

## **The Influence of Infrastructure Management and Teacher Performance on School Quality**

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**Abstract:** This study aims to analyze the influence of infrastructure management and teacher performance on school quality in State Junior High Schools within Tebing Tinggi District, examining both partial and simultaneous effects. Employing a quantitative ex post facto method, data were collected via questionnaires and documentation from a sample of 134 teachers and analyzed using SPSS. The results confirm that both infrastructure management and teacher performance individually have a significant positive influence on school quality. Critically, their combined effect demonstrates a statistically stronger, synergistic impact. The novelty of this research lies in its integrated investigation of tangible resource management and human resource effectiveness within a specific district context, highlighting their interdependence as pillars of institutional quality. A key practical implication is that school administrators and district policymakers must adopt holistic improvement strategies that concurrently optimize facility utilization and support teacher development initiatives. This study contributes to educational management theory by providing empirical evidence that sustainable school quality is best achieved through a dual-focused approach, effectively bridging operational management with pedagogical excellence.

**Keywords:** Infrastructure Management, School Quality, Teacher Performance

### **A. Introduction**

Education is something very fundamental and very strategic because through education a nation rises and develops, the program of educating the life of the nation is an ideal of the state as stated in the preamble to the Constitution of the Republic of Indonesia. Various efforts have been taken by the government and educational institutions that carry out the task of education in improving the quality of education. The quality of schools when associated with education in Indonesia has been seen to have experienced a lot of progress, with various programs carried out by the government to continue to improve the quality of education. The government has planned programs in the short term and in the long term so that programs to

improve the quality and quality of education in Indonesia occur in a sustainable manner.

Improving the quality of schools in the world of education is one of the main pillars in building education in Indonesia, because if education is of high quality, it will produce smart and competitive human resources. To realize a sustainable education quality improvement program, this is clarified by the existence of Government Regulation (PP) Number 57 of 2021 concerning National Education Standards (SNP), which is the minimum criterion for the education system in all regions in Indonesia. Regarding the quality of schools, it is synonymous with the quality of education, where the quality of schools is an inseparable part of the quality of education. Quality when viewed in the context of education in question is the ability of educational institutions to utilize educational resources to improve learning abilities as optimally as possible. According to Syarifuddin (2023), conveying that something is said to be of quality, it must be because something has good value or contains a good meaning (Moldovan, 2012; Dyason, 2022; Solikhin, & Suwadi, 2022; Sahney, et. al., 2008). On the other hand, something is said to be of poor quality, if something has a poor value, or contains a bad meaning. According to Zahroh (2020), it is explained that, in the context of education, the definition of school quality or school quality is identical to the *output* that is processed optimally by educational institutions (Andrews, & Abawi, 2017; Hilton, et. al., 2013; Purwantiningsih, & Suharso, 2019). Because from *this output*, the public can judge whether the educational institution is of quality or not. Quality is said to be quality if it has superior quality output and is able to compete with others. The same thing was conveyed by Zamroni (2021) school quality improvement has the meaning of a systematic process that is continuous to improve school quality and factors related to school quality, with the aim that school targets can be achieved more effectively and efficiently (Gisbert Cervera, & Lázaro Cantabrana, 2015; Heck, 2000; Idris, et. al., 2022). In the sense that it will continue to experience development according to the demands of the times.

It is explained in the Regulation of the Ministry of Education and Culture of the Republic of Indonesia Number 28 of 2016 concerning the quality assurance system for elementary and secondary school education in chapter 1 article 1 it is stated that Education Quality Assurance is a systematic, integrated, and sustainable mechanism to ensure that the entire process of implementing education is in accordance with quality standards. One of the results of quality education is teacher performance.

The performance of a quality teacher is a professional teacher who is able to carry out tasks and transfer knowledge to students to realize the vision, mission and goals of the school, teachers who are professional in carrying out their duties with quality improvement strategies, so that they can produce quality *outputs* and *outcomes* for students. According to Soepandi (2018), school quality refers to the quality or standard of educational services provided by a school. Factors that affect the quality

of schools include infrastructure facilities and teacher performance. The availability of adequate and conducive learning facilities, as well as supporting infrastructure, also determines the quality of the school, and the teacher's teaching performance, classroom management ability, and the use of learning resources also affect the quality of the school. According to Daryanto (2020), it is explained that the educational goals of an educational institution depend on the effectiveness of education and the results or outputs are determined by several factors such as students, educators, curriculum, facilities (facilities and infrastructure), and the environment. In relation to the quality of the school, infrastructure facilities can be positioned as part of supporting the success of students.

