, data validity checks were carried out by triangulation.

## **Results and Discussion**

Facilities and infrastructure management at Madrasah Aliyah Negeri 1 Pringsewu begins with the planning stage. Planning is done by analyzing the needs that are discussed in a joint meeting held at the beginning of each semester between the principal and the deputy head of facilities and infrastructure, the secretary, and the treasurer. Planning must be done carefully and in a coordinated manner, which is distinguished by various considerations and coordination or good relations from various parties involved in the procurement of goods. With the planning meeting, Madrasah Aliyah Negeri 1 Pringsewu will indirectly know what things will be held through joint decisions by analyzing the needs and determining the priority scale to be adjusted to the budget owned by Madrasah Aliyah Negeri 1 Pringsewu. After the needs of facilities and infrastructure are known, a proposal is made for the procurement of facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu.

The process of finding information about the existence and condition of facilities and infrastructure owned by Madrasah Aliyah Negeri 1 Pringsewu is carried out before holding an annual planning meeting. This activity is carried out before the beginning of the new school year, but indirect data collection regarding the existence and condition of infrastructure facilities is carried out every day because every day the data is updated based on input from all school members about the condition of the facilities owned. From the analysis of RKAS documents, it was also found that the data collection activities on the existence and condition of facilities and infrastructure were carried out a few days before the facilities and infrastructure procurement planning meeting was held at the beginning of the new school year. Following the results of observations made by researchers at the time of the Madrasah Aliyah Negeri 1 Pringsewu facilities and infrastructure planning meeting, information can be found regarding the participation of the

school community in providing specific information about the existence and condition of current facilities and infrastructure to the principal and providing input regarding the procurement plan to be carried out. So, from the results of the data exposure above, it can be concluded that the activities of preparing the procurement plan for facilities and infrastructure were carried out by the head of MAN 1 Pringsewu together with the planning team through needs analysis and adjustments to the budget owned by Madrasah Aliyah Negeri 1 Pringsewu.

The next process is procurement, which is carried out by selecting a partner as a third-party to carry out the procurement process. In addition, the madrasah also controls and supervises the funds that will be used for the procurement process of facilities and infrastructure to meet the needs of school facilities and infrastructure.

Procurement of facilities and infrastructure begins with needs analysis activities and the determination of priority scales based on the results of data collection regarding the existence and condition of facilities and infrastructure that have been carried out to produce a list of needs that contain what facilities and infrastructure will be purchased or procured. The Head of Madrasah Aliyah Negeri 1, Pringsewu, conducts needs analysis and prioritization activities at every planning meeting. This activity is carried out by consensus and determines the more important and urgent needs that are implemented first.

The head of Madrasah Aliyah Negeri 1, Pringsewu, always tries to determine an action or policy together through meetings, as evidenced by the meetings always held in analyzing the facilities and infrastructure needs of the school and determining the priority scale of the needs that are very important and most prioritized at that time through various considerations. In the implementation of the procurement of facilities and infrastructure in Madrasah Aliyah Negeri 1, Pringsewu, based on the opinion expressed by the principal, the procurement of facilities and infrastructure follows existing planning and is seen according to the needs that have been formulated by elements related to the procurement of facilities and infrastructure. So it can be concluded that in the planning meeting for the procurement of facilities and infrastructure, the principal decides the results of the meeting in the form of a list of needs for facilities and infrastructure obtained from proposals and input from members of the planning team for the procurement of facilities and infrastructure based on analysis of needs and priorities.

After planning and procurement are carried out, the process of maintaining facilities and infrastructure is another thing that is done at Madrasah Aliyah Negeri 1 Pringsewu. This maintenance process is carried out by collecting data on facilities and infrastructure owned, making special arrangements, and maintaining electronic objects.

The implementation of this activity is handled by the facilities and infrastructure department at Madrasah Aliyah Negeri 1 Pringsewu. The school already has administrative staff in the facilities and infrastructure section who are competent and have a decree from the education office as the recipient of goods. Inventory activities have been carried out well, this result is indicated by the fact that the person who takes care of this section is a person who is very familiar with and an expert in the facilities and infrastructure section. This condition requires teachers and staff to collaborate and assist one another in carrying out and enjoying the assigned work. Existing procedures are equated with the holding of training on inventorying through a program of activities organized by the education office. The inventory results are also reported to monitor the facilities and infrastructure owned. Observations showed that the school has a master inventory book. The existence of a master inventory book will greatly help managers check all items because they have to look at them one by one from the catalog. From the description above regarding the aspect of inventorying infrastructure facilities, it can be seen that the condition of infrastructure

facilities at Madrasah Aliyah Negeri 1 Pringsewu is currently quite good. This is evidenced by the existence of a recording book on educational facilities and infrastructure (master book) and the coding of facilities and infrastructure owned by the school that has been installed properly.

