MANAGEMENT OF FACILITIES AND INFRASTRUCTURE IN SCHOOLS

Url Jurnal: https://ui.e-journal.id/akademika/article/1348
DOI : https://doi.org/10.34005/akademika.v10i01.1348

Submitted: 2021-04-27 Reviewed: 2021-05-11 Published: 2021-05-30

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Abstract: The purpose of this study was to find out and obtain information about the management of educational facilities and infrastructure at Vocational High School 2 Cikarang Barat. The analysis method used is descriptive qualitative. The study took place at Vocational High School 2 Cikarang Barat from July 2020 to December 2020. The school principal, deputy headmaster in charge of facilities and infrastructure, maintenance support staff, and students of Vocational High School 2 Cikarang Barat served as research informants. Interviews, observation, and reporting studies are all used to collect data. After that, the data is analyzed by reducing it, presenting it, and drawing conclusions. The triangulation of sources, techniques, and hypotheses is a validity technique. The results showed that: (1) Preparation for the management of facilities and infrastructure at Vocational High School 2 Cikarang Barat begins with a work meeting and arranging an activity agenda lead by the school principal, then maintenance is divided into 2 categories, namely periodic and routine maintenance. Then compile a one-year budget plan made by the principal and the Budget Draft Team. Following that, representatives from the facilities and infrastructure sector specifically select the structure of facility and infrastructure maintenance, as well as their respective jobdesks in each division, which are known to the school principal. The final move is to socialize students at school. (2) School maintenance processes and techniques begin with frequent and routine maintenance. Routine maintenance includes the upkeep of classrooms, teacher's offices, and special rooms such as libraries, computer laboratories, and science labs. The school also performs routine maintenance on air conditioners, printers, and photocopiers, as well as computer program upgrades. (3) Obstacles faced by schools in preparing facility and infrastructure repairs, including, among other problems, things that arise unexpectedly and need urgent repair at the facility. The lack of knowledge of users of school facilities and infrastructure, partners with outsiders who are often less sensitive, and cultural differences among individuals in the use of facilities and infrastructure are among the process and technological obstacles encountered.

Keywords: Management, facilities and infrastructure

INTRODUCTION

Education is a conscious effort so that humans can develop their potential through the learning process. In essence, Humans need education in order to improve their lives on a daily basis. Every person is entitled to a high-quality education. (UU, 2003). Based on this statement, the government as the leader of a country supports the implementation of
education in Indonesia and provides educational institutions for the community.

There are facilities and infrastructure in an educational institution. Facilities and facilities are one of the educational tools that must be professionally handled and are an inseparable part of educational administration. If there is a mechanism with clear steps, Maximum management of educational facilities and resources that has been carried out by the facilities and infrastructure team can be realized.

Rue & Byar defines management as a form of work that involves a process of coordinating the resources that exist within the organization, such as land, buildings, workers, and capital to achieve organizational goals (Kurniawati, 2013). This means that to create good management in a school does not only rely on the principal alone, but there are various aspects that must be considered such as land, buildings, and human resources who must have the same vision and mission in order to create good management.

According to Ari H. Gunawan from Megasari, Teaching and Learning Process or Teaching and Learning Activities will be more successful if it is supported by school facilities and infrastructure adequate, so that the government is always trying to continue complete school facilities and infrastructure for all levels education, so that the physical wealth of the state in the form of facilities and infrastructure very big school (Megasari, 2014). Therefore educational facilities and infrastructure are one of the important aspects in the world of education, because with adequate facilities in a school it will also help students in teaching and learning activities, and make it easier for teachers to expand their teaching style methods and make it easier to achieve results from optimal teaching and learning activities.

The purpose of managing educational facilities and infrastructure is to create a work system for education providers, so that educational operational activities can be completed effectively and efficiently. Each formal and non-formal education unit provides facilities and infrastructure to meet educational needs in accordance with students' physical potential, academic, social, and emotional intelligence, as well as their responsibilities. (UU, 2003).