The success of the implementation of learning in schools must be thoroughly evaluated, among other things, by evaluating the quality of the process from learning outcomes. Without support from infrastructure facilities in the learning process, of course, teachers' performance in teaching is not optimal. The goal of education in achieving success is one of the supports is infrastructure. It is explained in Permendikbudristek Number 22 of 2023 concerning Standards for Facilities and Infrastructure in Early Childhood Education, Basic Education, and Secondary Education Levels, that standards for facilities and infrastructure are the minimum criteria that must be available to educational units in the implementation of education. In the Permendikbudristek, it is clearly stated that the implementation of the learning process carried out in schools must have the availability of infrastructure facilities provided by the government directly, as well as the availability of infrastructure facilities that must be provided by the school itself, which includes: 1) Each educational unit must have facilities that include furniture, educational equipment, educational media, books, and other learning resources, consumables, as well as other equipment needed to support an orderly and engaging learning process; 2) Each educational unit must have infrastructure which includes land, classrooms, educational unit leadership rooms, educator rooms, administrative rooms, library rooms, laboratory rooms, workshop rooms, production unit rooms, canteen rooms, power and service installations, sports venues, places of worship, places of mining, places of creation, and other spaces or places needed to support an orderly and continuous learning process.

Infrastructure facilities can be said to be available even though they are not optimal as part of the needs in the learning process, teachers who teach are certainly less than optimal teacher performance. The existence of infrastructure and teacher work motivation in the implementation of the learning process conveyed, teachers must be professional in carrying out the tasks given. A teacher who has professionalism in teaching will have a positive impact on the results that have been implemented. According to Matin & Nurhattati, (2022) stating that facilities are media/tools that are the main support for the implementation of a process of teaching and learning activities. This has been explained in Government Regulation Number 7 of 2022, Chapter II Article 2 states that one of the National Education Standards Environment

is the standard of facilities and infrastructure. The paragraph of Article 24 of the PP states as follows:

1. Each educational unit must have facilities that include furniture, educational equipment, educational media, books, and other learning resources, consumables, and other equipment needed to support an orderly and continuous learning process;
2. Each educational unit must have infrastructure which includes land, classrooms, educational unit leadership rooms, educator rooms, administrative rooms, library rooms, laboratory rooms, workshop rooms, production unit rooms, canteen rooms, power and service installations, sports venues, places of worship, places of mining, places of creation, and other spaces or places needed to support an orderly and sustainable learning process.

In addition to infrastructure facilities as part of supporting school quality, teacher performance is also an inseparable part. Teachers are professions whose positions or jobs require special skills. The duties of teachers as a profession include: educating, teaching and training. Educating means developing life values, teaching means passing on and developing science and technology, while training means developing students' skills.

Teachers are educators whose main task is to teach, in the sense of developing the realm of creation, taste and karsa of students as the implementation of the ideal concept of education. Personality characteristics of teachers include: cognitive flexibility, and psychological openness. Teachers are required to have the ability and authority to carry out their profession. In carrying out their duties, teachers where teaching is considered a professional job, then teachers are required to be professional in carrying out their duties. According to Aqib (2020), there are four measures of a teacher who is declared to have performance: (1) have a commitment to students and their learning process, (2) deeply master teaching materials and how to teach them, (3) be responsible for monitoring students' learning abilities through various evaluation techniques, (4) should be part of the learning community in their professional environment. The same thing was expressed by Samana (2020) that the nature and personality of a teacher are very important for the learning process, namely adaptability, enthusiasm, confidence, precision, empathy and good cooperation. Basically, there is a set of tasks that must be carried out by teachers related to their profession as teachers, namely:

1. Duties in the professional field include educating, teaching and training students;
2. Tasks in the field of humanities include that teacher in schools must be able to become second parents, be able to understand students, help students in transforming and identifying themselves as participants;
3. Duties in the field of society include helping the community to be able to obtain knowledge and educate the entire Indonesian nation based on Pancasila.

Becoming a qualified teacher is a teacher who is able to make learning tools, manage learning, be able to develop himself or follow the development of the world of education so as not to miss information and master teaching materials in accordance with the field he is engaged in. To become a teacher, you must have certain qualifications or competencies (Zahroh, 2022). The same thing was stated by Suryana (2021) that teachers who have performance certainly have a commitment to carrying out teachers' duties as a profession, including: educating, teaching and coaching. Educating means developing life values, teaching means passing on and developing science and technology, while training means developing students' skills. In relation to the world of education, teacher performance can be defined as the extent to which a teacher works optimally according to his or her abilities in an effort to achieve institutional goals. A teacher's ability will be seen when teaching which can be measured from his teaching competence.

