



THE INFLUENCE OF MANAGERIAL COMPETENCE OF SCHOOL PRINCIPALS AND TEACHER PERFORMANCE ON THE QUALITY OF PUBLIC ELEMENTARY SCHOOLS IN WARUREJA DISTRICT, TEGAL REGENCY

Rina Taurisia¹, Supandi², Harjito³

Universitas Persatuan Guru Republik Indonesia Semarang^{1,2,3}

arjuna.sakti117@gmail.com

ABSTRACT

The quality of primary schools in Indonesia continues to face considerable challenges, as evidenced by the 2025 Education Report Card data from Warureja District, Tegal Regency, which reveals uneven achievement in literacy, numeracy, and learning process quality. This study aims to analyze the influence of principals' managerial competence and teacher performance on the quality of public primary schools in Warureja District, Tegal Regency, both partially and simultaneously. A quantitative approach with an ex post facto correlational design was applied to 157 teacher respondents selected through proportional random sampling. Data were collected using Likert-scale questionnaires and analyzed through multiple linear regression using IBM SPSS version 25. The findings demonstrate that principals' managerial competence significantly influences school quality ($t = 7.388$; $sig. = 0.000$), teacher performance significantly influences school quality ($t = 12.360$; $sig. = 0.000$), and both variables simultaneously exert a significant influence on school quality ($F = 101.553$; $sig. = 0.000$) with a combined contribution of 56.9%. These findings imply the urgency of synergistically strengthening principals' managerial competence and improving teacher performance as the primary strategy for enhancing the quality of primary education.

Keywords: managerial competence of school principal, teacher performance, school quality

INTRODUCTION

Sustainable and globally competitive nation development requires the availability of superior human resources, and this can only be realized through the implementation of high-quality education at every level. The constitutional mandate contained in Law Number 20 of 2003 Article 3 emphasizes that national education functions to develop abilities and form a dignified national character and civilization in order to educate the nation's life, with the aim of leading students to become people of faith and piety, noble character, capable, creative, independent, and responsible as democratic citizens. Within this framework, the quality of education occupies a very vital position as the main determinant of the achievement of national education goals in a comprehensive and equitable manner (Sidik, Rahmatuloh, Nurohmah, Setiawan, & Nurmallasari, 2024). The concept of education quality itself is understood as a relative and dynamic construct, which essentially boils down to the ability of educational units to meet and even exceed the expectations of stakeholders, especially the satisfaction of students and parents in obtaining high-standard educational services. In line with this view, the degree of quality of education is believed to be directly proportional to the quality of human resources formed, so that the responsibility for improving it does not solely rest on the government, but rather becomes the collective



obligation of the entire educational ecosystem which includes school principals, teachers, students, and the wider community (Sartika, Rukiyah, & Missriani, 2023).

The quality of education is operationally realized through the quality of schools as a unit providing formal education services. Sallis (2002) Conceptualize school quality as the capacity of educational institutions in providing learning services that not only meet, but also exceed national standards of education in three fundamental dimensions, namely *Input*, *Process*, and *Output*. The quality of education is a dynamic condition and is constantly evolving along with the fulfillment of standards in these three dimensions (Bramastia & Nurhadi Yasin, 2022). Dimensions *Input* including the availability of competent educators, learners, relevant curriculum, and adequate educational facilities and infrastructure; Dimensions *Process* refers to the overall learning activity; while the dimensions *Output* It is reflected in the competence of graduates who are able to continue to the next level of education and actively contribute to community life (Erfiyana, Sehabudin, & Gumilar, 2024). These three elements are intertwined and synergistically determine the degree of quality of a school. School quality is the result of a complex interaction between effective principal leadership, professional teacher performance, availability of adequate infrastructure, and a conducive school organizational climate (Harahap, Lapisa, Milana, & Sari, 2023). Quality education is a form of accountability of educational institutions to stakeholders, namely education that is able to meet national standards as well as the real needs of the community. Schools as formal organizations designed to optimize the learning process of students affirm that optimal teacher performance is a fundamental need that cannot be ignored in every educational unit (Fitria & Limgiani, 2024).

Among the various factors that affect the quality of schools, the managerial competence of school principals plays a very decisive and strategic role. The principal is not just an administrative figure, but the main driver of the school organization who is responsible for managing all resources efficiently, effectively, and sustainably for the realization of continuous and measurable quality improvement (Hapsari & Widhianningrum, 2016). Permendiknas Number 13 of 2007 explicitly affirms managerial competence as one of the core competencies that must be mastered by school principals, including the ability to prepare strategic planning, build and develop school organizations, manage resources optimally, and create an innovative and productive learning ecosystem. School principals who master managerial competence comprehensively are not only able to maintain institutional stability, but also able to accelerate changes that lead to sustainable quality improvement (Agus & Lutfiatul, 2022; Mahiroh & Abidin, 2023). The success of schools in achieving the expected quality is highly determined by the ability of the principal to carry out managerial functions which include planning, organizing, implementing, and supervising school programs in an integrated and consistent manner (Siregar, 2022). Noble in (Siregar, 2022) Placing the principal as the most strategic component of education in improving the quality of education, where the managerial functions include coordination of activities, program evaluation, data-based decision-making, and overall management of education personnel. The managerial function of the principal has even been proven to have a real and significant effect on improving teacher performance in basic education units (Siregar, 2022).