According to Darmawan from Rahayu facilities which include furniture, equipment education, educational media, books and other learning resources, consumables, land, classrooms, unit leadership room education, teachers' room, administration room, library room, laboratory room, workshop room, production unit room, canteen room, power and service installations, premises sport, place of worship, place play, a place of recreation (Rahayu, 2014). Infrastructure, according to Kodatie in Budiningsih, Soehari, and Marlison, is something related to the physical framework for providing public services, such as houses, irrigation, drainage, transportation (land, sea, and air), and other public facilities to serve human needs in life. social, cultural, and economic factors all play a
role (Budiningsih, Soehari, & Marlison, 2020). Then management of facilities and infrastructure is a very important activity in higher education institutions, because their existence will greatly support the success of the learning process (Sinta, 2019).

Maintenance is an integral part of the management of educational facilities and infrastructure. Maintenance of educational facilities and infrastructure is the task of managing and arranging facilities and infrastructure so that they are still in good working order and ready to be used in the pursuit of educational objectives. There are three ways to ensure that educational facilities and resources are maintained to their full potential: (a) The school facilities and infrastructure team should perform a more rigorous needs review while preparing a work schedule for facilities and infrastructure. (b) The education facilities and infrastructure committee must collect data on damaged facilities and infrastructure, and (c) the school principal must supervise and educate all school stakeholders about the importance of maintaining school facilities and infrastructure.

The school principal views that the maintenance of facilities and infrastructure is very important because it is often found that school educational facilities and infrastructure are not functioning properly. One of the real issues is that the district of Bekasi’s educational facilities and infrastructure are still in poor condition. It can be show by the fact that number of damaged school buildings reported until the end of 2018, which totaled 9,686 classrooms. Meanwhile, there are only 3,198 units of proper classrooms. The majority of the damage was done to State Junior High Schools (Wartakotalive.com, 2019). The collapse of the Jakarta 32 Middle School Building caused a problem not only in Bekasi District, but also in the Jakarta city. Two school workers were hospitalized as a result of this. A instructor and an administrative officer are the two individuals. (Tempo.co, 2019).

Doddy Ariyanto, chairman of Commission III DPRD, also made a statement about the importance of maintaining educational facilities and infrastructure, saying that it is necessary for the education office to allocate a budget for maintaining school buildings, and that with regular maintenance, the condition of the school building should be maintained. (Radarcirebon.com, 2019).

Several studies related to the management of the facilities and infrastructure have been carried out by Aminah from Sri Herawati, which focuses on the management of the use of facilities and infrastructure in Islamic Religious Education learning, obstacles in implementing the management of the use of facilities and infrastructure in Islamic Religious Education learning, and solutions to overcome obstacles in implementing facility utilization management. and PAI learning infrastructure at SMPN 2 Tawangsari District in the 2017/2018 school year (Herawati, 2020). Then according to research conducted by Aswin Bacin and Wildansyah Lubis, the facts in the field are found that many infrastructure facilities are not well planned, no specific budget is made for the needs of infrastructure,
are not optimized and properly managed the existing facilities and infrastructure. This requires an understanding and application of management or governance of educational facilities and infrastructure (Lubis, 2017). Then the findings from the research conducted by Mulida, there are a lot of educational facilities and infrastructure that are owned by schools (both government and community assistance) have not optimal use even can no longer be used accordingly with the location and function, it is caused by a lack concern for facilities and infrastructure that are owned and not there is adequate management (Mulida, 2015).

According to Darmastuti & Karwanto from Alif Wicaksono in their research journal, in the learning process facilities and infrastructure are very much needed in order to support the process of their activities, so that the management of facilities and infrastructure is needed by every school (Wicaksono, 2015). Therefore, the management of facilities and infrastructure from the results of the above research shows that schools still need to improve strategies in managing facilities and infrastructure, requiring cooperation from all parties not only from internal schools to realize the best facilities and infrastructure so that they can support teaching and learning activities at school.

According to the findings of a GTO (Grand Tour Observation) conducted by researchers at several private schools in Bekasi Regency, Vocational High School 2 Cikarang Barat is an example of a school with well-maintained educational facilities and infrastructure. The results of observations from researchers that school buildings, fields, and classrooms were not damaged even though they had been used for years, this shows that Vocational High School 2 Cikarang Barat is one of the schools in Bekasi Regency where the management of facilities and infrastructure is carried out very well.