The results of our initial observation at the State Junior High School in Empat Lawang Regency are that in Tebing Tinggi District there are 7 (seven) State Junior High Schools that have different school quality accreditation status. This is reflected in the accreditation certificates obtained by each school as seen in the following table.

**Table 1. The Condition and Quality of State Junior High Schools in Tebing Tinggi District for the 2025 Academic Year**

No.	School Name	School Accreditation Status	Number of Teachers
1	SMPN 1 Tebing Tinggi	Akreditasi A No. 555/BAN-SM/SK/2023	41
2	SMPN 2 Tebing Tinggi	Akreditasi A No. 1589/BAN-SM/SK/2022	27
3	SMPN 3 Tebing Tinggi	Akreditasi B No. 1346/BAN-SM/SK/2021	31
4	SMPN 4 Tebing Tinggi	Akreditasi B No. 556/BAN-SM/SK/2023	26
5	SMPN 5 Tebing Tinggi	Akreditasi A No. 1008/BANSM- Prov.Sumsel/TU/XII/2018	43
6	SMPN 6 Tebing Tinggi	Akreditasi C No. 1334/BAN-SM/SK/2020	15
7	SMPN 7 Tebing Tinggi	Akreditasi C No. 105/BAN-PDM/SK/2024	21
Quantity			204

Based on the explanation in the table above, it can be seen that each State Junior High School in Tebing Tinggi District has a different accreditation. The accreditation given by the National Accreditation Board (BAN) is a benchmark of the quality of State Junior High schools in Tebing Tinggi District, where the research provided by BAN is based on the results of surveys and verification of existing conditions, including being reviewed from the infrastructure facilities and the performance of the teachers themselves. The results of the researcher's observation also see that there is a lack of existing infrastructure, especially State Junior High Schools that are

accredited B and C, including media/props as learning needs, incomplete books in the library, inadequate sports equipment for student activities in carrying out sports learning activities, damaged learning localities and inadequate toilet facilities.

In addition, the performance of teachers in carrying out learning can be said to be modest without the existence of solutions and the teachers themselves are innovative in delivering learning, such as delivering learning that requires media/teaching aids, but these media do not exist. As a result, the teacher conveys learning materials using lecture techniques without the support of existing media. Furthermore, there are also teachers who are not linear from their knowledge such as History graduates teaching in Economics subjects, and there are also teachers who do not have an educator certificate because they have not passed the competency test.

The next information obtained by the researcher is that the principal seeks to improve the quality of the school by submitting a proposal to the Empat Lawang Regency Education Office to complete the existing infrastructure facilities and extracurricular provision for students so that the quality of learning achieved can improve student outcomes and the quality of graduates. However, because the school is a public school, and considering that the education funds in Tebing Tinggi District are very limited, other infrastructure must also be considered, such as road repairs, government building repairs and damaged building repairs. So, it indirectly has an impact on existing State Junior High Schools. This certainly has an influence on existing schools. Also, the principal always strives to always provide direction and guidance to teachers, especially related to learning needs so that the school can be better and the learning process delivered will be better. This is a concern for schools in Tebing Tinggi District, to always strive to improve the quality of schools. But in reality, currently some schools in Tebing Tinggi District, Empat Lawang Regency have a poor quality of school. Some schools are still low in quality, this condition can be assessed in terms of infrastructure, curriculum, programs, media and tools to support readiness in achieving the vision, mission and goals of the school. If the infrastructure, curriculum, programs, media and tools as support have not been fulfilled, then the quality of the school cannot be fulfilled according to expectations.

Based on this background, the researcher wants to conduct research to find out in depth with the title of research on the influence of infrastructure management and teacher performance on school quality in State Junior High Schools in Tebing Tinggi District. The formulation of this research problem is 1) does the management of infrastructure facilities affect the quality of schools in State Junior High Schools in Tebing Tinggi District? 2) does the teacher's performance affect the quality of schools in State Junior High Schools in Tebing Tinggi District? 3) does the management of infrastructure facilities and teacher performance have a combined influence on the quality of schools in State Junior High Schools in Tebing Tinggi District?

