Inventory Management of Educational Facilities and Infrastructure at State Vocational High School 2 Pekanbaru

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ABSTRACT. This research aims to obtain information on the inventory management of educational facilities and infrastructures, as well as the supporting and inhibiting factors at State Vocational High School 2 Pekanbaru. This study used a descriptive qualitative approach by utilizing some data collection techniques such as a transcript, coding, and data interpretation. The results of this study showed that 1) the inventory management of the educational facilities and infrastructures had been good, it was seen by recording, classification, and coding based on the history purchase of goods. Moreover, reporting and removing the inventory had been based on the warrant by education authorities. 2) The supporting factors were the cooperation between the people at the school and adequate facilities and it has been well-formatted on the computer. Meanwhile, the obstructing factors were a large number of goods, low human resources, and relatively old age. The researcher hopes this study could be applied to be inventory guidelines for schools.

Keywords: *Inventory, Educational Facilities and Infrastructures, Management.*

INTRODUCTION

Mature readiness is needed in the era of globalization. Human resources are the spearhead in the field of education (Siahaan, 2016; Rahayu, & Sutama, 2016); Walidin, 2016), because reliable human resources are needed to face the challenges of the times (Maksum, & Hani, 2018; Aminuddin, 2019; Wahyuni, 2019). So that it takes preparation in the field of education starting from elementary, secondary, up to high education for the realization of educational goals. For this reason, the role of educational facilities and infrastructure is very significant to facilitate the teaching-learning process (Pramono, 2012; Herrington, & Summers, 2014; Rahayu, & Sutama, 2016; Marzuki, & Irawati, 2018; Megasari, 2020). Educational materials that are very important in educational institutions are facilities and infrastructure (Richardson, De Leeuw, & Vis, 2010; Oluwadare, & Julius, 2011; Riveiro, Arias, Armesto, & Ordóñez, 2011; Zohriah, 2015). In general, schools already have good educational facilities and infrastructure, so that they can support the education process in schools, both teachers and students will be helped by the existence of these facilities. The situation does not last long, if the lack of attention and regular

maintenance. While assistance from the center in the form of facilities and infrastructure did not come at any time. Therefore, good governance efforts are needed so that facilities and infrastructure can last for a relatively long time.

Basically, success in a teaching-learning process is certainly supported by adequate educational facilities and infrastructure. Therefore, the government strives to continuously supplement educational facilities and infrastructure for all levels of education (Gunawan, 2011). The success of education in schools is greatly influenced by the condition of educational facilities and infrastructure owned by the school and the optimization of its management and utilization. The government has also released Law on National Education System No. 20 of 2003 Chapter XII Article 45 on Educational facilities and infrastructure, which states that Article 2: Provisions regarding the provision of educational facilities and infrastructure in all educational units as referred to in paragraph 1 shall be further regulated by government regulations. The rules issued by the government are government regulations no. 24 of 2007 on the standards for facilities and infrastructure article 1, article 2, article 3, states that there are a number of minimum criteria for facilities and infrastructure standards regarding land, buildings and infrastructure.

Inventory management is one of the activities in the management of educational equipment in schools, namely recording all equipment owned by school, and arranging the list of state-owned goods in a systematic, tidy, and orderly manner based on applicable provisions or guidelines. However, it is never necessary to conduct an inventory of educational equipment in an orderly and orderly manner to fulfill lawsuits. But more than that, namely the acquisition of use value contained in the investment equipment education. Inventory of educational equipment is expected to create order administration of goods, financial savers, facilitate the maintenance and supervision (Bafadal, 2008).

During the inventory process, staffs sometimes find school items or equipment that is heavily damaged. The item also cannot be used and cannot be repaired anymore. If it can be repaired will require a very large cost so it is better to buy a new one than to repair goods that are damaged. Likewise, when the inventory of equipment was found, officers also found a number of educational equipment which were in excessive amounts so that they were not used anymore, and out of the date items that did not suit the current situation. If all equipment is left or stored, the maintenance costs and their use are technically and economically unbalanced; therefore all items need to be removed.

Barnawi and Arifin (2014) expressed that the management of school facilities and infrastructure, namely human resources that optimize the use of various types of facilities and infrastructure for the benefit of education in a particular school, its existence is very important in a school organization system. Because if the facilities and infrastructure are not managed properly, the decline in the quality of the facilities and infrastructure can happen quickly. Besides, the number will quickly decrease because of carelessness, untidiness, or even because of theft. In addition, inventory of goods in an institution can improve the management of goods that are effective, efficient, and maintain administrative order in accordance with applicable regulations, as well as saving State finances by looking back at the inventory items already recorded in the inventory book. So, it can be seen that governance is an activity that can regulate, direct, manage, monitor the activities of the organization in the context of achieving goals, so that mistakes do not occur, and produce effective and effective in work.