This demonstrates that Vocational High School 2 Cikarang Barat is not only focused on advancing a school by using existing facilities and resources, but is also balanced in terms of facility and infrastructure maintenance. Maintaining good facilities and infrastructure in schools would benefit students, teachers, and the local community in the teaching and learning process, as well as the successful and efficient achievement of educational goals.

The following are the problems addressed in this study: How is the plan for the maintenance of educational facilities and infrastructure at Vocational High School 2 Cikarang Barat? Then what is the responsibility of each division in the West Cikarang 2 Vocational High School system in maintaining educational facilities and infrastructure? And what is the status of educational facilities and infrastructure for the West Cikarang 2 Vocational High School? services and infrastructure maintenance strategies used at Vocational High School 2 Cikarang Barat?, and what are the challenges in maintaining the educational facilities and infrastructure of Vocational High School 2 Cikarang Barat ?, and finally what are the efforts made at Vocational High School 2 Cikarang Barat to
overcome the challenges that arise in the process support educational facilities and infrastructure?

The aim of this study is to discover and obtain an overview of the management of educational facilities and infrastructure at Vocational High School 2 Cikarang Barat, as well as the processes and techniques for maintaining educational facilities and infrastructure at Vocational High School 2 Cikarang Barat, as well as obstacles in the maintenance of educational facilities and infrastructure at Vocational High School 2 Cikarang Barat. Therefore according to Mulyasa, whatever is used as a method to achieve educational goals is considered an educational facility. Educational facilities include structures, classrooms, desks, chairs, and preparation materials and media that are directly used and support the educational process, especially the teaching and learning process (Mulyasa, 2014). Education facilities are classified into many categories based on (1) wear and tear; (2) moving or not moving while used; and (3) the teaching and learning process. (Bafadal, 2004).

Educational services, on the other hand, are an essential part of the ongoing educational process. Yards, school gardens or parks, roads leading to classrooms, school codes, and other facilities that do not explicitly help the educational or management process are examples of educational infrastructure. The essence of this term, both direct and indirect in the educational process, is highlighted (Irjus, 2015). Infrastructure in an educational institution can be divided into two categories, namely the first: (1) Such as the theory room, library room, practice room, skills room, and laboratory room, which are directly used for the teaching and learning process. (2) Then the second category is educational infrastructure such as school offices, land and roads to schools, toilets, UKS rooms, and parking lots for vehicles, which are not used for the teaching and learning process but are very supportive of the implementation of the teaching and learning process. (Prihatin, 2011). Educational services, on the other hand, are an essential part of the ongoing educational process. Yards, school gardens or parks, roads leading to classrooms, school codes, and other facilities that do not explicitly help the educational or management process are examples of educational infrastructure. The essence of this term, both direct and indirect in the educational process, is highlighted (Irjus, 2015). Infrastructure in an educational institution can be divided into two categories, namely the first: (1) Such as the theory room, library room, practice room, skills room, and laboratory room, which are directly used for the teaching and learning process. (2) Then the second category is educational infrastructure such as school offices, land and roads to schools, toilets, UKS rooms, and parking lots for vehicles, which are not used for the teaching and learning process but are very supportive of the implementation of the teaching and learning process. (Prihatin, 2011).