## B. Methods

This research was conducted at State Junior High Schools in Tebing Tinggi District, Empat Lawang Regency, namely State Junior High School 1 Tebing Tinggi which is located on Jalan Tebing Benteng, Kupang, Tebing Tinggi District, Empat Lawang Regency, South Sumatra Province. SMP Negeri 3 Tebing Tinggi is located on Jalan Batu Pance, Ebing Tinggi District, Empat Lawang Regency. SMP Negeri 4 Tebing Tinggi which is located in Batu Raja Lama Village, Tebing Tinggi District. SMP Negeri 6 Tebing Tinggi which is located on Jalan Fajar Bakti, Tebing District, and SMP Negeri 7 Tebing Tinggi which is located on Jalan Padang Ajan, Jaya Loka Village, Tebing Tinggi District, Empat Lawang Regency. The research period was conducted from June 2025 to August 2025.

This study uses a quantitative method with *an ex post facto* approach. The reason the researcher uses *an ex post facto approach* in this study is because in accordance with the research study, namely the influence of the management of teachers' work performance infrastructure facilities on the quality of schools in State Junior High Schools in Tebing Tinggi District, which aims to find causes that allow changes in behavior, symptoms or phenomena caused by an event or things that cause overall changes that have occurred. In this study, teachers in State Junior High Schools in Tebing Tinggi District are as depicted in the following table.

**Table 2. Research Population**

No.	School Name	Number of Teachers
1	SMP Negeri 1 Tebing Tinggi	41
2	SMP Negeri 2 Tebing Tinggi	27
3	SMP Negeri 3 Tebing Tinggi	31
4	SMP Negeri 4 Tebing Tinggi	26
5	SMP Negeri 5 Tebing Tinggi	43
6	SMP Negeri 6 Tebing Tinggi	15
7	SMP Negeri 7 Tebing Tinggi	21
Quantity		204

Sampling in this study refers to the opinion of Arikunto (2022) that samples are part of the population. If the population is 100, the sample is taken as a whole and called a population sample, but if the population is more than 100, it can be taken 10 - 15%, 20 - 25%, 30 - 35% or more. The sample in this study is as follows.

**Table 3. Research Sample**

No.	School Name	Number of Teachers
1	SMP Negeri 1 Tebing Tinggi	41
2	SMP Negeri 3 Tebing Tinggi	31
3	SMP Negeri 4 Tebing Tinggi	26
4	SMP Negeri 6 Tebing Tinggi	15
5	SMP Negeri 7 Tebing Tinggi	21
Quantity		134

This research is based on the theory of Sugiyono (2022) and Arikunto (2022), the data collection technique used is a *likert* scale questionnaire presented with various alternative answers, namely: 1) Always (SL), 2) Often (SR), 3) Rarely (JR), 4) Never (TP) (Sugiyono, 2022). Questionnaires were given to each teacher in State Junior High Schools in Tebing Tinggi District which was used as a sample in this study with a total of 134 teachers. The data analysis technique in this study uses simple correlation data analysis techniques and multiple regression with the help of *the SPSS For Windows Version 26* program. The stages of implementation of the analysis include: (1) descriptive analysis, (2) analysis requirements test, and (3) hypothesis test.

### **C. Results and Discussion**

Based on the results of the research that has been carried out through three stages of hypothesis testing, the researcher can say that this research states: 1) there is an influence of infrastructure management on the quality of schools in State Junior High Schools in Tebing Tinggi District; 2) there is an influence of teacher performance on the quality of schools in State Junior High Schools in Tebing Tinggi District; 3) there is an influence of infrastructure management and teacher performance together on the quality of schools in State Junior High Schools in Tebing Tinggi District.

#### **The Influence of Infrastructure Management on School Quality**

Based on the results of the first hypothesis test, the influence of infrastructure management on school quality in State Junior High Schools in Tebing Tinggi District using t-test statistical analysis showed that the t-count value obtained a result of 5.670. To test the hypothesis, the criterion is used that if  $t\text{-calculated} > t\text{-table}$ , then  $H_a$  is accepted. Conversely, if  $t\text{-count} < t\text{-table}$ , then  $H_a$  is rejected. To find the t-table, we look at the significance level  $\alpha = 5\%$  divided by two, i.e. 2.5% for the double-sided test, with the degree of freedom (df) calculated by the formula  $n-k$ , so  $df = 134 - 2 = 132$ , with  $n$  as the sum of the sample and  $k$  as the sum of the independent variables. In a double-sided test, for a significance level of 0.025, the t-table is obtained at 0.000. Thus, based on this information, the t-calculated value of the t-table  $>$  or the value obtained is  $5.670 > 0.000$ . This shows that  $H_0$  was rejected and  $H_a$  was accepted. Thus, the results of this first hypothesis test can be said to be acceptable or there is a significant influence of infrastructure management on the quality of schools in State Junior High Schools in Tebing Tinggi District.