The main question in this study is how to manage the inventory of educational facilities and infrastructure and what are the supporting and inhibiting factors in State Vocational High School 2 Pekanbaru? This study aims to get an overview of the governance of the inventory of educational facilities and infrastructure, as well as the supporting and inhibiting factors at the school.

METHOD

This research employed descriptive qualitative approach. This study was intended to describe the phenomena or events that actually occurred in the school that researchers found in the study (Sukmahdinata, 2001). This research was conducted from April to August 2019 and the research location was carried out at State Vocational High School 2 Pekanbaru. The reason the researchers took the location at the school is that this school has interesting data, namely the highest number of students in Sumatra, which is 2,192 consisting of 700 class XII, 660 class XI, and 832 class X from 15 vocational schools.

The informants in this study were the Principal, the Head of School Administration, the Deputy Principal of the Facilities and Infrastructure Section, Staff of Facilities and Infrastructure Section, the Treasurer of School Operational Assistance, the Head of the Workshop of the Department of Geomatics Engineering, and the Head of the Workshop of the Department of Industrial Chemical Engineering. Meanwhile, data collection instruments used interviews, documentation, and observation. Muhadjir in Tohirin states that data analysis is an activity to search for and compile notes of findings systematically through observation and interviews so that researchers focus on the research they study (Tohirin, 2013). After that, make it a material for finding others, editing, classifying, and presenting it. Data analysis techniques used are transcription, coding and data interpretation

RESULT AND DISCUSSIONS

Result

The results of this study are in the form of an overview of the activities of inventory management of infrastructure and facilities that have been running with the findings: (1) Inventory Management, (2) Recording of Inventory Goods, (3) Classification of Inventory Goods, (4) Codification of Inventory Goods, (5) Reporting Inventory Items, (6) Deletion of Inventory Lists, and (7) Supporting and Obstacles. The seven findings are presented as follows:

Inventory Management. The inventory management of educational facilities and infrastructure in State Vocational High School Pekanbaru 2 was carried out by organizing or arranging inventory items, starting from recording all forms of inventory items, classifying, coding, and deleting inventory lists of facilities and infrastructure. This inventory activity involves the staff of infrastructure and facilities in each of the respective units. However, this activity is carried out without following the principles of facilities and infrastructure but only as a daily activity as usual.

Listing of Inventory Items. Recording activities were carried out by classifying them based on the origin of the purchase of goods. After the item was spent, the next process is recorded in the inventory master book and there is also a computer in the format of the Education Office. From the department, it also made records that function as a provider of information to the facilities section.

Classification of Inventory Items. All units classify inventory items including all their respective Departments also classify inventory items based on the type of equipment and materials used during the practice, and the availability of tools to calibrate the accuracy of the machine.

Codification of Inventory Items. Codification also is done by marking numbers, letters, pictures, symbols and so forth which aims to provide the code to the inventory to make it easier to recognize certain types of goods by the uniform preparation of the order of items on the list of the inventory report.

Reporting Inventory Items. The reporting of inventory items is based on a circular from the central education office, so if the education office requests an inventory report, the school must carry out the order. Likewise, each department is given the obligation to report inventory items to

the facilities and infrastructure department once in a school year. However, in the absence of an important SOP, every item that is newly entered or recently purchased is directly inputted to the computer.

Deletion of Inventory Lists. In this school also carried out the elimination of a number of inventory items in accordance with applicable regulations.

Supporting and Inhibiting Factors. The factors that support the Inventory of Educational Facilities and Infrastructures in this School are the availability of goods inventory application facilities and the existence of a good supervision system for inventory items. The inhibiting factors are the absence of skilled human resources in the field of inventory of goods and infrastructure.

Discussions

Inventory Management

In managing the inventory of educational facilities and infrastructure in State Vocational High School Pekanbaru 2, which is an activity in the form of arranging or managing inventory items, starting from recording all forms of inventory items, classifying, coding, and deleting the inventory and facilities inventory list in a format or provision which has the principles of facilities and infrastructure, and refers to the standard of facilities and infrastructure, starting from planning, supervision, maintenance, and evaluation. And inventory activities are carried out by all facilities and infrastructure administration staffs in each respective unit, these activities are carried out only on the basis of what is done every day, without following the principles of facilities and infrastructure.

