

IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT IN FACILITIES TO IMPROVE INSTITUTION QUALITY SCHOOL

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ABSTRACT:

One of the improvements in the quality of education is the fulfillment of the needs for facilities and adequate, quality, and ready-to-use educational infrastructure. So as for the impact of the lack of proper infrastructure of school institutions, namely that it can reduce student achievement in learning activities, especially in class. Therefore, to improve the quality of education in schools, management of facilities and infrastructure is needed to meet the needs of the student learning process at school. This study aims to determine the implementation of total quality management in improving the quality of infrastructure in schools. This research using library research with analytical study methods (library research), namely research carried out using a library alias literature, either in the form of notes, books, journals, or reports of previous research results. The analytical study used is content analytical and analytical descriptions of total quality management to improve infrastructure at school. The results of this study indicate that the facilities and infrastructure at the school are inadequate standards. Therefore, the use of infrastructure in the learning process must also be improved, as an increase in service quality continuously meets the reality and expectations for customers.

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ABSTRAK:

Salah satu peningkatan kualitas pendidikan pada saat ini adalah dengan terpenuhinya kebutuhan sarana dan prasarana pendidikan yang memadai, berkualitas, dan siap pakai. Sehingga adapun dampak dari kurangnya sarana prasarana yang memadai bagi lembaga sekolah yaitu dapat mengurangi prestasi siswa dalam kegiatan pembelajaran khususnya di kelas. Oleh karena itu, untuk meningkatkan kualitas pendidikan di sekolah, diperlukan manajemen sarana dan prasarana agar dapat memenuhi kebutuhan dalam proses belajar siswa di sekolah. Penelitian ini bertujuan untuk mengetahui implementasi total quality manajemen dalam meningkatkan kualitas sarana prasarana di sekolah. Penelitian ini menggunakan penelitian kepustakaan dengan metode studi analitis (library research), yaitu penelitian yang dilaksanakan dengan menggunakan kepustakaan alias literatur, baik berupa catatan, buku, jurnal maupun laporan hasil penelitian terdahulu. Studi analitis yang digunakan adalah analitis konten dan analitis deskripsi tentang total quality manajemen untuk meningkatkan adanya sarana prasarana di sekolah. Hasil penelitian ini menunjukkan bahwa sarana dan prasarana pada sekolah yang kurang memenuhi standar, pemanfaatan sarana prasarana pada proses pembelajaran juga tetap harus ditingkatkan, sebagai upaya peningkatan mutu layanan secara terus-menerus untuk memenuhi kenyataan dan harapan bagi pelanggan.

Kata Kunci: *Implementasi Total Quality Manajement, Manajemen Sarana Prasarana, Kualitas Pendidikan.*

INTRODUCTION

In the global era, education is surprised by the existence of a model of industry-based education management. Management of such a model strive for educational institutions to improve the quality of education based on corporate leadership. In the world of education, the quality of education depends on customer satisfaction. Customer education is grouped into two, namely internal customers and external customers. Internal customers are education managers, educators, and education personnel, while external customers are students, parents, society, and government. Association and government can be called tertiary external customers.

Therefore, as education, it is supposed to improve the equipment and infrastructure of educational institutions so that customers or the public can be interested and the institution can be the primary or favorite choice as a good school place.

In the Indonesian government regulation No. 19 of 2005 concerning Standards National education concerning facilities and infrastructure, national education in CHAPTER VII article 42 paragraph 1 and 2 reads: 1. Every academic



unit is obliged to have facilities that include furniture, educational equipment, educational media, books, resources, other learning, consumables, and other supplies needed to support an orderly learning process and sustainability. 2. Every education unit is required to have the infrastructure. Those are land, classrooms, academic unit leadership room, educator room, administration room, library room, laboratory room, room workshop, production unit room, canteen room, power installation, and services.

In addition, places to exercise, places of worship, places to play, places creative, and other places/spaces too needed to support a regular and continuous learning process. (*Law of the Republic of Indonesia No. 20 of 2003 concerning the Education System National and PPRI 2005, 2017*)

Mulyasa mentioned that education is direct equipment and supplies used in supporting the educational process, especially the learning process teaching, such as buildings, classrooms, tables, chairs, and tools and media teaching. As for educational infrastructure is a facility that does not directly support the course of the academic or teaching process, such as yards, gardens, parks, learning paths, such as parks are used for biology teaching, the yard as a sports field (Mohammad Nurul Huda., n.d.).

Ibrahim Bafadal said that management means infrastructure as a process co-use of all educational equipment effective and efficient include: planning, procurement, distribution, use, maintenance, inventory, deletion". Therefore, facilities and infrastructure used for educational purposes can be achieved effectively and efficiently. Infrastructure activities include (1) planning needs, (2) procurement, (3) storage, (4) inventory, (5) maintenance, and (6) deletion of educational facilities and infrastructure, Rohiat argued. Then Soetjipto and Raflis Kosasi also said, "Mentioning that facility management and educational infrastructure activities include: needs planning, procurement, storage, inventory, maintenance, deletion, and supervision." (Koridin and Wresni Pujiyati, 2019).

Then, Barnawi argues that education means all equipment, materials, and furniture devices directly used in the educational process in schools such as buildings, spaces class, table and chairs, blackboard, and learning media. While educational infrastructure is all essential equipment that indirectly supports

implementing the education process in school, such as yard, garden, park. (Barnawi and M. Arifin, 2012).

Quality improvement is one of Indonesia's pillars of education development (Wina Sanjaya, 2006). Science and technology increasingly demand an increase in the quality of education in various aspects. One of the benchmarks for this increase is improving good management (Feiby Ismail, 2016). Education cannot be separated from several essential factors that can support the implementation of education in schools. One factor supporting the implementation of education is the availability of resources for education, such as educational facilities and infrastructure.