Educational facilities or objects may be classified according to their purpose, form, or design, as follows: (a) Educational infrastructure operates indirectly in the teaching and learning process (PBM) (its presence is not very decisive). Included in educational infrastructure are land, yards, fences, plants, school buildings / buildings, road networks, electric water, telephones, and furniture / furniture. Educational facilities have a direct function (their existence is very decisive) for teaching and learning activities, such as learning tools, teaching aids, practical tools and educational media; (b) In terms of type, according to Gunawan, educational facilities can be divided into physical facilities and non-physical facilities. Physical means or material means, namely everything in the form of inanimate objects or objects that have a role to facilitate or smoothen a business, such as vehicles, writing machines, computers, furniture, props, models, media and so on. Non-physical facilities, namely something that is not an inanimate object or less can be called a dented object or object, which plays a role in facilitating or launching a business
such as people, services, money (Gunawan, 1996); (c) Educational objects can be classified into two categories based on their properties: movable objects and immovable objects. (1) Consumable goods and non-consumable goods are divided into movable goods or movable / moving goods. Consumables such as chalk, paint, paper, markers, erasers, brooms, and other objects that decrease in volume with use and can continue to shrink until they run out or no longer work, are examples of consumables. Non-consumable objects, such as writing machines, computers, typewriters, cars, furniture, educational media, and so on, can be used repeatedly and do not lose volume over time, but still require maintenance to ensure readiness. used to carry out tasks. (2) Immovable assets include land, houses / buildings, wells, water towers, and other items that do not move from one location to another or cannot be relocated. (Kasan, 2006).

Maintenance is the process of protecting or preventing harm to an object so that it remains in good working order and is ready to use. Maintenance goals are as follows when preparing for the upkeep of educational facilities and infrastructure: (a) To prolong the useful life of assets; (b) to ensure the highest possible availability of equipment installed for production or services; (c) to ensure the operational readiness of all appropriate equipment at all times in the event of an emergency; and (d) to ensure the safety of the individual using the system. The following are the different forms of facility and infrastructure maintenance: (a) emergency maintenance, (b) corrective maintenance, (c) preventive maintenance, (d) periodic or continuous maintenance, and (e) minor replacement due to minor damage.

In the maintenance of educational facilities and infrastructure, there are four categories that must be considered, namely, first is time-based maintenance, such as routine and periodic maintenance, routine maintenance which means that these facilities must be cared for and carried out daily maintenance so that these items last according to their timeframe. then periodic maintenance which means maintenance that is carried out based on a specified time period, for example the painting of the school walls which is carried out twice a year. The second is the age of use of the goods seen from a physical point of view, which means that visually it does not look damaged and is still functioning optimally, then administrative and custodial in terms of law, namely the value of an item that is determined at the time of purchase and the depreciation of the item is calculated annually. The third is the maintenance in terms of usage, which means that every item is not maintained in the same way, for example, for electronic facilities and furniture, the maintenance technique will be different, the last is maintenance in accordance with the condition of the goods, namely consumables and non-consumable goods.

According to Barnawi and Arifin, the maintenance techniques for school facilities and infrastructure can be formulated into 5 aspects, namely; the first is awareness, awakens the spirit of awareness of the
responsibility of maintaining existing facilities and infrastructure in schools to all school residents, then the second is understanding, the principal as a leader in a school must provide an understanding of the importance of maintaining educational facilities and infrastructure, in addition to supporting teaching and learning activities are also to keep beautifying the place where students gain knowledge so that they continue to feel comfortable, third is organization, the principal makes a management structure regarding educational facilities and infrastructure so that each has rights and obligations in utilizing educational facilities and infrastructure, then is the implementation In the implementation, procedures must be made to use all existing facilities so that they function optimally and rules of use must be made so that all school members have the same opportunity to use these facilities, fifth is data collection, at the end of the year teaching and learning activities to collect data on facilities and infrastructure serve to evaluate and analyze which items must be replaced, purchased new or are not suitable for use. (Barnawi and Arifin, 2012).

METHOD
This study was carried out at Vocational High School 2 Cikarang Barat, which is located at Jalan Fatahahih No 1A Cikarang Barat Bekasi Regency. This is a qualitative study that uses descriptive approaches. This study was carried out in stages 6 months after the research proposal was approved, starting from July-December 2020 when all the data and information needed for the focus under study were complete and in-depth.

This study applied primary and secondary data sources as data analysis techniques. Primary data were obtained from interviews with the Principal, Deputy Principal of School Facilities and Infrastructure, officials in charge of educational facilities and infrastructure, and students. Then for secondary data obtained from supporting documents such as vision, mission, goals, school achievements, profiles of Vocational High School 2 Cikarang Barat, data on education and education personnel, structure of facilities and infrastructure administrators, list of school facilities and inventory, and photos of school facilities and infrastructure.