Ibrahim Bafadal states that inventory management is one of the activities in the management of educational equipment in schools is to record all equipment which owned by schools, and compile a list of state property in a systematic, tidy, and orderly manner based on applicable provisions or guidelines. Inventory management is one of the activities in managing educational equipment in schools, namely recording all equipment owned by schools, and compiling a list of state property in a systematic, orderly, and orderly manner based on applicable provisions or guidelines. However, it is never necessary to conduct an inventory of educational equipment in a tidy and orderly manner to fulfill lawsuits. But more than that, namely the acquisition of use values contained in investment equipment education. Inventory of educational equipment is expected to create order administration of goods, financial savers, simplify the maintenance and supervision (Bafadal, 2008).

The inventory management of school facilities and infrastructure has several principles that need to be considered so that these objectives can be achieved to the maximum. According to Bafadal these principles include: (1) the principle of achieving goals, (2) the principle of efficiency, (3) the principle of administration, (4) the principle of clarity of responsibility, (5) the principle of cohesiveness (Nurabadi, 2014).

The principle of achieving goals, basically the management of school supplies is carried out with the intention that all school facilities are in a ready-made condition. Therefore, management of school supplies can be said to be successful if the school facilities are always ready to use at any time, when someone will use them. The principle of efficiency, all school facilities and infrastructure procurement activities are carried out with careful planning, so that they can obtain good quality facilities at relatively low prices. The principle of efficiency means that the use of all school facilities should be done as well as possible, so as to reduce waste. So, school supplies should be equipped with technical instructions for their use and maintenance. Administrative principles, namely by observing the laws, instructions and technical instructions imposed by the authorities. The principle of clarity of responsibility, in organizing all the tasks and responsibilities

of all people involved needs to be clearly described. Because the facilities and infrastructure are so numerous that management involves many people. How it happens then there is a need for organizing work management of educational equipment. In organizing all the tasks and responsibilities of all the people involved it needs to be clearly described. The principle of cohesiveness means that the management of educational equipment in schools should be realized in the form of a very compact school work process. Therefore, although everyone involved in managing the equipment has their respective duties and responsibilities, one must always work well together with one another.

Listing of Inventory Items

In the recording of inventory items is to record and arrange existing facilities and infrastructure in an orderly, tidy, and complete manner based on the applicable provisions. Facilities and infrastructure that originate from the government (state-owned) must be carried out an inventory in accordance with predetermined formats. Through an inventory, it will be easy to know the quantity, type of goods, quality, and year of manufacture, brand/size, and price of items in school. Recording activities are carried out by classifying them based on the origin of the purchase of goods. After the item is spent, the next process is recorded in the inventory master book and there is also a computer in the format of the education department. From the department, it also makes records that function as a provider of information to the facilities section.

Classifications of Inventory Items

Procedures in the classification of inventory items of facilities and infrastructure must refer to the Decree of the Minister of Finance Number 225/Kep/V/4/71. This is to facilitate the recording and rediscovery of inventory items when needed both physically and through records (Matin & Fuad, 2006). Inventory items are grouped into four categories, namely immovable property, movable property, animals, and inventory. Each department also classifies inventory items based on the type of tools and materials used during the practice, and the availability of tools to calibrate the accuracy of the machine.

Codification of Inventory Items

Giving a code or sign can be tangible giving numbers, letters, images, symbols and so on. The purpose of coding the inventory of goods is to make it easier to recognize certain types of goods by uniform zing the ordering of items on the inventory report. The inventory item code is determined by seven numbers arranged into three numbers and four numbers separated by a dot, the following example is XXX.XXXX where the first number from the three-digit arrangement that is in front is stating the size group or form used, the next two numbers are the code for the group of goods. Two numbers after the dot indicate the code for the sub group of goods and the two numbers behind it are the code for the type of item (Matin & Fuad, 2006).

Reporting Inventory Items

Reporting inventory items at State Vocational High School 2 Pekanbaru based on a circular letter from the central education office, if the education office requests an inventory report then schools must carry out the order, each department also reports inventory items to the facilities and infrastructure section once in one school year, and does not have reporting procedures or mutations of goods in quarterly or annually form. However, every item that is newly entered or recently purchased is immediately recorded and entered into a computer format.