For the educational facilities and infrastructure needed by schools to function optimally in supporting learning, the Principal, Teachers, and Administrative Personnel must understand and manage educational facilities and infrastructure professionally (Matin and Nurhattati Fuad, 2016). Management of facilities and infrastructure is collaborative empowerment of all educational facilities and infrastructure effectively and efficiently. This management activity includes planning, procurement, maintenance, inventory, and deletion (Mulyasa, 2009). Besides, *total quality management* must implement by cooperating with all related elements in one unit of education and all related stakeholders, and cooperation makes service more maximum and higher quality. Of course, this can happens when there is an increased awareness of all implementing elements of *total quality management* (Moh Iqra a Husain, 2017).

It is in line with the policies outlined by the Ministry of Education and Culture regarding competency standards that school members must possess. One of these competencies is the principal's managerial competence. Namely, the principal must have the ability to manage school facilities and infrastructure to optimize utilization. Management of educational facilities and infrastructure is an essential factor in advancing an academic institution. Good management of facilities and infrastructure can create a clean, tidy, beautiful environment to create pleasant conditions for educators and students. In addition, it is hoped that the availability of learning tools or facilities that are adequate quantitatively, qualitatively, and relevant to the needs and optimally utilized for



the benefit of the education and learning process, both by educators and students as students

Utilization of facilities good leasehold is its use according to your needs, there are four the intended use of the infrastructure effective, namely: (1) achievement of objectives; (2) relevant intermedia use and discussion of material; (3) available infrastructure; and (4) student characteristics (Tri Firmansyah, 2018). In detail, the objectives are as follows: 1. To strive to procure educational facilities and infrastructure through a careful and thorough planning and procurement system. With these words, through the management of educational equipment, it is hoped that all the equipment obtained by schools is educational facilities and infrastructure of high quality, following school needs, and with efficient funds. 2. To strive to use school facilities and infrastructure appropriately and efficiently. 3. To maintain school facilities and infrastructure always ready-to-use condition whenever all school personnel needs it (Bafadal Ibrahim, 2004).

Appropriate facilities and infrastructure is one form of support for achieving schools' learning and education process. For this reason, schools must continue to make improvements to meet the needs and desires of their customers, both internally and externally. For example, suppose an educational institution or school has been able to meet the needs and expectations of its customers. In that case, the school can be said to be a school with good quality service, but if the reality and expectations of customers are not met, then the school can be said to be a school that provides poor quality service.

There are several research results or related to research to be carried out by researchers, as follows:

What was written by Muhammad Muda'i, the Tarbiyah and Teacher Training Faculty, Department of KI in 2011 was the Management of Educational Facilities and Infrastructure at Madrasah Aliyah Vocational Al-Falah, Rumbio Jaya District, Kampar Regency. Based on research conducted, the Management of Educational Facilities and Infrastructure at Madrasah Aliyah Al-Falah Vocational School, Rumbio Jaya District, Kampar Regency, has achieved maximum results with a rate of 81.67% in the range 81-100%. Research conducted by Prastyawan (2016) describes the results of a survey regarding management of school infrastructure where control has been carried out

correctly and adequately following the planning of facilities and infrastructure, with objectives as set to run more effectively and efficiently. The similarity with this research is using qualitative methods. The difference is that this study using qualitative methods (library research) on the Implementation of Total Quality Management in Improving the Quality of Infrastructure in Schools.

Then, the research was carried out by Suminto A. Sayuti (2013), entitled "Management of Facilities and Infrastructure at SMK Negeri 1 Kasihan Bantul". The result of research on infrastructure management for productive subjects is standard management. At the end of each year, procurement is carried out by analyzing the necessary needs by determining the planning for one semester/year ahead with the funds owned, maintenance carried out by periodic daily maintenance, and preventing damage. The equation is using qualitative methods with qualitative descriptive approach techniques. The difference in this study is the object and theory used.

Then, Sukimin's research, Tarbiyah and Teacher Training Faculty, KI Department in 2005, entitled "Problems in the Administration of Educational Facilities and Infrastructure at Madrasah Aliyah Fatahillah Terempa, Sinantan District, Natuna Regency." Based on research conducted by Sukimin, it is stated that in realizing the Administration of Educational Facilities and Infrastructure at Madrasah Aliyah Fatahillah Terempa, Sinantan District, Natuna Regency, it is classified as less complex because it is located in the category: 46% -75%. Based on the results of research conducted by Sukimin, the problems faced by schools in realizing the Administration of Educational Facilities and Infrastructure at Madrasah Aliyah Fatahillah Terempa, Sinantan District, Natuna Regency are influenced by factors of lack of cooperation, quality of work and knowledge, guidance and supervision and funding.

From the relevant research above, the researcher's focus in this study is related to implementing total quality management in improving the quality of infrastructure in schools. Researchers ascertain how the infrastructure in schools meets predetermined service quality standards.

Solutions carried out at school institutions to solve existing problems, namely: Procurement must be following the School Work Plan that has been compiled, organizing must be carried out following the primary duties of the school, controlling the procurement and use of infrastructure must be carried



out with procedures that have been previously decided, so that supporting documents ultimately. In addition, community participation is considered good if it is involved in school management (Restika Manurung, Edi Harapan, Tahrn, 2020).

School cooperation with the community means all forms of joint activities that directly or indirectly benefit both parties. All forms of community support, including support from parents of students, are a form of cooperation. All activities in schools, including the teaching and learning process, aim to benefit the community and need to be improved. The program's structure carried out in implementing school-community cooperative relations depends on the cooperation's purpose and nature. In principle, school collaboration with the community must be a school framework. Each component gets a picture of carrying out activities according to what the school has programmed in its implementation.