This study is divided into three stages, the first is the pre-field stage, which starts from the preparation of the research design, the selection of research fields, licensing arrangements, monitoring and assessment of conditions in the field, selecting and utilizing informants, and preparing research equipment, second is the work stage. field, namely understanding the history of research and self-preparation, entering the field, collecting data and knowledge from research, and finally the data analysis stage is carried out by data reduction, data presentation and drawing conclusions. After completing the three stages, the next step is to check the validity of the data carried out in this study as follows; first is credibility test with triangulation of source techniques, techniques and theories, then dependability and finally confirmability.
RESULTS

Preparation for the maintenance of facilities and infrastructure carried out at Vocational High School 2 Cikarang Barat is very good and measurable. The preparation process begins with a staff conference held by the Principal at the beginning of the school year, where one of the topics discussed is the RAB (budget plan). The Principal and Deputy Principal of the School for Facilities and Infrastructure distinguished between periodic maintenance, such as monthly or yearly, and routine maintenance related to the maintenance of facilities and infrastructure. The Deputy for School Facilities and Infrastructure reports all the infrastructure and facilities needs of this grouping, then makes a maintenance plan for goods based on the consideration of needs assessment, priority measures of facilities and infrastructure in schools, and the implications of these decisions are contained in the next year's Annual Revenue and Expenditure Budget Plan and are debated, this is in line with the statement of research conducted by Ike Malaya, namely the planning process carried out on facilities and infrastructure must be in accordance with the needs and conditions of the madrasah. Planning for the procurement of facilities and infrastructure based on the aspect of the analysis of the needs for facilities and infrastructure and the projection of the need for facilities and infrastructure (Sinta, 2019). In collaboration with the administration of Vocational High School 2 Cikarang Barat. In the Principal's knowledge, the school makes a structure to maintain facilities and infrastructure, then makes job descriptions for each position in the maintenance of educational facilities and infrastructure, and makes a report on the condition of facilities and infrastructure in the room at the beginning and the end of the school year, which is then socialized to all school members.

The results of the findings show that maintenance is carried out into two categories, namely, annual and routine maintenance carried out for a certain period of time. Routine maintenance, namely classrooms and teacher rooms, is carried out directly by the school, but for maintenance such as air conditioning, photocopiers, and electronic program upgrades, it usually uses the services of certain technicians who work together for third parties to carry out this maintenance.

Maintenance of facilities and infrastructure is focused on seeing the age of the goods and the types of goods. In addition, the school also makes procedures for using the facilities and is placed on the wall near the facility so that it can help to make the tool work optimally. Then for the maintenance of consumable items such as marker ink, chalk, soap, procurement is carried out according to the time-out period for the goods and arranged so that the use is in accordance with the portion. for example. And non-consumable items such as tables, shelves and chairs are washed and cared for every day.
The next finding in this study is regarding the maintenance techniques performed by schools starting from the awareness that is carried out at the beginning of each school year. Then the representative of the deputy principal in the field of facilities and infrastructure at a work meeting must divide the duties and obligations of each teacher when utilizing existing educational facilities and infrastructure, then the deputy principal in the field of facilities and infrastructure always asks for data from the previous homeroom teacher regarding the condition of the facilities in the classroom, the final step, namely raising awareness to students starting from providing understanding to students at the beginning of the school year during the MPLS (Introduction to School Environment Period) to maintain facilities and infrastructure in schools and applying sanctions if violated.

The vice principal of the facility and infrastructure sector is responsible for the management and maintenance of existing facilities and infrastructure at school. In addition, he is also assisted by three supporting employees who work as a team to maintain facilities and infrastructure and are responsible for each floor of the building in the school, then there is also a person in charge of a certain room, such as a computer lab or library who is an expert in that room. Therefore, managing such a room, especially a library to become a center for learning resources among students and lecturers, not only requires sufficient funds, but also requires creative and innovative managers in accordance with the advancement of science and technology (Budiningisih, 2016)