All educational equipment in schools must be reported, including new equipment to the government. Private schools must report it to their foundation. The report is often referred to as the goods mutation report. Reporting is done once every quarter. For instance, every July, October, and April of the following years (Bafadal, 2008). Some provisions regarding the

reporting of inventory of educational facilities and infrastructure according to Matin and Fuad (2006) are as follows:

First, each school and technical implementation unit must make a double duplicate quarterly inventory report. To be submitted one set (original) to the Head of the Local Regency/City Education Office and a set for the archive itself. The report must be submitted no later than seven days after the end of the current quarterly budget; *Second*, the District Education Office makes a quarterly recapitulation of reports coming from schools/UPTD/District Education Offices subsequently, the Provincial Office of Education c.q. Head of Equipment Section; *Third*, each school is obliged to fill in the inventory checklist and recapitulation of inventory items in two copies. Annual inventory reports (which make inventory lists and inventory recapitulation) are submitted in a set (original) to the Head of the Local District/City Education Office; and fourth, the District/City Education Agency Office must complete the inventory checklist and the annual inventory report recapitulation from the school/UPT in its environment. The annual inventory report is submitted to the Head of the Provincial Education Office c.q. Head of Equipment.

Deletion of Inventory List

Deletion of inventory list aims to removing or eliminating educational facilities and infrastructure from the inventory list of items based on applicable laws and regulations. Because the facilities and infrastructure have been deemed not functioning as expected especially for the benefit of school learning. In its implementation must pay attention to certain reasons because the estuary of various considerations is none other than for the sake of effectiveness and efficiency of educational activities in schools. When carrying out an inventory of equipment, it is also possible to find a number of educational equipment that is in excessive amounts so that it is not used anymore, and old-fashioned goods that are not appropriate to the situation. If all equipment is still left or stored, the maintenance costs and their use are technically and economically unbalanced. Therefore, all items or equipment need to be removed. The elimination of infrastructure is the last process in the management of educational facilities and infrastructure in schools, therefore it must consider certain normative reasons in its implementation (Nurabadi, 2014).

According to Matin and Nurhattati Fuad state that the elimination of educational facilities and infrastructure is a process of activities aim to removing or eliminating educational facilities and infrastructure from the inventory list of items, because these facilities and infrastructure have been deemed not to function as expected especially for the necessity of implementing learning in schools (Matin & Fuad, 2006). Definitive elimination is the activity of eliminating the items belonging to the institution (can also be owned by the State) from the inventory list by means of the applicable laws and regulations (Bafadal, 2008). Furthermore, it was stated, the elimination as one of the activities of managing educational facilities had the aim to: (1) prevent or limit the greater losses resulting from the expenditure of funds for maintenance or repair of damaged facilities; (2) prevent wasteful costs of securing equipment that is no longer useful; (3) freeing the institution from the responsibility of maintenance and security; (4) ease the burden of inventory. The principal has the authority to carry out the removal, but the facility to be removed must meet the conditions for removal; (5) the activity of eliminating educational facilities and infrastructure shall also be carried out based on the applicable laws and regulations. In its implementation must consider certain normative reasons because the estuary of various considerations is none other than for the sake of effectiveness and efficiency of educational activities.

Supporting and Inhibiting Factors

Some factors that support and inhibit the activities of managing inventory of educational facilities and infrastructure can be seen from human resources who are not experts in their fields or professionals and many coding activities are hesitant or forgotten, due to too much coding.

Thus, it has an impact on the inventory management system that cannot run effectively and efficiently. Although the officer assigned is not an expert in his field and the age of his staff, it does not rule out the possibility that the officer can work optimally, if assisted by the provision of direction and also good training, it may be a reference for better.

As for some factors that can support the inventory of educational facilities and infrastructure are facilities provided in the form of an inventory format or application of goods to be inventoried and also holding good supervision of inventory items which in the end can carry out an optimal inventory management system continuously for goods inventory items, which can later be useful for the effective management of inventory items.

CONCLUSION

The inventory management of educational facilities and infrastructure in State Vocational High School Pekanbaru 2 has started to be good, judging by the inventory activities, especially recording, classification, and codification based on the origin of the purchase of goods. Furthermore, reporting and deletion of inventory at the school is based on a warrant from the Education Office. Factors that support the inventory of educational facilities and infrastructure in schools include adequate cooperation and facilities, while the factors that inhibit the inventory of educational facilities and infrastructure are the low number of goods and human resources.

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