Based on the description that has been described above, the author will briefly discuss: 1. how facilities and infrastructure at schools have met quality standards? 2. how to use infrastructure in the learning process so that it must be improved, as an increase in service quality continues to meet the reality and expectations for customers. The goal is, so the school has independence within utilizing, managing, and organizing facilities and infrastructure, the utility of their optimization can be done in a managerial process by stakeholders from the school, heads schools, education personnel, and students as school residents. The participation of school members is demanded use and make the best possible use according to what the regulations refer to, and the legislation contained and enforced.

METHODS

This type of research is library research, aka library research (Nursapia Harahap, 2014). that is, research carried out using the alias literature, in the form of notes, books, journals, and reports on the results of previous research (M Iqbal Hasan, 2002).

The source of the data in this study is under M. Iqbal Hasan's thinking, which states that a documentation study is a data collection technique that is not directly aimed at a task, but through documents. The documents used can be

books on total quality management, facilities and infrastructure, journals, reports, and special notes on work and other forms. So, all documentation here is positioned equally, depending on the relevance of the main topic of this research.

The books used as primary sources in this library research are 1) Sulistyorini, M. Fathurohman. *The Essence of Islamic Education Management*, Indrawan, Irjus. *Introduction to School Facilities and Infrastructure Management*, Sopiatin, Popi. *Student Satisfaction Based Learning Management* Arbangi et al. *Education Quality Management*. Cet. I, Kompri. *School Management: Theory and Practice*. Matin and Nurhattati Fuad. *Management of Educational Facilities and Infrastructure Concepts and Application*. Barnawi and M. Arifin. *Management of school facilities and infrastructure*, Bungin, Burhan. *Qualitative Research Methodology Variety Actualization Contemporary Variants*, E. Mulyasa. *School-Based Management: Concept, Strategy, and Implementation*. Bandung: Youth Rosdakarya, Sanjaya, Vienna. *Learning in Competency-based Curriculum Implementation*.

Then the researcher also uses related journals according to the title of the discussion that has been discussed. For example, there are about twenty journals quoted on total quality management and infrastructure.

The data collection technique in this research is to identify discourses from books, articles, papers, journals, or other information related to the title of writing to look for things or variables in transcripts, notes, newspapers, books, magazines, etc. Therefore, in this study, the following steps were carried out:

- a. Collect existing data, either through documents, books, magazines, journals.
- b. Analyze these data so that we can conclude about the problem being studied.

Data analysis techniques in this study are descriptive analysis and content analysis. The descriptive analysis method attempts to compile and collect data and then analyze the data (Winarno Surachman, Tarsita, 1990). This research will contain data quotations and data processing to provide an overview of the presentation of the information. Content analysis used in this research is content analysis, which means that descriptive data is often only



analyzed according to its content. Therefore this kind of analysis is called content analysis (Sumadi Suryabrata, 1983).

Following what was stated by Hadari Nawawi, who Soejono and Abdurrahman quoted, noted that content analysis in research was carried out to reveal the contents of a book which would later describe the situation of the author and society at the time (Soejono and Abdurrahman, 1999). Content analysis is a research technique to make inferences that can be imitated and valid by paying attention to the context. The analysis relates to communication or the content of communication (Burhan Bungin, 2007). In this research, content analysis is emphasized on how the researchers interpret the content of communication in symbolic interactions that occur in contact.

FINDINGS

Understanding the Implementation of Total Quality Management

Implementation of application is applying ideas, concepts, policies, or innovations in practical action to impact knowledge, skills, values, and attitudes (Kompri, 2014).

Total Quality Management (TQM) is a concept of school management in the delivery of education in schools which is expected to provide better changes under developments, demands, and community dynamics in responding to problems in education management at the school level (Indana, 2017). Quality management of education is a systemic activity synergize between management functions with all parts of educational institutions and everyone into a holistic philosophy built based on the concept of quality, teamwork, productivity, and stakeholder satisfaction, both internal and external (M Nur, 2001). Quality is a measure, grade, provision, and assessment of a good or service (product) with absolute and relative characteristics. Usually, it is called good, superior, beautiful, expensive, luxurious, and so on. So, the quality of education is elite because only a few institutions can provide high-quality educational experiences to students (Dahlia, 2018).

Institutions must consider five things in implementing Total Quality Management (TQM) in educational institutions: focus on internal and external customers, total involvement, quality standards, commitment, and continuous quality improvement (Lilik Huriyah and Endraswari, 2016). In short, service is

the fulfillment of needs through activities others to assist others. The word quality comes from English, namely quality.

Some experts define quality or quality as follows:

1. Ishikawa said that "quality is customer satisfaction". In other words, quality or quality cannot be separated from customer satisfaction (Arbangi et al., 2016).
2. *According to Edward Sallis, Total Quality Management* means a philosophy of continuous improvement that can provide a set of practical tools for every educational institution in meeting the needs, wants, and expectations of its customers for the present and the future (Nur Khikmah, 2019).

From some of the above definitions, it can be concluded that quality or quality is a state that is appropriate and exceeds the expectations of students to get satisfaction. Service quality can be defined as "a measure of how good it is the level of service provided is by user expectation".

According to Aviliani and Elu, customer satisfaction through service quality can be improved with the following approaches (Meinarti Puspaningtyas, 2018):

1. It is minimizing the gaps that occur between management and customers.
2. Companies must be able to build a shared commitment to creating a vision in improving the service process.
3. Provide opportunities for customers to submit complaints.
4. Develop and implement accountable, proactive, and partnership marketing according to the marketing situation.

To be successful educational institutions must carry out a process systematic in implementing continuous improvement to improve quality. Quality improvement can also be interpreted as the process by which an established mechanism is maintained so that quality can be achieved sustainably (HE Sobana, 2006).

The actual service quality cannot be measured because it is an imaginary thing, so it is not measurable. Therefore, it is necessary to make quantifiable quantities to determine the quality of products and services. Various attempts have been made to make measurable and suitable indicators for deciding



quality. As a result, the manufacture of the product or service and its quality control is guaranteed to be carried out.

