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Total Quality Management (TQM) In The Management Of Educational Facilities And Infrastructure: Efforts To Increase School Accreditation

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ABSTRACT

This research aims to explore the application of Total Quality Management in the management of facilities and infrastructure in order to improve and maintain school accreditation. The focus of the research is the implementation of TQM principles, such as *(Focus on Customer),* (*Total Involvement), (Continuous Improvement),* to meet the National Education Standards (SNP).

With a descriptive qualitative approach, this study involves school principals, infrastructure managers, teachers, and students to explore, identify, and analyze the influence of the application, so as to improve the quality of school services.

The findings show that the principle *(Focus on Customer)* is a priority for schools in providing facilities according to the needs of service users. A structured work program is formed through the involvement of all parties (*Total Involvement).* This enables the program to become a structured work cycle and a continuous improvement strategy.

The results of this study contribute to developing the application of TQM principles in the management of infrastructure facilities and provide practical management methods for sustainably maintaining accreditation. This study also presents updates to TQM, which is specifically applied as an infrastructure facility management system that acts as a superior accreditation assessment instrument.

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Introduction

Total Quality Management (TQM) is an approach introduced by W. Edward Deming in Japan in the 1950s to improve management in a company. (Chijioke 2024). However, over time, Total Quality Management (TQM) began to adapt to an institution in the form of services, such as educational institutions. (Rosidin, et al. 2025). This is a challenge for all educational institutions to be able to apply the principles of TQM optimally. With

systematic managerial principles, in accordance with existing problems, such as mapping, control, and evaluation, which have not been standardized, resulting in a decline in global competitiveness in the quality of education (Rahmi et al. 2024). Therefore, the implementation of TQM is not only a management system but also a means of facing global challenges in creating quality education.

The Indonesian government requires all educational institutions to have equal values so that Indonesian students do not experience learning gaps. This aims to establish managerial standards in the scope of education (Satria et al. 2025). In this context, the assessment of school accreditation appears as evidence that the standards set have been met by each educational institution. (Alfi Alfaridli et al. 2025). In fact, the assessment process in obtaining accreditation not only depends on the curriculum, administration, or human resources, but also looks at how the school can support student learning facilities. (Hardianti 2025; Baharun et al. 2025). Government Regulation Number 57 of 2021 stipulates special standards or regulations related to school infrastructure facilities. (Aldi et al. 2024). With this stipulation, schools can have a strong incentive to continue to innovate in the management of infrastructure facilities, especially to meet the National Education Standards. (Espinosa Andrade et al. 2024).

One of the educational institutions that has implemented the TQM principle is Nurul Jadid High School, Paiton, Probolinggo City. This school has obtained superior accreditation based on its demonstrated ability to meet the National Education Standards. (Rosida, et al. 2025). However, dynamic education quality standards also require Nurul Jadid High School to continue to innovate in developing a sustainable infrastructure management system. (Azhari et al. 2025). Given this condition, it is necessary to explore further how the management of available infrastructure and facilities is able to maintain the accreditation obtained at Nurul Jadid Senior High School. Also, how management based on the principles of Total Quality Management (TQM), such as continuous improvement, involvement of all parties, and a focus on service users, can be applied as an instrument to meet the National Education Standards.

Previous research has stated that the TQM principles applied to school management are very effective and efficient. Ahmad Baihaqi's research confirms that TQM, with a system that is oriented towards customer satisfaction and involves all members of the organization, is able to improve the quality of service. (Baihaqi et al. 2024). Other researchers also gave the results of their analysis that the application of TQM principles in educational institutions can improve the learning process, human resources, and service quality. (Erliyanto et al. 2024). Azizah's research has different results, stating that the implementation of TQM not only improves the quality of services but can also contribute to the assessment of school accreditation. (Azizah et al. 2021). That way, some of these researchers identified that TQM can be an important component in the accreditation process.

The results of several previous researchers have shown the impact of applying the TQM principle to improve the quality of services and school accreditation. (Maghdhuroh Hindarto et al. 2021). However, there is very little discussion of TQM's applied focus on the management of infrastructure facilities as a strategy for maintaining superior accreditation. In fact, infrastructure facilities are also the main factor in the accreditation assessment to improve the quality of school services. (Leharia Pakpahan et al. 2023). With this study gap, the researcher can present updates that lie in TQM specifically applied to

the infrastructure management system, and play a role in fulfilling the items of the superior accreditation assessment instruments.

