

Open Access Repository

www.ssoar.info

Optimisation of Educational Facilities and Infrastructure Management in Supporting Student Learning Activities in Senior High Schools in Nagan Raya Regency, Indonesia

Dewi, Via Risna; Murniati, Murniati; Usman, Nasir

Veröffentlichungsversion / Published Version Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

Dewi, V. R., Murniati, M., & Usman, N. (2023). Optimisation of Educational Facilities and Infrastructure Management in Supporting Student Learning Activities in Senior High Schools in Nagan Raya Regency, Indonesia. *Path of Science*, 9(5), 3057-3062. https://doi.org/10.22178/pos.92-17

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY Lizenz (Namensnennung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier:

https://creativecommons.org/licenses/by/4.0/deed.de

Terms of use:

This document is made available under a CC BY Licence (Attribution). For more Information see: https://creativecommons.org/licenses/by/4.0





Optimisation of Educational Facilities and Infrastructure Management in Supporting Student Learning Activities in Senior High Schools in Nagan Raya Regency, Indonesia

Via Risna Dewi, Murniati ¹, Nasir Usman ¹

¹ Syiah Kuala University

Jln. Teuku Nyak Arief, Darussalam, Banda Aceh, Aceh, 23111, Indonesia

DOI: 10.22178/pos.92-17

LCC Subject Category: L7-991

Received 26.04.2023 Accepted 28.05.2023 Published online 31.05.2023

Corresponding Author: Via Risna Dewi via_rd@mhs.unsyiah.ac.id

© 2023 The Authors. This article is licensed under a Creative Commons Attribution 4.0 License

Abstract. Management of educational facilities and infrastructure can be interpreted as utilising all existing components related to educational facilities and infrastructure in schools in supporting the educational process. This study describes the management of educational facilities and infrastructure supporting student learning activities in SMA Nagan Raya Regency. The method used is a descriptive analysis method with a qualitative approach - data collection techniques through observation, interviews, and documentation studies. The research subjects are the Principal, Vice Principal for Facilities and Infrastructure, and Teachers. The results showed that: 1) educational facilities and infrastructure planning is carried out during meetings involving the principal, viceprincipals, and all teachers related to the school's needs in supporting student learning activities. 2) Procurement of educational facilities and infrastructure is carried out by considering the current needs at the school and adjusting to the available budget. If the procurement can be fulfilled with the BOS budget, then the procurement is done with the available BOS budget. 3) The inventory of educational facilities and infrastructure is adjusted to the condition of the facilities and infrastructure available at the school. 4) The school's needs carry out the distribution and utilisation of educational facilities and infrastructure. 5) Maintenance of educational facilities and infrastructure begins with checking the facilities and infrastructure available at the school. 6) Eliminating educational facilities and infrastructure in schools has never been implemented.

Keywords: Management; Facilities and Infrastructure; Education; Student Learning Activities.

INTRODUCTION

Education is one of the critical factors in development in every country. Author [1] argues, "Education is an effort so that humans can develop their potential through the learning process". This is by the mandate in Article 3 of Law No 20 of 2003 concerning the National Education System, which stipulates that "National education aims to create or develop the potential of students to become human beings who believe, have faith in God Almighty, have a noble character, are healthy and, knowledgeable, creative, capable, independent and democratic and responsible. So that, one way to realise educational goals is in educational institutions or schools.

School is a formal institution where it is hoped that someone will acquire the knowledge, skills, attitudes and skills needed for forming and developing a complete person through learning. The learning process will lead to student learning activities. These student learning activities can run well if supported or supported by the availability of educational facilities and infrastructure in schools. This is in line with the opinion of [2], who argues, "An important factor capable of supporting the implementation of education in schools is the availability of educational resources such as educational facilities and infrastructure."

Educational facilities and school infrastructure must be appropriately managed to support student learning activities. This is in line with [3]

argument: "Management of facilities and infrastructure is a significant activity in schools because its existence will greatly support the success of the learning process in schools." Besides that, good management of facilities and infrastructure in schools will make an educational institution, namely schools can develop optimally and well as expected. Authors [4] argue, "Management of facilities and infrastructure is in charge of managing educational facilities and infrastructure so that they can be utilised or used optimally and meaningfully in the course of the educational process".