As for the indicators of school facilities, namely: the use of quality tables and chairs, blackboards, availability of trash bins, availability of cabinets in the classroom as a means of storing goods, computers for practicing student learning activities, quality of teaching media available in schools, availability of library collections, learning support books in the library, the availability of materials and practical tools. Meanwhile, the management of educational infrastructure and facilities in schools is concerned with the implementation of management functions which include: planning, procurement, maintenance, inventory, and elimination of school facilities.

According to Popi Sopiadin, student satisfaction is an attitude shown by students, both positive and negative, to match their service expectations (Sopiadin, 2010).

Services from producers or service providers of an institution from one institution to another are different. Even though something like that happens, every agency still wants a decision from consumers. Kotler states the following characteristics of satisfied consumers (Fandy Tjiptono, 2001):

- a. Loyalty to the product Loyalty attitude of satisfied consumers will repurchase from the same manufacturer. Therefore, it is necessary to maintain a quality product so as not to reduce customer trust.
- b. There is a positive word of mouth communication.
Satisfied consumers will recommend to other consumers to direct or buy products that have been felt or received from the manufacturer.
- c. The company is a significant consideration when buying other brands.
Consumers who wish to reverse direction on other producers will consider the manufacturer who delivers first satisfaction.

Irawan expressed another opinion regarding the indicators of satisfied customers, namely (Irawan H., n.d.):

- a. Feelings of satisfaction, which expresses feeling satisfied or dissatisfied with current customers, receive excellent and quality service.

- b. The fulfillment of customer expectations after purchasing a product, namely suit or not a product or service after the purchase with customer expectations.
- c. Always buy products. Customers will continue to use and continue to purchase or use services if their expectations are met.

So the government must improve the quality of national education. In improving the quality of education, quality management adapted from total quality management in modern industry is suitable for adaptation in education management. In principle, this quality management empowers all components of schools and schools as production units that serve students, parents, users/recipients of graduates, and teachers/employees (Sri Rahmi, 2015).

It can be concluded that the implementation of total quality management is an idea or policy carried out in a place or institution to achieve the quality or quality that has been planned from before so that the service can be satisfactory for a customer.

Scope of Infrastructure

In-Law Number 20 of 2003 concerning the National Education System, Chapter XII Sarana and Educational infrastructure listed in article 45, reads:

First: Every formal and non-formal education unit provides facilities and infrastructure to meet educational needs under the growth and development of physical potential, intellectual, social, emotional, and intelligent psychiatric students. Second: Provisions regarding the provision of facilities and educational infrastructure in all education units as mentioned in paragraph (1) further regulated by government regulations.

Educational facilities and infrastructure are one of the components in the system for each educational institution. So because of that, its existence must be aligned with other components and determined based on function and educational purposes (Sulistiyorini and M. Fathurohman, 2014).

Service quality can be defined as the ability of a product in an intangible form to satisfy customers with how to fulfill any hopes or desires. To provide optimal educational services to customers, schools must improve and develop quality services prime in managing infrastructure at the school institution.



With facilities and infrastructure management, you can be tasked with regulating and maintaining educational facilities and infrastructure to maximize its use. Kinds of Educational Facilities and Infrastructure:

- a. The school office, a school unit that provides administrative services for the smooth running of education, can clarify school office furniture and materials school office equipment.
- b. There are two kinds of teaching and learning media available, namely classroom furniture and teaching media. The relationship with the class furniture must be provided among other things in the form of blackboards, teacher desks and chairs, student desks and chairs, classroom cabinets, student attendance boards, picket list boards, boards display of student work, student display table, graphic board achievement of curriculum targets, student grouping list boards, and student attendance boards. Meanwhile, the teaching media that need to be provided is for the effectiveness of the learning process Class teaching can be classified into four types that are: 1) Projection display media; 2) Media View is not projected; 3) Listening to media; and 4) Media for viewing.
- c. The school library facility is a facilities education in developing knowledge, skills, and student attitude.

According to Nawawi, educational facilities are classified into several types of educational facilities, namely: (Ibrahim Bafadal, 2004)

1. In terms of wear and tear, when viewed from the end or not used.
There are two kinds of educational facilities, namely educational facilities which are used and durable.
 - a. Consumable educational facilities
Consumable educational facilities are materials or tools that can run out quickly if used, for example, chalk, marker pens, and others.
 - b. Durable educational facilities
Durable educational facilities are all materials or tools that can be used continuously for a relatively long time. Some examples are madrasa benches, writing machines, atlases, globes, and some sports equipment.

2. In terms of mobile education or not

a. Mobile education facilities

Mobile educational facilities are educational facilities that can be moved or moved according to the wearer's needs. An archive cupboard, for example, is an educational facility that can be moved or moved anywhere if desired.

b. Immovable educational facilities

Immovable educational facilities are all educational facilities that cannot or are relatively very difficult to move. For example, a madrasah already has a water supply from the Regional Water Company (PDAM). Everything is connected like the pipe. Therefore, it is not easy to move to certain places.

3. In terms of its relationship with the teaching and learning process

There are two types of educational facilities needed in the teaching and learning process. First, teachers directly use educational facilities in the teaching and learning process, including chalk, atlas, globe, and other educational tools. Second, educational facilities that are indirectly related to the teaching and learning process, such as cupboards and madrasah office archives, are educational facilities that teachers in the learning process do not directly use.

According to management experts at the State University of Malang, there are several matters regarding the purpose of facilities and infrastructure (Irjus Indrawan, 2015):

- a. To strive for the multiplication of facilities and infrastructure through planning and copying system carefully and thoroughly, so that the school or madrasah has the facilities and infrastructure good according to the needs of efficient funds.
- b. To strive for the use of school facilities and infrastructure must be fast & efficient.
- c. To strive for the maintenance of facilities and infrastructure thorough and precise, the existence of these facilities and infrastructure will always be in a state ready to use when used or required.