From this gap, it is assumed that the TQM principle in the management of infrastructure facilities has not been fully utilized optimally as an instrument to maintain accreditation. Therefore, the objectives of the research are: (1) to describe how the principle of total quality management can be applied in the management of school infrastructure facilities, from the stage of procurement and maintenance to repair or final evaluation; (2) to identify factors that affect the acquisition of school accreditation for the management of infrastructure facilities; and (3) to analyze the influence of the principle of total quality management in the management of infrastructure facilities to improve school accreditation.

Methods

This study uses a descriptive qualitative research method on the phenomenon of superior accredited schools. (Adiningrat et al. 2025). This approach was chosen because the researcher aims to analyze and understand in depth the management system of infrastructure facilities based on the TQM principle, which is able to affect the value of school accreditation. The research was conducted at Nurul Jadid Paiton Probolinggo High School in February 2026. The selection process is based on the results of the school's systematic management of infrastructure facilities. This site is relevant to the case of the implementation of TQM in the management of infrastructure facilities and efforts to increase school accreditation.

The data in this study were obtained through the results of semi-structured interviews with school principals, deputy heads of infrastructure, 2 teachers, and 3 students from each class X, XI, and XII, who were selected as the main informants, using purposive sampling techniques with a duration of about 35 minutes from each informant. (Cheong et al. 2023). This technique is a technique chosen by the researcher to determine subjects from the entire population, which is adjusted to the criteria of participants or parties involved, including (1) service users, (2) infrastructure managers, and (3) as policy determinants of the work program in the field of infrastructure facilities.

In addition, this study applies source triangulation, including interviews, observations, and documentation, to maintain the consistency of the data obtained (Arianto 2024). At the interview stage, the focus was on applying the principles *(Focus on Customer)*, (*Total Involvement*), (*Continuous Improvement*and to find connections between these principles and the school accreditation standards. Observation and documentation of facilities were also carried out to strengthen the results of interviews from various parties (Chand 2025). Observations were carried out in several specific locations to see the provision of school facilities in supporting the learning process, including classrooms, labs, libraries, and several other supporting facilities, to see the real conditions in the field. In addition, documentation is also carried out to provide a clear picture, including school accreditation data, facility inventory, follow-up policies, and explaining the form of annual school evaluation in the form of self-developed applications, to strengthen the results of interviews and observations at the school.

The data analysis technique uses the Miles and Huberman model, which is carried out in a structured manner, starting from data reduction, data presentation, and conclusions based on the results of interviews, observations, and documentation that

have been obtained. (Asipi et al. 2022). The data is presented in the form of table images and descriptive narratives to make it easier for researchers to find patterns from the three stages of data analysis.

Result

1. Achievement of school accreditation and reference standards for the management of infrastructure facilities.

1.1 School accreditation

The results of the interviews show that the Nurul Jadid High School educational institution has received superior accreditation (A) since 2007, which is recognized as one of the educational institutions with complete facility allowances, as well as a professional workforce. The acquisition is influenced by the available facilities and infrastructure factors in accordance with SNP standards, and in accordance with the needs of all school residents. Based on the statement of the principal that "We realize that infrastructure facilities are also one of the accreditation assessment instruments for this school. Therefore, we provide facilities and management based on the standards of the government and in accordance with the needs of students and teachers in this school".

Figure 1. The school profile is on the website of Nurul Jadid High School.

The findings show that Nurul Jadid High School positions school infrastructure as a supporting factor for the school's success in obtaining superior accreditation. Therefore, in the process of managing infrastructure facilities, the institution continues to strive to optimize the management system in order to create effective quality education and support all teaching and learning activities.

1.2. Reference Standards for the management of infrastructure facilities.

Educational standards are a benchmark or criterion that must be used as a reference in managing the institution, and in the management of infrastructure facilities Nurul Jadid High School sets several special standards that become managerial references. Based on an interview with the deputy head of infrastructure facilities, it was stated that "for the standards of infrastructure management, we prioritize standards for the decisions of the government and

Islamic boarding schools". Data obtained from the deputy head of facilities and infrastructure. 4 standards are used as a reference and technical guidelines for management, namely:

(1) National Education Standards (SNP),
(2) Permendiknas No. 24 of 2007,
(3) IASP-2020 Accreditation Instrument (BAN-PDM),
(4) Standards of PUNJ (Public Works Nurul Jadid).

The standard reference emphasizes that the management system is carried out in a structured manner based on national quality standards, while still paying attention to internal guidelines. In this case, the findings also reflect the school's efforts to improve the quality of services, in order to ensure the quality of available facilities and be able to be an indicator of the fulfillment of school accreditation.