Facilities and infrastructure in Madrasah Aliyah Negeri 1 Pringsewu can be utilized according to existing procedures by all parties. In addition to utilization, maintenance actions are also carried out, starting with the supervision of Madrasah Aliyah Negeri 1 Pringsewu facilities and infrastructure. The supervision of school facilities and infrastructure is carried out by involving all school residents under the direction of the principal in order to foster concern for the facilities and infrastructure owned by the school. This strategy is carried out by the principal issuing an appeal to all school residents, which means that all school residents are invited to supervise the existing facilities at Madrasah Aliyah Negeri 1 Pringsewu as well as light maintenance. In the event of minor damage, repairs are carried out by teachers who have special skills in facility and infrastructure affairs. In the observations made, the school only fixes it as much as possible with the minimum possible funds because the school is still always hampered by the costs it has. The forms of maintenance carried out by Madrasah Aliyah Negeri 1 Pringsewu are the maintenance of science laboratory equipment, environmental sanitation, maintenance of parks and the environment, maintenance of furniture, painting of buildings, maintenance of electronic equipment, and maintenance of electrical installations. As a result, the maintenance of facilities and infrastructure is guided and directed by the head of Madrasah Aliyah Negeri 1, Pringsewu, to all school members to participate in maintaining and maintaining the school's facilities and infrastructure.

Follow-up is the final process in the management of facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu. Follow-up of facilities and infrastructure is carried out by regulating the use of consumables and non-consumable items. In addition, the process of renewal and repair of facilities and infrastructure that have been damaged every year or every three months depends on the damage and maintenance needs of the facilities and infrastructure. As well as for facilities and infrastructure that are no longer feasible and can no longer be used, a deletion process is carried out through the State-Owned Entity program.

The process of using educational facilities and infrastructure is the responsibility of the head of the madrasa, who should be assisted by the deputy principal of infrastructure facilities or other officers related to the handling of infrastructure facilities. The use of facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu includes consumables and non-consumables. The use of consumables is used as well as possible and used as needed, for example, as the use of markers to write on the blackboard. Used properly, the use of electricity in moderation is not excessive, for example, as in the direction of the madrasah head to the teachers to turn off the fan when not in use or before going home. regulating the use of electricity for computer laboratories by increasing electrical power also directing madrasah residents to use water moderately and not excessively. As for non-consumable items, their use is also regulated, such as the use of tables and benches for students, while other facilities are based on usage schedules, such as libraries, prayer rooms, computer laboratories, and so on. Because the Madrasah Aliyah Negeri 1 Pringsewu computer laboratory only has 40 computer devices, the officer who handles the computer laboratory must also make a schedule for the use of the computer laboratory.

Another part of the follow-up of facilities and infrastructure is deletion. The elimination of existing facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu is still in the improvement stage because some items are still scattered, so they are still piled up in the

warehouse, and the maintenance of the warehouse is still not good, resulting in facilities and infrastructure that should have been removed not having been done. Madrasah Aliyah Negeri 1 Pringsewu has formed a team to eliminate damaged and unused facilities and infrastructure; after the elimination team is formed, they submit a report on assets that are no longer used or cannot be used again for further elimination action. Thus it can be concluded that the follow-up of facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu is carried out by using and carrying out deletion when the facilities and infrastructure can no longer be used.

### **Conclusion and suggestion**

Based on the results of the study, it can be concluded that the efforts of the madrasah head in improving the management of educational facilities and infrastructure at Madrasah Aliyah Negeri 1 Pringsewu include planning, procurement, maintenance, and follow-up. Planning is done by analyzing needs, recording the needs needed by the madrasah at that time, and synchronizing with last year's planning data that has not been implemented. Procurement of facilities and infrastructure is carried out by selecting a partner as a third party to carry out the procurement process. In addition, the madrasah also controls and supervises the funds that will be used for the procurement process of facilities and infrastructure to meet the needs of the school's facilities and infrastructure. Maintenance of facilities and infrastructure is carried out by collecting data on facilities and infrastructure owned, then making special arrangements and care for electronic objects. The follow-up process of facilities and infrastructure is carried out by making arrangements for the use of consumables and non-consumable items. In addition, the process of renewal and repair of facilities and infrastructure that have been damaged every year or every three months depends on the damage and maintenance needs of these facilities and infrastructure. As well as for facilities and infrastructure that are no longer feasible and can no longer be used, a deletion process is carried out through the State-Owned Entity program..

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