Many educational facilities and infrastructure are owned by an educational institution, namely schools that are still not optimally used and cannot even be used according to their function. This can be caused by a lack of care and a sense of belonging to educational facilities and infrastructure and the lack of management so that these facilities and infrastructure are neglected. Then, the problem that often occurs is that there is still a lack of attention to the facilities and infrastructure that exist in an institution, namely schools to maintain or maintain and carry out an inventory in checking goods or matters related to educational facilities and infrastructure.

In line with the standards for facilities and infrastructure contained in the regulation above, it includes the minimum criteria for facilities and infrastructure that must be available and managed in school. With this standard of facilities and infrastructure, everything related to the management of educational facilities and infrastructure in the learning process within the school environment is regulated or managed according to applicable standards so that it can take place optimally or, at a minimum, must comply with these standards.

METHODS

The research approach used in this study is a qualitative approach with a descriptive method used to describe various symptoms and facts contained in social life in depth to realise the final results of the research. The author [5] argues that: "Qualitative research is an activity of observing, interacting, trying to understand the language and interpretations of people in their environment, to produce a picture of conditions that occur at a certain time as they are."

In this study, research subjects were selected using a purposive sampling technique. The author [6] argues, "The purposive sampling technique is a determination technique with certain considerations". This study's research subjects were school principals, vice principals for facilities and infrastructure, and teachers at SMA Negeri 1 Seunagan. Determination of school principals, vice principals for facilities and infrastructure, and teachers as the main subject is based on considerations or criteria for determining that an informant who really knows and also masters the matter to be studied, as well as informants who are directly involved in the research.

The instruments used to collect data regarding the management of facilities and infrastructure in supporting student learning activities are observation guidelines, interview guidelines, and documentation studies by asking questions that have been formulated according to the research objectives to obtain answers that can be used as results qualitative data whose validity and truth can be accounted for.

This type of research uses descriptive analysis, where after the data has been collected, selective sorting is carried out, which is adjusted to the problems raised in the study, and then data analysis is carried out. The primary purpose of data analysis is to summarise data in a form that is easy to understand and interpret. The data obtained in this descriptive research is described through descriptions of words and sentences, which then produce conclusions from the study.

RESULTS AND DISCUSSION

Educational Facilities and Infrastructure Planning. Planning educational facilities and infrastructure is the first step in preparing or formulating a design that will be implemented in the future. Authors [7] argue that: "Planning for facilities and infrastructure has the goal of making it easier for the school to determine needs, facilitating the learning process, financial management, and so that what will be done or what will be purchased is arranged." In planning educational facilities and infrastructure, it is better to involve school stakeholders to make the planning mature and precise.

The results showed that planning for educational facilities and infrastructure at Seunagan 1 Public High School was carried out two times a year in meetings, namely at the beginning of semester

one and at the beginning of semester two. Then in the discussion, facilities and infrastructure planning were adjusted according to the school's needs. All teachers and supervisors in the forum, such as the head of the librarian, laboratory, and so on, were invited and involved. This is in line with [8], which says that: "The elements that need to be involved in planning facilities and infrastructure are school principals, deputy principals, teachers, heads of administration and treasurers, and school committees."

Planning for educational facilities and infrastructure is also carried out by first analysing the needs and requirements. Furthermore, the priority scale is also carried out from the required conditions, what needs must be immediate or urgent, and then these needs will be prioritised or prioritised. In planning educational facilities and infrastructure, there is no special committee. Still, this school has a team that reflects eight academic standards, including one regarding educational facilities and infrastructure. The team is the School Education Quality Assurance Team or abbreviated as (TPMPS). The team that was formed consisted of the deputy head of the school for facilities and infrastructure and other representatives,

Procurement of Educational Facilities and Infrastructure. After planning is done for educational facilities and infrastructure, the procurement of educational facilities and infrastructure. Then the results of the planning that has been done are fulfilled by procuring educational facilities and infrastructure. The author [9] states that: "There are several alternative ways to procure educational facilities and infrastructure, namely through buying, making it yourself, assistance or grants, renting, borrowing, recycling, exchanging and repairing or reconstructing it."