So that educational programs can be appropriately achieved, several principles must be considered in managing facilities and infrastructure school education (Prastyawan, 2016).

- a. The principle of achieving goals is managing school supplies to intend that all school facilities are ready to use. Therefore, school equipment management can be said to be successful if school facilities are prepared to use at any time. Whenever someone is there, school personnel will use it.
- b. The principle of efficiency, namely all activities of the procurement of facilities and school infrastructure, is carried out with careful planning to get good quality facilities at relatively low prices. The principle of efficiency also matters that all school facilities should be carried out and reduce waste.
- c. The organizational principle is that there are several regulations laws relating to facilities and infrastructure education in Indonesia. An example is a rule regarding inventory and deletion of state equipment. With administrative principles of all equipment management behavior education, the school should always pay attention to the laws, regulations, instructions, and guidelines that the government has enforced.
- d. The principle of clarity of responsibility, namely that of management means and educational infrastructure in schools, must be delegated (handover) to responsible school personnel.
- e. The cohesiveness principle means management infrastructure in schools should be realized to form a very compact school work process. Hence, though everyone involved in managing the equipment had their respective duties and responsibilities, they must always work well together.

Teaching and learning activities are carried out in a particular atmosphere to support certain learning facilities and infrastructure. Therefore, the success of the learning process depends on the teacher, students, teaching facilities, classroom environment, and classroom culture (Patience Budi Raharjo, n.d.).

Facilities and infrastructure have a significant role in the creation of a conducive teaching and learning process. The implication of the conducive teaching and learning process is student achievement. The better and more complete the condition of the facilities and infrastructure owned by the school, the higher the student's learning achievement. And conversely, the worse and incomplete the facilities and infrastructure requirements, the lower the

student's learning achievement (Rudy Herteno, 2016). Managing facilities and infrastructure in schools takes a process as contained in management, namely: starting from planning, organizing, mobilizing, maintaining, and monitoring (Nurmadiyah, 2018).

Based on the findings, the results show that the planning for the management of facilities and infrastructure in schools is by the provisions planning management of facilities and infrastructure in schools. The first step for the principal is to hold a meeting with all the teacher and staff councils. The principal asks for suggestions from the teacher board of what facilities and infrastructure only in class are still lacking. Next, each teacher must propose what tools and facilities are needed because they best know what they need for fluency in the teaching and learning process. The manager of the goods then submitted the teacher's suggestion to the principal. Then the next step is for the principal, together with the entire teacher board and employees, to discuss what facilities and infrastructure are urgently needed to be fulfilled. This step was taken because of the limited funds owned by the school (Nurbaiti, 2015).

Procurement of school facilities and infrastructure is carried out employing; (1) drooping; (2) buying, (3) donations from guardians of students, (4) making their own. The first is the drooping from the government, and this is the assistance provided by the government to schools. The government carries out drooping with procedures (a) analyzing the needs and functions of facilities and infrastructure; (b) classifying the facilities needed (c) proposing the procurement of facilities and infrastructure to the government; if approved, it will be reviewed and assessed for its eligibility to obtain approval from the intended party; and (d) after being approved and visited, the infrastructure will be sent to schools that apply for the procurement of said facilities and infrastructure. Second, buying is done utilizing direct purchases, namely purchases made to meet a small amount. The way to buy is to compare among suppliers to get the same material at a lower price. Items purchased include textbooks, teaching aids, and buying consumables such as chalk, markers, pencils, pens, erasers, paper, notebooks, cleaning tools, books, and sports equipment. Third, asking for donations from The guardians of students through meeting with the school committee. Its goals to fulfill the facilities and infrastructure needed by the school for the smooth learning process. It is done because the procurement by buying the funds owned by the school is not



sufficient. Fourth, make it yourself. School facilities that are made are usually simple teaching aids that can help teach and learn activities.

The principal carries out an inventory of school facilities and infrastructure, namely; (a) an inventory of facilities and infrastructure by appointing one of the teachers to be in charge of investing notarization of school facilities and infrastructure; (b) goods inventory cards have been made (c) facilities and infrastructure inventory activities are carried out by recording all incoming goods, but the recording is not carried out entirely because the goods code and goods brand are still not stated (d) no recording of outgoing goods is carried out, (e)) Consumables are not recorded in the stock book.

The results of the research findings after reading journals on the distribution of facilities and infrastructure are: (1) distribution is carried out by school administrators (2) distribution of textbooks is carried out directly to the teacher after being recorded in the inventory book; (3) the distribution of props is carried out indirectly, namely by storing them first, when they are going to use, then they are taken, and after being used, they are stored back to their original places. School administrators distribute school facilities such as textbooks, sports equipment, and consumables. Usually, school administrators directly deliver the books, sports equipment, and consumables to teachers. The teacher's textbooks also distribute directly to students. Likewise, what happens in an institution that always competes to show quality to gain public trust by promoting good quality (Lailatul Maghfiroh, n.d.).

Maintenance of facilities and infrastructure in terms of their nature consists of inspection, prevention, minor repairs, and heavy repairs. In comparison, the maintenance time is divided into daily maintenance and periodic maintenance such as painting walls. This maintenance is intended so that school facilities or facilities are in an optimal state of ready-to-use, improve performance, extend service life, recognize any damage or symptoms of the damage, and avoid fatal damage. The successful application of management in an educational institution to improve quality has caused many of the managers of educational organizations to apply the concepts and principles of quality assurance and modify them as needed. (Wahyu Septiadi, 2019).