DISCUSSION

According to research Ekundayo has conducted on all teachers in public secondary schools in southwest Nigeria. The sample consisted of 1,200 teachers selected from 60 secondary schools, namely that school facilities were interrelated. Student achievement in the affective and psychomotor domains needs to be pursued by the government in increasing the level of physical facilities in schools in order to increase the level of student performance in this learning field (Ekundayo, 2020)

Maintenance of facilities and infrastructure is carried out first, choose someone who is responsible for each room. Then, in each room, determine the rules of use. Third, conduct regular monitoring, where the person in charge of the room will check and record which items are damaged and report it to the floor coordinator. Then collect data on facilities and infrastructure that the school does is record at the beginning of the year and at the end of the year, by making a report on the condition of the facilities in the classroom, making a summary report, and making a list of facilities and infrastructure, then submitting it to management for follow up. This is also related to the results of research by Rahmat Guret regarding the use of textbooks and the school environment together with a positive relationship with student learning outcomes in social studies subjects (Guret, 2019)
The obstacles that were found in this study were, the principal must be alert in responding to an unexpected event in the facilities and infrastructure in the school, for example, there are facilities that are suddenly damaged but not included in the budget meeting the principal must be ready to make draft a new budget together with the management team for educational facilities and infrastructure so that these problems can be immediately followed up. As a result, the Principal usually makes changes to the RAB (Budget Plan). Furthermore, the challenges faced in the process and strategy of managing school facilities and infrastructure include a lack of understanding among users of school facilities and infrastructure, external partners who sometimes lack attention, and cultural gaps between communities, on the one hand there are teachers who use the facilities, and on the other hand, there are partners with outsiders who are sometimes less sensitive. Some people do not care whether school facilities and buildings are clean and well-maintained, while others do not care about clean and well-maintained school facilities and infrastructure. As a result, this was done in order to instill a sense of belonging and responsibility to all school students. Barriers to loss of goods can be seen in the leasing data book, followed by increased CCTV surveillance.

Based on the description of the results of the discussion above, the management and maintenance of facilities and infrastructure carried out by the West Cikarang Vocational High School 2 are very good and organized from planning to implementation. This is in line with previous research also conducted by Tubagus Djaber that the management process of Islamic education facilities and infrastructure is closely related to planning Islamic education facilities and infrastructure, procuring Islamic education facilities and infrastructure, inventorying Islamic education facilities and infrastructure, monitoring and maintaining facilities and infrastructure. Islamic education and the finishing of school facilities and infrastructure (Ellong, 2018). And also according to Nur Fatmawati from the results of her research that the maintenance of educational facilities in schools must be carried out optimally, where maintenance in terms of nature is light and heavy checking, prevention, and repairs, while maintenance in terms of time is daily maintenance and periodic maintenance (Fatmawati, 2019).

CONCLUSION

The conclusions that can be drawn from the study findings on the management of educational facilities and infrastructure in West Cikarang 2 Vocational High School are, firstly the management of facilities and infrastructure at SMK Negeri 2 Cikarang Barat begins with a work meeting to compile a budget for one year, then the implementation of maintenance is divided into two categories, namely routine and periodic, then the principal makes direct formation of the structure and division of tasks, and the last step is to socialize it to students and all school members.
Further conclusions regarding the processes and techniques used by Vocational High School 2 Cikarang Barat for the maintenance of facilities and equipment begin with a time-based maintenance procedure, including periodic and routine maintenance. Routine maintenance includes maintenance of classrooms, teacher rooms, and special spaces such as libraries, computer labs and science labs. Meanwhile, the school's regular maintenance includes repairing air conditioners, scanners and photocopiers, as well as upgrading computer products. There is also maintenance in terms of product usage and life, as well as maintenance of consumables and non-consumables.

Obstacles encountered in the management of facilities and infrastructure at West Cikarang 2 Vocational High School are unexpected things that often occur and must be repaired immediately in the building or facility, which is one of the obstacles in maintaining educational facilities and infrastructure faced by schools in preparation. Then the lack of knowledge of the use of school facilities and infrastructure, the existence of collaborators with outsiders who are often unprofessional, and cultural gaps in the use of facilities and infrastructure are one of the biggest challenges for schools to resolve these problems.

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