The study results show that the procurement of educational facilities and infrastructure is carried out after previous planning has been carried out regarding school needs. There is no specific schedule or schedule for procuring educational facilities and infrastructure. But only adjusted to the needs and, of course, to the available budget for procuring these facilities and infrastructure. Furthermore, the available budget in this school is only BOS funds for procuring educational facilities and infrastructure. Hence, fulfilling educational facilities and infrastructure also uses the BOS funds.

Procuring educational facilities and infrastructure is usually for sources of funds or costs. In general, it is only available at schools, namely BOS funds. Furthermore, in the procurement of educational facilities and infrastructure, those involved in the procurement are usually the deputy head of the school in the field of facilities and infrastructure, the treasurer's boss.

Inventory of Educational Facilities and Infrastructure. Inventory of educational facilities and infrastructure is carried out using coding, numbering, etc. This is in line with [10], who says that: Inventory is the process of calculating, recording, classifying, classifying, and coding goods or facilities and infrastructure that are contained in one list, so inventory includes recording and preparation of school-owned goods or infrastructure and recorded in a book so that it can be easier to review the data.

Inventorying educational facilities and infrastructure is one of the essential recording activities to be carried out in schools. Authors [11] argue, "Inventory of facilities and infrastructure is the recording or registration of school-owned items into an inventory list of goods in an orderly and regular manner according to the applicable provisions and procedures." The study results showed that the educational facilities and infrastructure inventory was sorted out in advance. The inventory of consumables, non-consumables, and others were all recorded or inventoried by the vice principal for educational facilities and infrastructure. Furthermore, reporting on the inventory of educational facilities and school infrastructure has been running quite well.

For the schedule for carrying out an inventory of educational facilities and infrastructure in schools, there is no specific schedule or specific schedule. Still, it is just adjusted if there are items that come in. The school's deputy head in the educational facilities and infrastructure field will immediately be inventoried, as currently, there is assistance from the agency in the form of 4 smartboards so that there are goods that come in, so an inventory is immediately carried out. Likewise, if other facilities come in, and so on, we directly make an inventory.

Distribution and Utilisation of Educational Facilities and Infrastructure. Allocation and utilisation of educational facilities and infrastructure is distributing and using available facilities and infrastructure in schools to support student learning activities. Authors [12] explain, "The distribution

of facilities and infrastructure is spreading something from one party to another. Three things need to be considered in distributing goods: the accuracy of the goods delivered (quantity and type), the accuracy of the target and the accuracy of the condition of the goods being distributed.

The research results in the field show that the distribution of facilities and infrastructure in schools is adjusted to the needs and demands. The distribution is by which party needs it so that that party will be distributed. For example, the laboratory needs tools and materials submitted at the meeting and procured, then immediately spread to the facilities and infrastructure representatives or distributed directly to the laboratory supervisor. Furthermore, for the schedule for the use of facilities and infrastructure at the school, there is a specific schedule because each class already has its roster of lessons for each day so that students and teachers adjust to the available registration every day to enter any subject, at what time and how many hours of the class are listed. Then there are special rules related to using school facilities and infrastructure, such as borrowing textbooks in the library. Of course, there are special rules that already exist. There are rules, likewise, with the use of other means.

The study's results also show that the existence of facilities and infrastructure in this school has been able to support student learning activities. They can already support the learning process regarding the facilities and infrastructure available. As for the use of facilities and infrastructure, overall, the dominance of the facilities and infrastructure available at the school has been put to good use by the teachers. As one of them, with the dominant use of InFocus, teachers already use Infocus. This depends on the teacher concerned and is adjusted to the material conveyed or taught to students.