It can be concluded that the educational infrastructure management process begins with planning. The planning process is carried out to find out

what kind of infrastructure the school needs. The following process is procurement, a series of activities to provide various types of infrastructure according to what has been planned. The following process is setting. In the regulation, there are incentivization, storage, and maintenance activities. Then the process again is usage, namely the use of educational facilities and infrastructure to support the educational process. In this process, the principle of effectiveness and efficiency must be considered. The last is the elimination process, which removes facilities and infrastructure from the inventory list. So, to improve the quality of the school, leaders, staff, other residents in the school must cooperate to utilize all educational facilities and infrastructure owned by the school to achieve the stated goals effectively and efficiently.

There are four ways to contribute to improving the quality of a school education institution:

School review, which requires all school components to work together with various related parties, for example, parents and professional staff, to evaluate the effectiveness of school policies, programs, and implementation, and the quality of graduates. With a school review, it is hoped that a report will be produced containing strengths, weaknesses, opportunities, threats, school achievements and provide recommendations for strategic planning in the future.

Benchmarking is an activity to set standards, both the process and the results to be achieved in a certain period. For the sake of praxis, these standards are reflected from the existing reality. For example, measures have been set and reflected on a teacher known to students and other teachers who have exemplary teaching achievements for teaching behavior. This standardization can be divided into two, namely internal benchmarking and external benchmarking.

Quality assurance is process-oriented. It means that this process contains a guarantee that the ongoing process is carried out according to predetermined standards. It is intended so that the results achieved can be following predetermined targets. In carrying out this, it is essential to carry out the checking and auditing mechanism for all elements of educational institutions.



Quality control is a system to detect deviations in output quality that is not by the standard. This concept is output-oriented to ascertain whether the quality of the output is following the norm. Therefore, this concept demands definite and clear indicators.

Given the importance of completeness or adequate infrastructure in learning activities, students, teachers, and schools will be directly related. The support of learning infrastructure will assist students more. Not all students have a good level of intelligence, so that the use of learning infrastructure will help students, especially those who have weaknesses in participating in learning activities. For teachers, it will be administered by the support of infrastructure facilities. Learning activities will also be more varied, exciting, and meaningful. Meanwhile, the school is obliged to be the party most responsible for managing all activities carried out. In addition to providing, the school also maintains and maintains the infrastructure it has

Organizing student learning in the teacher class, of course, needs a means that can support their performance so that learning can attractively. With the support of adequate teaching facilities, the teacher delivers material orally and by writing and demonstrating by the infrastructure that the teacher has prepared.

DISCUSSION

TQM is a practical and strategic approach that focuses on customer needs. The goal is to seek better results. TQM is a systematic and careful approach to achieving the right level of quality that is consistent with meeting customer needs and wants.

As stated by the research results of Amir Kumar Singh and Mili Singh, the file on the role of facilities and infrastructure in educational schools has a huge role for performance teachers. Furthermore, the design infrastructure in poor schools impacts the health of students and teachers, thereby affecting the teaching and learning process (Edy Siswanto, 2020).

Then, research by Sousa and Voss, commenting on the validity of quality management, said, quality control, as espoused by its founders, can be reliably distinguished from other strategies for organizational improvement. Moreover, there is substantial agreement in the literature about which practices fall under

the umbrella of quality management or as a cover (Síría Barros, Paulo Sampaio, 2014).

Then, Robbins said TQM is "a management philosophy driven by the constant achievement of customer satisfaction through continuous improvement of all the organization's processes (Suleiman Aden Jamaa, 2010).

Educational facilities are tools and equipment used simultaneously to support the educational process, especially teaching and learning, such as buildings, classrooms, tables, chairs, tools, and learning media. As for what is meant by educational infrastructure is facilities that indirectly support the education process or teaching, such as courtyards, gardens, parks, Islamic madrasas, roads leading to Islamic madrasah. So that facilities, such as madrasa parks for teaching biology, madrasah yards, sports fields, are components of education. The members form a TQM system that influences each other and is driven by its pillars, namely the leader. It means that the leaders here must be skilled at playing their role in running this system to achieve the goals of the TQM program that has been announced.

One of the policies that need to be prioritized for schools is to meet educational infrastructure needs. To achieve teaching and learning activities in madrasah, facilities and educational infrastructure play an essential role. A conducive learning facility, a healthy and beautiful environment, and supported by a gorgeous arrangement are conducive to enhancing learning activities. Understanding of educational facilities and infrastructure includes an array of movable property, immovable goods, and consumables. The management of facilities and infrastructure is a vital activity in the madrasa because its existence will significantly support its success in the learning process in the madrasa. It has become the provision of institutional quality education with a set of tools/infrastructure learning that can support the teaching and learning process at the institution education.

Learning tools and media have the primary function as teaching aids, influencing creating an atmosphere, conditions, culture, and learning environment managed by the teacher. The use of learning media in the learning process can arouse desire and interest, generate motivation, and stimulate student learning activities. Therefore, optimizing the use of learning media can enhance the quality of the process and student learning outcomes. It happens



because a) the use of media in learning activities attracts students' attention so that it can foster learning motivation; b) the meaning of the learning material is clearer so that students can better understand it; c) teaching methods are more varied, but also verbal communication through a speech by the teacher so that students do not get bored. Managing school facilities can be done through several processes, namely planning, procurement, distribution, use, maintenance, inventory, reporting, and processing. So that it will create facilities and infrastructure quality school, according to school needs, with efficient funds, and ready to use when needed by all school personnel to support the achievement of educational goals.

One of the essential factors supporting a student's success in teaching and learning activities is the completeness of facilities and infrastructure to support teaching and learning activities. Learning facilities are learning tools needed to achieve learning goals that can run smoothly, orderly, effectively, and efficiently. Good learning facilities will make it easier for children to learn activities to be more enthusiastic about learning. The more complete and adequate the learning facilities owned by a school will make it easier for teachers to carry out their duties as educators. Likewise, with the atmosphere during learning activities. Learning facilities must be developed to support the teaching and learning process, such as sufficient classrooms for students and in good condition, libraries, laboratories, supporting facilities for curriculum activities, infrastructure, and facilities for extracurricular activities and local content. Improving the quality of learning facilities done by the principal makes it easier for teachers to carry out learning activities teaching in schools and provide coaching or guidance to enhance teacher professionalism.