2. The fulfillment of minimum standards for school infrastructure facilities.

The results of the observation show that eight indicators of facilities based on the minimum standards set by the government are available at Nurul Jadid High School, including Classrooms, Library Rooms, Laboratory Rooms, Health Rooms, Places of Worship, Administration Rooms, Sports Venues, and Toilets.

Table 1. The facility data provided is based on the minimum standards of infrastructure facilities in education.

Minimum Standards of Facilities Available at Nurul Jadid High School.

No.	Facility Name	Quantity	Usage Status
1.	Classroom	47	Approx. 80% Usage
2.	Library space	1	100% Optimal Use
3.	Language labs, physics labs, chemistry labs, biology labs, computer labs, etc.	11	100% Optimal Use
4.	Health room	1	100% Optimal Use
5.	Places of worship	1	100% Optimal Use
6.	Administration room	1	100% Optimal Use
7.	Sports/field venues	2	100% Optimal Use
8.	Toilet	38	Approx. 90% Usage

Optimization of infrastructure facilities shows that around 87% of all available facilities are well utilized and effectively help the teaching and learning process of students and teachers in schools. The percentage figure has shown that the use of facilities in general has been effective; this is the school's effort to maximize services to service users. However, there are facilities that still need to be improved optimally in utilization, such as classrooms and toilets, so that all available facilities can be used effectively.

This is a limitation of schools in mapping the use of available facilities, which affects the quality level of infrastructure management. As a solution, schools need to remap unused rooms by adjusting all activities in the school. As well as it is necessary to re-check unused toilets, make repairs if they are damaged, so that all existing toilets can

be used properly and utilization runs optimally.

3. Integration of TQM Principles in Infrastructure Management

Based on the results of the documentation that has been obtained, the aspect of facility management from maintenance procurement to final evaluation consistently applies three approaches from the TQM principle, namely *focus on customer, total involvement, and continuous improvement.*

3.1. Focus on Customer.

Based on interviews, this principle is able to present high capabilities to schools in improving the quality of service, and is able to encourage schools to provide facilities that suit the needs of students and teachers. This condition is recognized by the statement of grade XI students that the facilities provided are in accordance with all existing majors, such as students with language majors provided language labs, and students with science majors provided physics, biology, and chemistry labs. Not only that, based on the results of interviews with other students, grade X students added that "The complete facilities provided by the language laboratory school, such as microphones, headsets, and computer servers, are very helpful for us in the process of learning foreign languages, especially when listening or audiovisual."

Figure 2. Nurul Jadid High School Language Laboratory.

These results show that schools also consider the learning process by providing facilities that function according to academic needs, not only providing administrative infrastructure facilities to increase school accreditation. The availability of complete facilities in accordance with the needs of service users reflects the school's value in implementing the principle of focus on the customer.

3.2. Total Involvement

Nurul Jadid High School also involves all parties in the process of managing school infrastructure facilities. This concept is in line with the theory of the TQM principle, namely total involvement; this process is able to facilitate the detection of damage to facilities through information submitted by the service user to the management. Based on interviews with grade XII students, they stated that they reported damaged facilities or facilities they needed to the homeroom teacher, and the teacher later conveyed the information to the infrastructure assistant. In this case, teacher A also gave a statement that "our involvement in the

management of infrastructure facilities is to report facilities that are needed and need to be repaired to the infrastructure facilities management for follow-up."

From the results of observations, the researcher observed that there was direct communication between students and the facility manager or with teachers regarding the needs and improvements of learning facilities. The reporting flow is used as information in the management process from the results of the evaluation of all parties.