Maintenance of Educational Facilities and Infrastructure. Educational facilities and infrastructure are maintained to maintain school facilities and infrastructure in acceptable conditions. These good conditions are intended so that school facilities and infrastructure are ready to use as optimally as possible, prolong their service life, identify any damage or symptoms of injury and prevent fatal damage. The author [13] argues, "Maintenance is the activity of caring for, maintaining and storing goods by the types of

goods so that these goods are durable and long-lasting."

The study results show that the maintenance of educational facilities and infrastructure in schools is carried out by checking the facilities and infrastructure available at schools. These checks are usually carried out before using the facilities and infrastructure. Then a specific schedule for when to maintain facilities and infrastructure if there is already a picket roster in each class to handle class cleanliness and maintain the existing facilities. Furthermore, in general, in the school environment, some officers are responsible for looking after, caring for, and maintaining the school environment.

In the maintenance of educational facilities and infrastructure, the source of funds or costs, if they are still classified as slightly damaged existing facilities and infrastructure at the school, then the maintenance uses BOS funds. We request assistance. In maintaining educational facilities and infrastructure in the school environment, a strategy is needed to awaken school resources to support the facilities and infrastructure available at school, one of which is by giving appeals or instructions to students to continuously maintain and care for the facilities and infrastructure available at school.

Elimination of Educational Facilities and Infrastructure. The erasure of educational facilities and infrastructure is an extermination activity carried out when the school's property no longer functions as it should. The author [11] argues, "Removing educational facilities and infrastructure is an activity that aims to remove or remove facilities and infrastructure from the inventory list. Criteria for facilities and infrastructure being abolished when they are in a state of disrepair so that they cannot be repaired or used again, repairs require a large amount of money resulting in waste, their use is not balanced with maintenance costs, and their whereabouts are lost or unknown.

The results of research in the field show that administratively removing educational facilities and infrastructure at schools has never been implemented in schools. However, suppose there are facilities and infrastructure at school that cannot be used anymore or are damaged. In that case, it is adjusted to the condition of the facilities and infrastructure. If indeed they can be recycled or repaired, they will be fixed. But it's stored in the warehouse if it can't be repaired.

CONCLUSIONS

Based on the results of research and data analysis that has been done, it can be concluded that:

- 1. Planning for educational facilities and infrastructure has been carried out with reasonable procedures, and planning is carried out during meetings involving the school principal, representatives of school heads, and all teachers who convey matters related to school needs in supporting student learning activities.
- 2. Education facilities and infrastructure are procured by considering the school's needs and adjusting to the available budget. If the procurement can be met with the BOS budget, then the procurement is carried out using the available BOS budget.
- 3. Inventory of educational facilities and infrastructure according to the condition of the facilities and infrastructure available at schools.

- 4. The distribution and utilisation of educational facilities and infrastructure are carried out according to the school's needs.
- 5. Maintenance of educational facilities and infrastructure begins with checking carried out when using the facilities and infrastructure available at school. Still, a specific schedule should be made periodically for the maintenance of facilities and infrastructure public at school to minimise if any facilities and infrastructure are damaged and so on. can support student learning activities.
- 6. Removing educational facilities and school infrastructure has never been carried out. The school should carry out the deletion considering that the facilities and infrastructure are ineffective or efficient to use again, so they do not take up space.