Factors that affect student satisfaction are satisfaction that comes from the awareness of the officers involved in the service. Institutional factors that run the system service also have an essential effect on happiness. Besides, facilities and infrastructure to support services make it easier for users to get the services desired. According to Sopiadin, student satisfaction is influenced by factors intrinsic and extrinsic factors. Intrinsic factor is a factor in students that can lead to happiness, high achievement, expectations, and talents. Extrinsic factors are outside the students, teacher quality, school culture, school facilities, infrastructure, and climate school.

It can be concluded that the factors that influence satisfaction students can be seen from the facilities and infrastructure provided, officers' ability to carry out their duties, and the climate of a comfortable and supportive school.

In Government Regulation Number 19 the Year 2005, article 42 paragraph (1) "Each unit education is obliged to have facilities that include furniture, educational equipment, educational media, books, and other book sources, consumables wear, as well as other necessary equipment to support the learning process regular and ongoing". Article 42 paragraph (2) states, "every unit education must have the infrastructure includes land, classrooms, leadership room education unit, educator room, layout room businesses, library rooms, laboratory rooms, workshop room, production unit room, room canteens, power and service installations, premises exercising, places of worship, places to play, recreation area, and other space/place needed to support the learning process regular and sustainable". Educational facilities and infrastructure are some of the resources that measure the quality of schools and need continuous improvement in line with the development of reasonably sophisticated science and technology.

There are several advantages to schools which have complete facilities and infrastructure.

First, completeness of facilities and infrastructure can arouse the passion and motivation of teachers to teach. Teaching can be seen from two dimensions: delivering subject matter and an environmental regulatory process that can stimulate students to learn. If education is seen as providing material, it takes a means of learning in the form of tools and materials to transmit messages effectively and efficiently. Meanwhile, when teaching is seen as organizing the environment for students to learn, it takes various learning resources that can encourage students to learn. *Second*, completeness of facilities and infrastructure can give students a choice to learn. Every student has a style to learn differently. For example, the additive type student will be easier to discover by hearing, while the visual type of student will be easier to understand by sight.

On the other hand, a lack of learning facilities will result in children being less enthusiastic about learning. Therefore, it will affect children's learning achievement. Given the importance of infrastructure in learning activities, the



students, teachers, and schools will be directly linked. The support of infrastructure learning will assist learners more because not all students have a good level of intelligence, so learning infrastructure will help students, especially those who have weaknesses in participating in learning activities. Integrated Quality Management in the environment of a non-profit organization, including education, cannot be realized if the availability of resources does not support it to discover the quality of processes and results to be achieved. In an organizational environment that is in healthy condition, various quality sources can support the optimal implementation of TQM.

Problems relating to total quality management practices in schools are identified, cited by most respondents as the main problem in the teaching field: the lack of cooperation between teachers for curriculum design changes. The majority also mentioned that the main problem for total quality management in the area was infrastructure that was still less of a concern among students for building maintenance. Finally, the main issues for entire quality management practice in student service are not being met among students with enrollment schedules, lack of enthusiasm among students for leadership training sessions, and inadequate equipment for many other types of athletic activities (Aaron Paul M. Pineda, 2013).

Then some problems occur in school quality management, such as the school management process. The sample school process includes strategic planning, staff recruitment, development, deploying resources, aligning what is taught, how it is taught, and assessing it. The next level is like the quality of teaching to students (Jacqueline S. Goldberg, 2002).

From various, the description above can be concluded that the means and educational infrastructure is one thing which is very much needed in the learning process teaching so that the learning process will be as expected well.

CONCLUSION

The application of total quality management is an idea or policy carried out in an institution to achieve quality and improve the institution's quality so that the services provided can satisfy customers. Improving the quality of education in schools requires good and correct management of facilities and infrastructure. The facilities and infrastructure needed in the student learning

process at school are buildings, classrooms, tables and chairs, blackboards, learning media, yards, gardens, and parks by educational standards. With the fulfillment of educational facilities and infrastructure, the student learning process can be carried out effectively and efficiently.

This research can be continued by conducting field observations to determine the cause of the school's lack of facilities and infrastructure and find out how the quality of the school has met the needs of its infrastructure.

Researchers hope that schools in Indonesia are currently able to meet national infrastructure standards. In addition to improving the quality of education, schools will also be in great demand by the community.

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REFERENCES

- Arbangi et al. (2016). *Education Quality Management*. Jakarta: Kencana.
- Bafadal, Ibrahim. (2004). *Supplies Management Theory and Application*. Jakarta: Bumi Aksara.
- Barnawi and M. Arifin. (2012). *School Facilities and Infrastructure Management*. Yogyakarta: Ar-Ruzz Media.
- Barros, Síría. Paulo Sampaio, P. S. (2014). Quality Management Principles And Practices Impact On The Companies' Quality Performance. *ICQ' Tokyo, Japan*. 1(5).
- Bungin, Burhan. (2007). *Qualitative Research Methodology of Actualization of Contemporary Variants*. Bandung: PT. Rajagrafindo Persada.
- Dahlia. (2018). Infrastructure Management in Improving Quality Quality of the Daar Ulum Islamic Institute of Asahan Regency. *Journal of Islamic Education Management*. 2(2).
- Firmansyah, Tri. and A. T. (2018). The Effectiveness Of Utilizing Facilities And Infrastructure In Improving Service Quality. *Journal of Management and Education Supervision*. 2.
- Harahap, Nursapia. (2014). "Library Research." *Iqra Journal*. 08(01).
- Hasan, M Iqbal. (2002). *Principles of Research Methodology Material*. Jambi: Ghalia Indonesia.