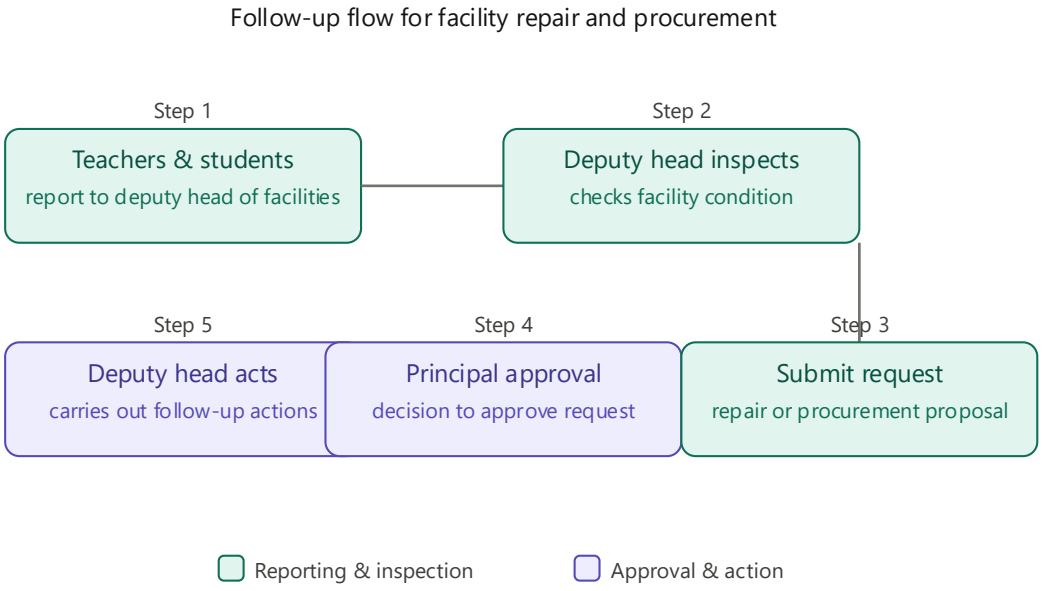

Figure 3. The follow-up flow of repairs and procurement of infrastructure facilities at Nurul Jadid High School.

Based on this flow to a personalized approach, it was found that the criteria for maintaining facilities involve the participation of all parties, both teachers, students, and staff. However, the follow-up flow based on the results of the interview showed that 2 out of 3 informants from the students did not fully understand the follow-up flow of the damage report. This is an obstacle to the effectiveness of the implementation of total involvement in the management of infrastructure facilities. As a solution, the infrastructure management team conducts socialization twice a year, at the beginning of each semester.

3.3. Continuous Improvement

The next cycle is evaluation. This stage is the final cycle of infrastructure management. The process is carried out by integrating the value of the TQM principle, namely, continuous improvement. In this case, the infrastructure manager stated that the evaluation process for repairing infrastructure facilities shows that, on average, around 9 to 11 facilities are repaired per month, ranging from easy to difficult categories.

Table 2. The category and duration of repairs to damaged facilities.

The process of repairing school infrastructure.

Categories	Duration
Easy	1-12 hours
Medium	1-6 business days
Difficult	More than 6 business days

The table above is observation data on the management and improvement of learning facilities and facilities based on categories that are systematically compiled for facilities and infrastructure managers. However, if there is a facility with a severe damage category and it is not possible to make repairs, then the next action is re-procurement. This requires further action at the coordination stage to the principal and then to the head of the Islamic boarding school.

The planning and development process is held once a year, as conveyed by teacher B, in the evaluation process of the the deputy head of facilities and infrastructure, distributing questionnaires at the end of each year to receive input from service users regarding what is needed. The Deputy Head of Facilities and Infrastructure also stated "the process of developing facilities, the first stage is evaluated at the end of each year by distributing a proposal form to work units, then the results are made into the RKSP (Preparation of Infrastructure Needs Plan). So that later it can be adjusted to the priority scale, the results of the adjustment are uploaded into the ERP *(Enterprise Resource Planning) system* to be ratified by the Head of the Islamic Boarding School.

Figure 4. The form of ERP application for educational institution infrastructure facilities under the auspices of the Nurul Jadid Paiton Probolinggo Islamic boarding school.

However, based on the statement of the deputy head of facilities and infrastructure, it shows that not all damaged and proposed facilities can be fulfilled immediately. The procurement of facilities has budget constraints and needs to go through a screening stage to determine the priority scale. So the impact is that the availability of facilities is inadequate. Therefore, the solution from schools is to prioritize the urgency matrix so that the learning process at school remains effective.

Based on all findings, from the school profile overview to the infrastructure management process at Nurul Jadid High School, a clear pattern of linkage can be identified between the principles of TQM, the governance of infrastructure facilities, and the fulfillment of standards for obtaining school accreditation.

The Conceptual Framework for Infrastructure Facility Management Based on TQM Principles in Improving School Accreditation.

Table 3. The pattern of the relationship between the implementation of the three principles of TQM and the management of infrastructure facilities, and the fulfillment of school accreditation.

TQM Principles	Implementation of Facilities and Infrastructure	Accreditation and SNP Indicators	Impact on the Quality of Education
Focus on the customer.	Provision of facilities according to the needs of students	Based on IASP-2020 and SNP standards	Increase the satisfaction and effectiveness of teaching and learning
Total involvement	Involvement of teachers and students in the process of reporting damage and procurement of facilities	School Quality Culture (IASP-2020)	Simplify facility follow-up detection
Continuous improvement	Annual evaluation with the ERP system	Education management standards	Establishing a sustainable infrastructure management system

Discussion

This study shows the pattern of linkage between infrastructure management and the three principles of TQM in improving and maintaining school accreditation. Based on the results of the research, the school also sets a reference for management standards, namely the national education standards (SNP) and the IASP-2020 accreditation instrument (BAN-PDM) and the IASP-2020 Accreditation Instrument (BAN-PDM). The use of these standards aims to meet the indicators of school accreditation assessment and improve service quality. This is in line with Simarmata's research that the management of infrastructure facilities needs to be adjusted to the standards of the government in order to maintain school accreditation. (Simarmata et al. 2022).