Based on the results of the analysis of the coefficient of determination of the first hypothesis test, it shows that the value of R in the Model Summary is 0.423. This indicates that there is a fairly strong influence between the two variables  $X_1$  on  $Y$ . This is known from the correlation value listed in the table which shows that the correlation coefficient is in the range of 0.400 to 0.599. The relationship between

variables in the first hypothesis, namely the influence of infrastructure management, has a fairly strong relationship with the quality of schools in State Junior High Schools in Tebing Tinggi District. *The Standard Error* in the summary model table that (Standard Deviation) indicates how much variation in the predicted value varies. In this study, the standard deviation value was 0.20123. The smaller the standard deviation number, the higher the quality of the resulting model. In accordance with the determination coefficient analysis, this analysis is used to measure how much influence the independent variable has on the bound variable in the form of a percentage. This is explained in the table above, which shows that the value of the R Square (R<sup>2</sup>) determination coefficient is 0.279, which means that the percentage of the influence of infrastructure management on school quality in State Junior High Schools in Tebing Tinggi District is 27.9%. Furthermore, the rest of the percentage of influence contributed was influenced by other sources that were not tied to this study.

Based on the results of the analysis above, it is stated that the management of infrastructure facilities in the Minister of Education and Culture Number 22 of 2023 concerning Standards for Facilities and Infrastructure in Early Childhood Education, Basic Education, and Secondary Education Levels, that the standards of facilities and infrastructure are the minimum criteria that must be available to educational units in the implementation of education.

Infrastructure facilities can be said to be available even though they are not optimal as part of the needs in the learning process, teachers who teach are certainly less than optimal teacher performance. The existence of infrastructure and teacher work motivation in the implementation of the learning process conveyed, teachers must be professional in carrying out the tasks given. A teacher who has professionalism in teaching will have a positive impact on the results that have been implemented. According to Matin & Nurhattati (2022), facilities are media/tools that are the main support for the implementation of a process of teaching and learning activities. This has been explained in Government Regulation Number 7 of 2022, Chapter II Article 2 states that one of the National Education Standards Environment is the standard of facilities and infrastructure.

According to Karwono (2021), it is explained that judging from its function or role in the implementation of the teaching and learning process, educational facilities are divided into two types, namely: 1) study tools such as: books in the library, teacher handbooks, lesson package books for students, dictionaries, teaching aids; 2) practical tools, such as sports equipment, arts, laboratory equipment, and so on; 3) stationery, such as: whiteboards, notebooks, pens, pencils, chalk, markers, computers, and so on; 4) educational media, which can be used for learning process activities that encourage students to think, willingness to learn in order to achieve goals.

According to Pribadi (2019) explained that the main functions of facilities and infrastructure are: 1) creating student comfort in learning; 2) creating satisfaction, facilitating learning activities; 3) accelerating the process of learning activities; 4) increase learning productivity; 5) The quality of the results achieved is better. According to Sanjaya (2022), learning facilities are everything that supports the smooth learning process. School learning facilities and infrastructure are very important in the learning process to support the learning process. With a variety of school learning facilities and infrastructure available and utilization that can support learning activities, it will certainly help students in learning both at home and at school.

Research on relevant infrastructure facilities does not have an influence on the current research, because it is to strengthen the suspicion for researchers to conduct research, such as the research researched by Yuseva, et al., (2024), concludes that: 1) The Principal's Leadership has a positive and significant influence on the Performance of State Vocational Schools in Prabumulih City; 2) Facility has a positive and significant influence on the Performance of State Vocational Vocational Teachers in Prabumulih City; 3) The leadership of the Principal and the Infrastructure provide a positive and significant influence simultaneously on the Performance of State Vocational Vocational Teachers in Prabumulih City. This research has similarities and differences between previous researchers and current research, which both examine the professionalism of teachers. Meanwhile, the current research examines the influence of infrastructure management on school quality in State Junior High Schools in Tebing Tinggi District.