REFERENCES

- 1. Arifah, U. (2018). Kebijakan Publik Dalam Anggaran Pendidikan [Public Policy in Education Budgeting]. *Cakrawala: Jurnal Manajemen Pendidikan Islam Dan Studi Sosial, 2*(1), 17–37. doi: 10.33507/cakrawala.v2i1.37 (in Indonesian).
- 2. Nasrudin, N., & Maryadi, M. (2019). Manajemen Sarana dan Prasarana Pendidikan dalam Pembelajaran di SD [Management of Educational Facilities and Infrastructure for Learning in Primary Schools]. *Manajemen Pendidikan, 13*(2), 15–23. doi: 10.23917/jmp.v13i2.6363 (in Indonesian).
- 3. Ginanjar, M. H., Rahman., & Jundullah, M. (2023). Manajemen Sarana dan Prasarana Pendidikan dalam Meningkatkan Kualitas Proses Pembelajaran di SMA Al-Minhaj Bogor [Management of Educational Facilities and Infrastructure in Improving the Quality of the Learning Process at Al-Minhaj High School in Bogor]. *Islamic Management: Jurnal Manajemen Pendidikan Islam, 6*(1), 103–118 (in Indonesian).
- 4. Nurharirah, S., & Effane, A. (2022). Hambatan dan Solusi dalam Manajemen Sarana dan Prasarana Pendidikan [Barriers and Solutions in the Management of Educational Facilities and Infrastructure]. *Karimah Tauhid*, 1(2), 219–225 (in Indonesian).
- 5. Nasution, S. (2017). *Metode Penelitian Naturalistik Kualitatif* [Qualitative Naturalistic Research Methods]. Bandung: Tarsito (in Indonesian).
- 6. Sarmanu. (2017). Dasar Metodologi Penelitian Kuantitatif, Kualitatif & Statistika [Basic Quantitative, Qualitative & Statistical Research Methodology]. Surabaya: Airlangga University Press (in Indonesian).
- 7. Ria Ramdhiani, & Rahminawati, N. (2021). Analisis Pengelolaan Sarana dan Prasarana Pembelajaran [Analysis of the Management of Learning Facilities and Infrastructure]. *Jurnal Riset Pendidikan Guru Paud*, 1(2), 95–101. doi: 10.29313/jrpgp.v1i2.389 (in Indonesian).
- 8. Sonia, N. R. (2021). Implementasi Manajemen Sarana Prasarana Pendidikan di Madrasah Aliyah Swasta [Implementation of Educational Infrastructure Management in Private Madrasah Aliyah]. *JIEMAN: Journal of Islamic Educational Management, 3*(2), 237–256. doi: 10.35719/jieman.v3i2.95 (in Indonesian).

- 9. Nurstalis, N., Ibrahim, T., & Abdurrohim, N. (2021). Peran Manajemen Sarana Dan Prasarana Dalam Meningkatkan Mutu Pembelajaran Di Smp Islam Cendekia Cianjur [The Role of Facilities and Infrastructure Management in Improving Learning Quality at Smp Islam Cendekia Cianjur]. *Jurnal Isema: Islamic Educational Management, 6*(1), 63–76. doi: 10.15575/isema.v6i1.6579 (in Indonesian).
- 10. Fikri, R., & Syahrani. (2022). Strategi Pengembangansarana Dan Prasarana Pembelajaran Di Pondok Pesantrenrasyidiyah Khalidiyah (Rakha) Amuntai [Development Strategy of Learning Facilities and Infrastructure at Pondok Pesantren Rasyidiyah Kha-lidiyah (Rakha) Amuntai]. *Educational Journal: General and Specific Research*, 2(1), 79–88 (in Indonesian).
- 11. Dewi, R. P. (2020). Pengelolaan Sarana Dan Prasarana Dalam Meningkatkan Mutu Pendidikan (Studi Deskriptif Kualitatif di SMPN 05 Lebong) [Management of Facilities and Infrastructure in Improving the Quality of Education (Descriptive Qualitative Study at SMPN 05 Lebong)]. *Manajer Pendidikan: Jurnal Ilmiah Manajemen Pendidikan Program Pascasarjana, 14*(3), 103–108. doi: 10.33369/mapen.v14i3.12915 (in Indonesian).
- 12. Almarogi, Ahmad Mugni dan Rofvini. (2020). Manajemen Sarana dan Prasarana Pendidikan untuk Meningkatkan Mutu Pembelajaran [Management of Educational Facilities and Infrastructure to Improve Learning Quality]. *Inclusive: Journal of Special Education*, 4(2), 77–90 (in Indonesian).
- 13. Sartika, R. (2021). Standar Sarana dan Prasarana di Madrasah di MAS Al-Washliyah Kp. Mesjid [Facilities and Infrastructure Standards in Madrasahs at MAS Al-Washliyah Kp. Mesjid]. *ALACRITY: Jurnal of Education, 1*(1), 17–25 (in Indonesian).