Based on the results of the study, the analysis of the provision of facilities shows that Nurul Jadid High School has met the National Education Standards. Important components that must be met in the accreditation assessment process, such as

classrooms, library rooms, laboratory rooms, and so on, have been effectively run and can improve the student learning process. (Islamiya et al. 2025). This condition indicates that the availability of facilities according to standards has a direct relationship with the assessment of school accreditation and the implementation of the three TQM principles.

Focus On Customer

This study highlights the influence of the implementation of the focus on customer principle on the level of customer satisfaction (Setiyaji et al. 2023). Findings in Figure 2. Regarding the language lab, it was revealed that the infrastructure facilities provided were in accordance with what was needed by students and educators, able to meet educational standards in accordance with government regulations Permendiknas No. 24 of 2007 (Lestari et al. 2025). Compliance with these standards is important because the principle of focus on the customer can contribute directly to meeting school facilities based on SNP standards.

This finding is in line with the results of Atina Salamah's research, that focus on customer is a principle oriented towards customer satisfaction in education. (Salamah et al. 2024). The results of Hendri's research also stated that a focus on customer or customer satisfaction is the basic foundation for educational institutions in improving service quality. (Hendri et al. 2022). Therefore, the provision of facilities based on the needs of service users shows a real implementation of the principle of focus on the customer.

This research expands on previous researchers' findings that the principle of focus on the customer can also provide strong synergy to support a good infrastructure management process. The implications of these conditions can provide facilities according to national education standards, thereby improving service quality management and school accreditation assessments. However, what still needs to be strengthened to improve the application of focus on customer is developing unused facilities to increase the effectiveness of facility utilization.

Total Involvement

To form good facility services in infrastructure facility management, it is very necessary for managers to get information from facility users to encourage schools to continue to provide good services as needed. (Azzahra 2021). Therefore, the involvement of all staff and students in the management of infrastructure facilities is important to increase the effectiveness of services. (Ibrahim Surakat 2025). The principle of TQM (*Total involvement*) in this agency will facilitate the process of further management of school infrastructure facilities.

The principle of Total Involvement in this study is reflected in the data of the follow-up flow of damage reports in Figure 3. The picture shows teachers and students being the primary initiators in the maintenance process. This corroborates Meirani's research that the TQM theory (*Total involvement*), that collaborate with stakeholders, can support quality assurance in accordance with user expectations. (Meirani et al. 2023). De Vera's research also explains that stakeholder involvement in activities provides access to the latest information, especially in the school improvement plan process. (De Vera 2022).

This research reinforces the findings of both studies, showing that the role of stakeholders is to convey information related to what they need for the learning process at school. This is important because in the IASP-2020 Government Regulation (BAN-PDM), it is emphasized that school quality culture is one of the aspects assessed in the school

accreditation process. Therefore, these findings reveal that schools must involve students, teachers, and other service users to participate in the management of infrastructure facilities so that educational standards are met and the value of school accreditation increases.

Continuous Improvement

The research data in Table 2 shows that schools continuously conduct routine evaluations of damaged facilities and develop school infrastructure through the ERP (*Enterprise Resource Planning)*. These results are in line with the principle of Continuous Improvement, which is the concept of continuous improvement to improve the quality and effectiveness of work. Based on Junaidi's research, the principle of continuous improvement can be an important indicator for controlling work programs for the management of educational infrastructure facilities (Ana et al. 2024). Ngindana's research also states that the cycle of infrastructure management facilities implemented based on SNP serves as a driver for educational institutions to improve quality (Ngindana et al. 2021).

However, this study shows that the application of the principle of continuous improvement not only functions as a controller of work programs but is also able to meet the regulations of the National Education Standard No. 57 of 2021 concerning system evaluation and improvement of facility quality. (Amrizal et al. 2023), as well as Permendikbud Number 28 of 2016 concerning the preparation of quality improvement strategies based on the results of monitoring and evaluation (Ranisa et al. 2025). School accreditation assessments not only demand how the school can provide facilities as needed and improve the school's quality culture, but also assess how the school can form a sustainable work program. Therefore, this principle can present a theoretical and practical contribution that is able to significantly affect the management of infrastructure facilities and the fulfillment of educational standards, so that it can affect the achievement of school accreditation.