Another research on infrastructure facilities was researched by Iskandar (2015), where the results of his research concluded that the availability of learning support infrastructure facilities is said to be quite good, but needs good management. This research has similarities with the research being conducted now, namely both researching facilities and infrastructure. The difference between this research and the current research is the supporting variables that are used as research. Research conducted by Tansel et al., (2022), the results of this study concluded that the availability of learning infrastructure facilities and student activity have a significant influence on the learning achievement of Buddhist Education at SMP Negeri 3 Kaloran. This research has similarities with the research being conducted now, namely both researching facilities and infrastructure. The difference between this research and the current research is the supporting variables that are used as research.

Research conducted by Mokoginta (2021) explains that the existing infrastructure at the research site is still in the development stage and the infrastructure needed, namely the construction of a clean water network, can be developed, for telecommunication networks it is necessary to add towers for cellphone networks in several villages such as in the villages of Mata Bulu and Jiko Belanga and the need

for a pier does not yet exist. Meanwhile, the facilities are the needs of community institutions (farmer/fisherman groups), TPI, fish processing industry, drying fields, ice factories, financial institutions, petrol stations/SPDN, processing/packing buildings, seed supply, refrigerators and boat workshops. This research has similarities with the current research, which is both researching the availability of facilities and infrastructure. The difference between this research and the current research is that the previous research used qualitative methods, while the current research uses quantitative methods.

### **The Influence of Teacher Performance on School Quality**

Based on the results of the second hypothesis test regarding the influence of teacher performance on school quality in State Junior High Schools in Tebing Tinggi District in this study, it shows that the results obtained are that the t-count value is 8.301. In the hypothesis testing criteria, if t-count is greater than t-table then  $H_a$  is accepted, but if it is the opposite, then  $H_a$  is rejected. To determine the t-table, it is searched with  $\alpha = 5\%: 2 = 2.5\%$  (double-sided test) and with degrees of freedom (df) calculated as  $n-k$ , i.e.  $df = 134 - 2 = 132$  (where  $n$  is the number of samples and  $k$  is the sum of independent variables). With double-sided testing (significant = 0.025), the obtained t-table is 0.000. Based on the existing explanation,  $t\text{-count} = 8.301 > t\text{-table} = 0.000$ , then t-count is greater than t-table. This shows that  $H_0$  was rejected and  $H_a$  was accepted. Therefore, it can be said that partially from the second hypothesis test in this study, there is a significant influence of teacher performance on the quality of schools in State Junior High Schools in Tebing Tinggi District.

Based on the results of the determination coefficient analysis, the R number in the Model Summary as shown in the table above, shows an R value of 0.586. This shows that there is a strong relationship between teacher performance and school quality in State Junior High Schools in Tebing Tinggi District. This is seen because the relationship value is between 0.400 and 0.599. The Standard Error of Estimated, also known as the Standard Deviation, serves to measure how much the predicted value varies. In this study, the standard deviation value was 0.18005. If the standard deviation number is smaller, then the model used is better. Next, to find out the percentage of influence contributed from independent variables to dependent variables. This explanation is where the value of the determination coefficient of R Square ( $R^2$ ) is recorded as 0.343. This shows that the percentage of influence given from teacher performance on school quality in State Junior High Schools in Tebing Tinggi District is 34.3%. Furthermore, the rest of the percentage of influence contributed was influenced by other sources that were not tied to this study.

Based on the results of the research on teacher performance, as a study of supporting theories in this study, as stated according to Aqib (2020) it is emphasized that there are four measures of a teacher who is declared to have performance: (1) having a commitment to students and their learning process, (2) deeply mastering teaching

materials and how to teach them, (3) being responsible for monitoring students' learning abilities through various evaluation techniques, (4) should be part of the learning community in their professional environment. The same thing was expressed by Samana (2020) that the nature and personality of a teacher are very important for the learning process, namely adaptability, enthusiasm, confidence, thoroughness, empathy and good cooperation. Basically, there is a set of tasks that must be carried out by teachers related to their profession as teachers, namely: 1) Tasks in the field of profession include educating, teaching and training students; 2) Tasks in the field of humanity include that teachers in schools must be able to become second parents, be able to understand students, help students in transforming and identifying themselves as participants; 3) Duties in the field of society include helping the community to be able to obtain knowledge and educate the entire Indonesian nation based on Pancasila.