- Herteno, Rudy. (2016). Visualization of the Spatial Cluster of Damage to School Facilities and Infrastructure. *Journal Speed - Engineering and Education Research Center*. 8(2).
- Huda, Mohammad Nurul. (2018). Optimization Of Facilities And Infrastructure In Improving Student Achievement. *Islamic Education Management*. VI(2).
- Huriyah, Lilik and Endraswari. (2016). Implementation of Total Quality Management (TQM) in Improving Public Service Quality at UIN Sunan Ampel Surabaya. *JOIES Journal of Islamic Education Studies*. 1(2).
- Husain, Moh Iqra A. F. A. N. and S. R. M. (2017). *Implementation Of Total Quality Management In Sdn 30 Kota Selatan*. 02(1).
- Indana. N. (2017). Implementation of Total Quality Management (TQM) in Improving the Quality of Education. *Al-Idaroh Journal*. 1(1).
- Indrawan, Irjus. (2015). *Introduction to School Facilities and Infrastructure Management*. Yogyakarta: Deepublish.
- Irawan. H. (n.d.). *10 Principles of Customer Satisfaction*. Bandung: Elex Media Komputindo.
- Ismail, Feiby. (2016). Implementation of Total Quality Management (TQM) in Educational Institutions. *Iqra Scientific Journal*. 10(2).
- Jacqueline S. Goldberg, B. R. C. (2002). "Quality Management in Education: Building Excellence and Equity in Student Performance." *QMJ*. 9(4).
- Jamaa, Suleiman Aden. (2010). "The effectiveness of applying total quality management in Public Senior High School Kasihan 1 Bantul, Yogyakarta Indonesia." *Journal of Education.*, 3(1).
- Khikmah, Nur. et al. (2019). "Implementation of Total Quality Management in Improving School Quality in SMA Negeri 1 Slawi, Tegal Regency." *Journal of Education Management*. 8(1).
- Kompri. (2014). *School Management: Theory and Practice*. Bandung: Alfabeta.
- Koridin and Wresni Pujiyati. (2019). "The Influence of Financial Management and Infrastructure Management on the Quality of the Learning Process in Elementary Schools in the Education Service Unit (Uptd) of Balongan Education, Indramayu Regency." *Journal of Education.*, V.
- Law of the Republic of Indonesia No. 20 of 2003 concerning the Education System National and PPRI 2005*. (2017). Bandung: Citra Umbara.
- Maghfiroh, Lailatul. (n.d.). Lailatul Maghfiroh. *Journal of Islamic Education Studies*. 1(1).
- Manurung, Restika. Harapan, Edi. Tahrur, A. S. (2020). Infrastructure Management at Prabumulih City 1 Elementary School. *Journal of Education Management*. 2(2).

- Matin and Nurhattati Fuad. (2016). *Concept and Management of Educational Facilities and Infrastructure Its application*. Bandung: PT Raja Grafindo Persada.
- Mulyasa, E. (2009). *School-Based Management: Concept, Strategy, and Implementation*. Bandung: Rosdakarya.
- Narbuko, Cholid and Abu Achmadi. (2009). *Research Methodology, Prints 10*. Earth Literacy.
- Nur, M. (2001). *Total Quality Management*. Jambi: Ghalia.
- Nurbaiti. (2015). Management of School Facilities and Infrastructure. *Education Manager*. 9(4), 538-545.
- Nurmadiyah. (2018). Management of Facilities and Infrastructure. *Journal Al-Afkar*. VI(1.).
- Pineda, Aaron Paul M. (2013). Total Quality Management In Educational Institutions: Influences On Customer Satisfaction. *Asian Journal Of Management Sciences And Education*. Issn: 2186-845x Issn: 2186-8441. 2(3).
- Prastyawan. (2016). Management of Educational Facilities and Infrastructure. *Al Hikmah, Journal of Islamic Studies.*, 6.(1).
- Puspaningtyas, Meinarti. (2018). Implementation Of Infrastructure Facilities And Quality Of Education Service Management On Student Satisfaction In Smkn 1 Singosari, Malang District. *Jayanegara Management Journal*. 10(2).
- Raharjo, Patience Budi. (n.d.). School Management to Achieve Exciting Superior Schools: A Case Study at Sman 1 Sleman Yogyakarta. *Journal of Education and Culture*. 1(2).
- Rahmi, Sri. (2015). Total Quality Management in Advancing Islamic Education. *Intellectuals*. 3(1).
- Siswanto, Edy. D. H. (2020). Management Indicators Of Good Infrastructure Facilities To Improve School Quality. *International Journal on Education, Management and Innovation (IJEMI)*. e-ISSN: 2716-2338. 1(1).
- Sanjaya, Wina. (2006). *Learning in Competency-based Curriculum Implementation*. Jakarta: Prenada Media Group.
- Septiadi, Wahyu. (2019). Overview of Total Quality Management (TQM) at Islamic Education Institutions. *Journal of Nidhomul Haq Management of Islamic Education*. 4(1).
- Sobana, HE. (2006). *Quality Management*. Yogyakarta: Ekonisia.
- Soejono and Abdurrahman. (1999). *Research Methods of Thought and Application*. Jakarta: PT. Rineka Cipta.
- Sopiatin, P. (2010). *Student Satisfaction Based Learning Management*. Jambi: Ghalia Indonesia.



- Sulistiyorini and M. Fathurohman. (2014). *The Essence of Islamic Education Management*. Yogyakarta: Teras.
- Surachman, Winarno. 1990. *Introduction to Scientific Research: Basic Methods*.
- Suryabrata, Sumadi. (1983). *Research Methodology*. Jakarta: Grafindo
- Tjiptono, Fandy. (2001). *Prinsip-Prinsip Total Quality Service*. Yogyakarta: Andi Offset.