Conclusion

The overall conclusion of this study shows that the application of TQM principles in the implementation of infrastructure facilities can improve and maintain school accreditation value. With the principles *of Focus on Customer, Total Involvement, and Continuous Improvement*, schools can provide complete facilities, improve the quality culture of the school, and be able to form a sustainable system. The results show that these factors are strengthened by facilities that meet the minimum national standards of education, based on a percentage of approximately 87% of available facilities being used effectively. This encourages the acquisition of superior accreditation for educational institutions.

However, to increase the effectiveness of the implementation of the TQM principle, it is necessary to strengthen internal limitations, such as the lack of utilization of facilities such as classrooms and toilets, the lack of understanding of all school residents on the follow-up flow of damage reporting, and the budget for the procurement of infrastructure facilities. Therefore, schools need to take several strategic steps by: (1) checking, repairing, and remapping all school infrastructure facilities so that they are not abandoned. (2) Re-socialize all parties regarding their involvement in the process of managing infrastructure facilities, or provide a checklist of damage in each existing facility to make it easier for

them to assess the feasibility. (3) Prevention of fatal damage by conducting a quarterly periodic mentoring system for facilities that have large purchase costs.

With these findings, researchers can present theoretical implications for infrastructure management by using the TQM principle as an initial approach in the infrastructure management process. On the other hand, this research also presents a practical concept that can be used as a guideline for schools to design a strategy for managing infrastructure facilities, based on the National Education Standard, IASP 2020, as well as service user satisfaction as an instrument in increasing school accreditation.

Although this research has made a theoretical and practical contribution to the development of infrastructure management, the research still has some limitations. The number of informants is relatively small, with only 7 informants from the entire school community, and the research was conducted at only one school. This research focuses solely on a qualitative descriptive approach, so the data obtained has not been fully maximized, although the researcher has presented some quantitative data on school facilities. Furthermore, this study has not explored in depth the other seven components of educational quality, such as curriculum or education personnel, which limits the scope of the observations.

Therefore, the researcher suggests that in the future, other researchers can develop a TQM principle approach, to a wider component, and research is carried out in several schools with different levels of accreditation in order to determine the effectiveness of this application. The researcher also hopes that the next researcher can strengthen the results of this research by developing a more applicable TQM infrastructure management model in order to improve the service system more optimally and effectively in various educational institutions.

References

Adiningrat, Nadia, Meyniar Albina, Wahyu Padila, and Erwinda Rahim Tanjung. 2025. "Descriptive Research In Education." *JICN: Journal of Intellectual and Scholars of the Archipelago* 2 (3): 2557–2564. https://doi.org/https://doi.org/10.33367/ijhass.v3i2.3099.

Aldi, Ahmad, Hery Muljono, Rahman Ghani, Imas Ratna Ermawaty, and Ernianis Ernianis. 2024. "Evaluation of the Implementation of Standard Facilities and Infrastructure to Improve the Quality of Education at SMA Bina Dharma Jakarta." *Educenter: Scientific Journal of Education* 3 (2): 110–118. https://doi.org/10.55904/educenter.v3i2.1029.

Amrizal, Muamar Qadafi, Ayu Sumarni, Arfa Dina, and Sella Fransiska. 2023. "Fulfillment of National Education Standards through the Implementation of an Internal Quality Assurance System in State Senior High Schools 6 Batang Hari" 04 (02): 8–18. https://doi.org/https://doi.org/10.1212/muntazam.v4i02.10884.

Ana, Junaidi, Nurul Adha, Nurul Fajri Arifin, and Nur Afif. 2024. "Control, TQM Principles, and Elements in School Quality Management." *Journal of Mandalika Literature* 5 (3): 501–509. https://doi.org/10.36312/jml.v5i3.3601.

Arianto, Bambang. 2024. (*Triangulation of Qualitative Research Methods)*. Edited by Irma Kharisma Hatiebi. 1st ed. East Kalimantan: Borneo Novelty. https://doi.org/https://doi.org/10.70310/q81zdh33.

Asipi, Lili Sururi, Utami Rosalina, and Dwi Nopiyadi. 2022. "The Analysis of Reading Habits Using Miles and Huberman's Interactive Model to Empower Students' Literacy at IPB

Cirebon." *International Journal of Education and Humanities* 2 (3): 117–125. https://doi.org/10.58557/ijeh.v2i3.98.

Azhari. 2025. "Sustainable Development Goals (SDGS) of School Facilities and Infrastructure Management Model Based on Kaizen 5s Industrial Work Culture at State Vocational Schools in Bireuen Regency." *Journal of Information Systems Engineering and Management* 10 (49s): 751–765. https://doi.org/10.52783/jisem.v10i49s.9958.