Becoming a qualified teacher is a teacher who is able to make learning tools, manage learning, be able to develop himself or follow the development of the world of education so as not to miss information and master teaching materials in accordance with the field he is engaged in. To become a teacher, you must have certain qualifications or competencies (Zahroh, 2022). The same thing was stated by Suryana (2021) that teachers who have performance certainly have a commitment to carrying out teachers' duties as a profession, including: educating, teaching and coaching. Educating means developing life values, teaching means passing on and developing science and technology, while training means developing students' skills.

Research on teacher performance, researched by Astuti, et al (2020) explains that both partially and simultaneously the significant influence between independent variables on dependent variables. This research concludes that the researcher has similarities in researching teacher performance. However, what distinguishes this study from the research conducted now is to examine the influence of infrastructure management and teacher performance on school quality in State Junior High Schools in Tebing Tinggi District. Another researcher who examined teacher performance was researched by Handayani, et al. (2021) who explained that both partially and simultaneously the significant influence between independent variables on dependent variables. This research concludes that the researcher has similarities in researching teacher performance. However, what distinguishes this study from the research conducted now is to examine the influence of infrastructure management and teacher performance on school quality in State Junior High Schools in Tebing Tinggi District. Furthermore, the research researched by Firman, et al. (2021) stated that both partially and simultaneously the significant influence between independent variables on dependent variables. This research concludes that the researcher has similarities in researching teacher performance. However, what distinguishes this study from the research conducted now is to examine the influence of infrastructure management and teacher performance on school quality in State Junior High Schools in Tebing Tinggi District.

## **The Influence of Infrastructure Management and GURU Performance on School Quality**

Based on the results of the third hypothesis test research on the influence of infrastructure management and teacher performance on school quality in State Junior High Schools in Tebing Tinggi District using multiple regression analysis, an F-calculation score of 46.953 was obtained. The condition for testing a hypothesis is that if  $F\text{-calculation} \geq F\text{-table}$ , then an alternative hypothesis is accepted. However, if  $F\text{-calculation} < F\text{-table}$ , then the alternative hypothesis is rejected. Referring to the F-table with a significance level of 0.05 and a degree of numbering freedom of 2 (calculated based on the number of free variables) and a degree of freedom of denominator of 133 (calculated from the number of samples minus the number of free variables, after that subtracted by one), these numbers can also be searched using an Excel program by entering the formula `=FINV(0.05,46,953)` on the empty cell, which yields the number 0.000 (Prayitno, 2018). From this description, it can be seen that the value of F-calculation is  $46.953 > F\text{-table}$  is 0.000. Therefore, the hypothesis in this study is acceptable, which shows that simultaneously there is a significant influence between the management of infrastructure facilities and teacher performance on the quality of schools in State Junior High Schools in Tebing Tinggi District.

Based on the results of the analysis of the third hypothesis test through the analysis of the determination coefficient which shows the summary of the model, an R value of 0.646 was obtained. This indicates that there is a strong relationship between the variables X1 and X2 (which are independent) and Y (which are dependent). This means that the correlation value is in the range of 0.600 to 0.799. The Standard Error of Estimated is used to assess how diverse the estimated values are. In this study, the standard deviation obtained was 0.17017. The smaller the standard deviation value, the better the model used. Furthermore, to see the results of the contribution of the percentage of influence between variables simultaneously, it is known that the value of the R Square (R<sup>2</sup>) determination coefficient is 0.418 which shows that the percentage of contribution of the influence of the management of infrastructure facilities and teacher performance together on the quality of schools in State Junior High Schools in Tebing Tinggi District is 41.8%. Furthermore, the rest of the percentage of influence contributed was influenced by other sources that were not tied to this study.

From the results of the research obtained, the researcher can explain that the better the management of infrastructure facilities owned by schools as learning facilities, according to Gunawan (2021) stated that school facilities and infrastructure are one of the supporting factors in achieving the success of the teaching and learning process in schools. Of course, this can be achieved if the availability of adequate facilities and infrastructure is accompanied by optimal management, including: 1) learning rooms, 2) educational activity management rooms, 3) worship rooms, 4)

UKS rooms, 5) laboratory rooms, 6) counseling rooms, 7) storage facilities for learning activities, 8) activity support fields, and other supporting facilities.

Pribadi (2019) explained that the main functions of facilities and infrastructure are: 1) creating student comfort in learning; 2) creating satisfaction, facilitating learning activities; 3) accelerating the process of learning activities; 4) increase learning productivity; 5) The quality of the results achieved is better. According to Sanjaya (2022), learning facilities are everything that supports the smooth learning process. School learning facilities and infrastructure are very important in the learning process to support the learning process. With a variety of school learning facilities and infrastructure available and utilization that can support learning activities, it will certainly help students in learning both at home and at school.

There is good management in relation to infrastructure, of course teachers in delivering material are more enthusiastic and have high performance, so that the quality of the school in the learning process will also be better. According to Rusyan (2020), the performance of teachers is to carry out the learning process both in the classroom and outside the classroom in addition to doing other activities, such as working on school administration and learning administration, carrying out guidance and services to students, and carrying out assessments. Furthermore, Zahroh (2022) defines performance as a reflection of the overall way a person sets his or her achievement goals. According to Simamora, (2021) gives performance limits, performance is a translation from English, *performance* or *job performance* but in English it is often abbreviated to *performance* only. Performance in Indonesian is also called work achievement. Performance is defined as an expression of ability based on knowledge, attitude, skills and motivation in producing something. Performance is defined as the achievement of certain job requirements which can ultimately be directly reflected in the *output* produced, both quantity and quality. The above definition highlights performance based on the results achieved by a person after doing work (Supardi, 2023). Furthermore, Mulyasa (2018) stated that teacher performance is a learning process as an effort to develop existing activities into better activities, so that the educational goals that have been set are achieved well through a learning activity carried out by the teacher in accordance with the targets and objectives. High performance is a path to meet his needs, so he will follow that path. Meanwhile, the situation factor states that Performance is the result of an interaction between motivation and basic abilities. If motivation is high but basic ability is low, then performance will be low and if ability is high but motivation is low, then performance will be low, or vice versa (Uno, 2020).

Permendikbudristek Number 57 of 2021 concerning National Education Standards (SNP), which is the minimum criterion for the education system in all regions in Indonesia. Regarding the quality of schools, it is synonymous with the quality of education, where the quality of schools is an inseparable part of the quality of education. Quality when viewed in the context of education in question is the ability

of educational institutions to utilize educational resources to improve learning abilities as optimally as possible. Syariffudin (2023) said that something is said to be of quality, surely because something has good value or contains a good meaning. On the other hand, something is said to be of poor quality, if something has a poor value, or contains a bad meaning. According to Zahroh (2020), it is explained that, in the context of education, the definition of school quality or school quality is identical to the output that is processed optimally by educational institutions. Because from *this output*, the public can judge whether the educational institution is of quality or not. Quality is said to be quality if it has superior quality output and is able to compete with others. The same thing was conveyed by Zamroni (2021), one of the things that is very urgent for schools is how to make the quality of the school continue to improve and develop so that it can compete with others. School quality improvement has the meaning of a systematic process that is continuous to improve the quality of the school and factors related to the quality of the school, with the aim that school targets can be achieved more effectively and efficiently. In the sense that it will continue to experience development according to the demands of the times.

#### **D. Conclusions**

This study yields three definitive key findings regarding the determinants of school quality in State Junior High Schools within Tebing Tinggi District. First, infrastructure management exerts a significant positive influence, indicating that effective maintenance, allocation, and utilization of physical facilities are foundational to institutional quality. Second, teacher performance is a critical driver, where pedagogical effectiveness and professional commitment directly elevate overall school standards. The most significant finding, however, is the synergistic effect: the combined influence of infrastructure management and teacher performance on school quality is substantially greater than the sum of their individual impacts. This reveals that optimal school quality is achieved not by excelling in one area alone, but through the integrated optimization of both material resources and human capital. The practical implication of these findings is the necessity for a holistic and systemic approach to school improvement. For school principals and district administrators, this means abandoning siloed initiatives in favor of integrated policies. Strategic plans must simultaneously address two fronts: (1) investing in systematic infrastructure management ensuring facilities are not only available but are effectively integrated into the learning process and (2) implementing comprehensive teacher development and performance support systems. This dual strategy ensures that high-quality facilities are leveraged by highly competent teachers, creating a multiplicative effect on educational outcomes. For future research, several recommendations emerge. To deepen causal understanding, a longitudinal or mixed-methods study is warranted, combining surveys with qualitative observations and interviews to explore how the management-teacher performance synergy functions in daily school operations. Research should also expand to investigate other potential mediating variables, such

as school leadership or community involvement, that might further explain school quality. Furthermore, replicating this study in diverse geographical or institutional contexts (e.g., private schools, vocational schools) would test the generalizability of this model and provide a more comprehensive framework for educational quality improvement across different settings.

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