Azizah, Lailatul, and Silvia Witri. 2021. "Improving the Quality of Education through the Implementation of Total Quality Management in School Accreditation Programs." *Dawuh Guru: Journal of MI/SD* Education 1 (1): 69–78. https://doi.org/10.35878/guru.v1i1.263.

Azzahra, Shalwa. 2021. "Management of Facilities and Infrastructure in Improving the Quality of Learning." *Al-Fikri: Journal of Islamic Education Studies and Research* 4 (2): 152–165. https://doi.org/10.30659/jspi.v4i2.19740.

Baharun, Hasan, Lukman Hakim, Ahmad Aziz Fanani, Rizkiyah Hasanah, Fathor Rozi, and Halimatus Sa'diyah. 2025. "Enhancing Educational Quality in Islamic Boarding Schools through Educational Fintech: Barokah Catalyst for Building Public Trust" 2025:586–594. https://doi.org/10.2991/978-94-6463-938-4_66.

Baihaqi, Ahmad, and Muhammad Yasin. 2024. "THE CONCEPT OF TOTAL QUALITY MANAGEMENT (TQM) AND THE IMPLEMENTATION OF EDUCATIONAL CONTEXTS." *Al-Wildan: Journal of Islamic Education Management* 02 (01): 1–12. https://doi.org/10.57146/alwildan.v2i1.2033.

Chand, Satish Prakash. 2025. "Methods of Data Collection in Qualitative Research: Interviews, Focus Groups, Observations, and Document Analysis." *Advances in Educational Research and Evaluation* 6 (1): 303–317. https://doi.org/10.25082/aere.2025.01.001.

Cheong, He In, Agnieszka Lyons, Robert Houghton, and Arnab Majumdar. 2023. "Secondary Qualitative Research Methodology Using Online Data within the Context of Social Sciences." *International Journal of Qualitative Methods* 22:1–19. https://doi.org/10.1177/16094069231180160.

Chijioke, Goddie Onyegbu. 2024. "Total Quality Management: The Modern Business Excellence." *International Journal of Scientific and Research Publications* 14 (6): 154–60. https://doi.org/10.29322/ijsrp.14.06.2024.p15013.

Erliyanto, Mohammad, and Bangbang Supriyono. 2024. "Implementation of Total Quality Management in Islamic Educational Institutions." *Cognitive: Journal of Education and Learning* 2 (2): 831–840. https://doi.org/10.61743/cg.v2i2.90.

Espinosa Andrade, Alejandra, León Padilla, and Sarah J. Carrington. 2024. "Educational Spaces: The Relationship between School Infrastructure and Learning Outcomes." *Helium* 10 (19): 1–21. https://doi.org/10.1016/j.heliyon.2024.e38361.

Hardianti, Tuti. 2025. "Accreditation Process and Stages for Improving the Quality of Education in Primary and Secondary Schools (PDM)." *Indonesian Journal of Education: Theory, Research and Innovation* 5 (1): 52–64. https://doi.org/10.59818/jpi.v5i1.1161.

Hendri, Arif Bahtera Sukma, Fadzli Makmur, Nurhasanah, Salfen Hasri, and Sohiron. 2022. "Implementation of Total Quality Management (TQM) Principles in Improving the Quality of Education at the Integrated Supreme Court Madinatul Munawwarah Pelalawan." *MUWAHHID GOVERNANCE* 6 (2): 186–206.

https://doi.org/10.30997/jtm.v6i2.6042.

Ibrahim Surakat, Fatima. 2025. "Influence of Management Practices and Research Infrastructure on Job Performance of Academic Staff in Some Universities in North East Nigeria." *Leadership and Organizational Insights* 1 (3): 25–31. https://doi.org/10.64229/2pm9ab89.

Islamiya, Izzatul, and Triana Rosalina Noor. 2025. "School Accreditation and Improving the Quality of Education." *Al-Abshar: Journal of Islamic Education Management* 3 (2): 118–132. https://doi.org/10.58223/al-abshar.v3i2.257.

Leharia Pakpahan, Poetri & Hidayati, Wiji. 2023. "Implementation of Total Quality Management in Infrastructure Engineering." *Lecture Notes in Mechanical Engineering* 6 (June): 549–564. https://doi.org/10.1007/978-981-19-6107-6_39.

Lestari, Wiwit Yuli, Hertien Koosbandiah Surtikanti, and Taufik Rahman. 2025. "Analysis of the Availability and Standardization of Science Laboratory Infrastructure in Improving Science Process Skills of Junior High School Students." *Journal of Mathematics and Natural Sciences* Education 15 (1): 194–203. https://doi.org/https://doi.org/10.37630/jpm.v15i1.2471.

Maghdhuroh Hindarto, Umi, Jasno Rulli Widiantoro, and Sabar Narimo. 2021. "Implementation of Total Quality Management (TQM) in Improving the Quality of Education in Vocational High Schools." *Journal of Educational Administration* 12(1)(1): 62–86. https://doi.org/https://doi.org/10.31004/riggs.v4i4.5079.

Meirani, Rosida Kerin, Achmad Supriyanto, and Ali Imron. 2023. "Implementation of Total Quality Management through Quality Assurance and Stakeholder Involvement in the Preparation of the PK Vocational School Curriculum." *Manage: Journal of Educational Management* 10 (2): 115–131. https://doi.org/10.24246/j.jk.2023.v10.i2.p115-131.

Muhammad Alfi Alfaridli, Dian Zulfatul Iman, and Ummi Hani. 2025. "Quality Management Strategy in Improving Educational Institution Accreditation Results." *PENG: Journal of Economics and Management* 2 (3): 4034–4049. https://doi.org/10.62710/z3d8y927.

Ngindana, Rispa, Taufik Akbar Alfajri, and Muhammad Rosyihan Hendrawan. 2021. "Implementation of Management Policies in Educational Facilities and Infrastructure." *Proceedings of the 3rd Annual International Conference on Public and Business Administration (AICoBPA 2020)* 191 (AICoBPA 2020): 533–336. https://doi.org/10.2991/aebmr.k.210928.101.

Rahmi, Elvi, Muhammad Hafizh, Amril Huda M, Sri Intan Wahyuni, Ninil Elfira, and Muhammad Yazid Ahda. 2024. "School-Based Management To Improve the Quality of Education in the Globalization Era." *El-Rusyd* 9 (2): 58–70. https://doi.org/10.58485/elrusyd.v9i2.272.

Ranisa, Sherwina, Ahmad Suriansyah, and Ratna Purwanti. 2025. "Implementation of the Internal Quality Assurance System (SPMI) in Improving the Quality of Education in Schools" 4 (19): 263–277. https://doi.org/https://doi.org/10.55606/jimak.v4i2.4657.

Rosida, Evanty Aulia, Ima Widiyanah, and Amrozi Khamidi. 2025. "School Strategies in Preparing Students to Enter State Universities." *Journal of Teacher and Learning* Studies 8 (2): 556–567. https://doi.org/https://doi.org/10.30605/jsgp.8.2.2025.5849.

Rosidin, Asep, Endang Herawan, and Diding Nurdin. 2025. "Implementing Total Quality Management (TQM) in Education: Enhancing Competitive Advantage and Sustainable Performance in Educational Institutions." *AL-ISHLAH: Journal of Education* 17 (2): 2289–2301. https://doi.org/10.35445/alishlah.v17i2.6361.

Salamah, Atina, and Maemunah Sa'diyah. 2024. "The Concept of Quality and Customer Satisfaction in Islamic Education TQM Method." *EDUCATION: Journal of Education and Learning* 10 (1): 139–153. https://ejournal.unida.gontor.ac.id/index.php/tadib/article/view/336.

Satria, Dzaky, Ihsan Hutama Kusasih, and Gusmaneli Gusmaneli. 2025. "Analysis of the Low Quality of Education in Indonesia Today: A Literature Review." *Journal of Bintang Pendidikan Indonesia* 3 (2): 292–309. https://doi.org/https://doi.org/10.55606/jubpi.v3i2.3838.

Setiyaji, Arif, Gertrudes Maria, De Fatima Frans, and Lianna Wijaya. 2023. "The Importance of Customer Focus for Organizational Performance: A Study Focus on an Information and Communication Technology Company Based in Indonesia," no. 2017, 3332–3339. https://doi.org/10.46254/an12.20220608.

Simarmata, Justin Eduardo, Fitriani, and Pius Thaal. 2022. "Mentoring Of Documents Arrangement Of Educational Unit Accreditation Instrument 2020 In Preparation For School Accreditation." *ABDIMAS TALENTA: Journal of Community Service* 7 (1): 399–406. https://doi.org/10.32734/abdimastalenta.v7i1.7107.

Vera, Veronica De. 2022. "Stakeholders' Participation and Its Correlation with Implementation of School-Based Management of Bambang East Elementary School." *International Journal of Research Studies in Education* 11 (11): 101–106. https://doi.org/10.5861/ijrse.2022.855.