In addition to the managerial competence of school principals, teacher performance is another strategic variable that directly and tangibly determines the quality of learning



services in educational units. Law Number 14 of 2005 concerning Teachers and Lecturers Article 20 mandates that teachers are obliged to plan, implement, and assess a meaningful and quality learning process for students. Holistic teacher performance includes the ability to plan, implement, and evaluate learning in a structured, reflective, and continuous manner (Sanfo & Malgoubri, 2023). Professionalism and high teacher performance have been proven to have a direct impact on the quality of graduates produced while strengthening the reputation and trust of the public in the school (Nisa, Irmalasari, Nurhasan, & Kaimudin, 2025). Without the presence of quality and professional teachers, the ideal of improving the quality of education cannot be realized optimally, because the quality of education is closely dependent on the capacity, commitment, and dedication of teachers in carrying out their professional duties. Therefore, school principals have the responsibility to design various targeted and programmatic teacher empowerment strategies, because the continuous improvement of teacher performance ultimately has positive implications for the systemic improvement of the quality of education (Lasmi, Lian, & Eddy, 2025). Teacher performance is one of the most fundamental determining factors in the successful implementation of education and improving the quality of learning in educational units (Nisa, Irmalasari, Nurhasan, & Kaimudin, 2025). The urgency of this research is further strengthened by the empirical conditions identified at the State Elementary School of Warureja District, Tegal Regency based on the 2025 Education Report data. The data reveals that the achievement of school quality in this region is not yet in an even and satisfactory condition. In the literacy ability dimension, only 44% of schools are in the good category, while 48% are still in the medium category, and 8% are in the poor category. A more worrying condition can be seen in the dimension of numeracy ability, where only 15% of schools are categorized as good, while 67% are medium and 19% are lacking. The quality of the learning process has not been encouraging, where only 26% of schools are in the good category while 70% are still in the medium category. Although the instructional leadership dimension shows a relatively high achievement of 92% in the good category, the proportion dimension of school resource utilization for quality improvement actually places 89% of schools in the poor category. This gap indicates that resource management has not been fully oriented towards real and measurable improvement in the quality of learning, so achieving national education standards is still a serious challenge that requires systematic handling (Hamzah, 2021). The results of the interview with the Head of the Regional Coordinator of Warureja District also confirmed that academic supervision by the principal is still carried out on a limited basis, has not been accompanied by structured follow-up, and therefore has not had a significant impact on improving the quality of learning in the classroom. These problems show that the relationship between the managerial competence of school principals and teacher performance is the root of the problem of education quality that needs to be studied scientifically and in-depth. This study focuses on the competence of a school principal's managerial needs to be carried out in depth and measurably. Each school needs to implement criteria that are tailored to the needs and goals of the school through an agreed vision and mission. This study seeks to measure the extent to which the role and function of school principals in the managerial form.

Various previous studies have discussed the influence of managerial competence of school principals and teacher performance on school quality separately, but studies that simultaneously analyze these two variables by utilizing the latest Education Report



Database at the elementary school level, especially in the Warureja District area, Tegal Regency, have never been conducted before. This research gap is the academic foundation for the presence of this study. Based on the overall description, the study in this study measures the extent to which the managerial competence of the principal is able to affect the quality of the school, the performance of the teacher, the managerial competence of the principal to the performance of the teacher will simultaneously affect the quality of the State Elementary School in Warureja District, Tegal Regency. This research is expected to produce scientific contributions that not only enrich academic treasures in the field of education management, but also become a solid empirical foothold for policy makers in formulating measurable, directed, and valid, field data-based strategies to improve the quality of basic education.

RESEARCH METHODS

This study uses a quantitative approach with a correlational design *ex post facto*, namely research that examines the cause-and-effect relationship between variables based on natural conditions that have occurred without providing treatment or intervention to the research subject. This approach was chosen because the main objective of the study was to measure the strength of influence between the managerial competence of the principal (X1) and the performance of the teacher (X2) on the quality of the school (Y) objectively through numerical data and statistical testing that is structured and scientifically accountable (Scott, 2022).

The research population includes all public elementary school teachers in the Warureja District area, Tegal Regency, which totals 259 teachers from 27 public elementary schools. The number of samples was determined using *the Slovin* formula with an error tolerance level of 5%, so that a sample of 157 respondents was obtained. Sampling is carried out through *the proportional random sampling* technique, where the number of samples from each school is determined proportionally based on the comparison of the number of teachers in each school to the total population, then individual selection is carried out randomly using *the Sampling* feature in *the Analysis ToolPak* Microsoft Excel. This technique ensures that every teacher has an equal opportunity to be selected as a respondent, so that the sample obtained is representative and able to represent the conditions of the population proportionally and objectively. The research instrument used was a closed questionnaire with a *five-level Likert* scale, ranging from a score of 1 (*Very Not Appropriate*) to a score of 5 (*Very Appropriate*). There are three instruments developed, namely the school quality questionnaire (Y) which measures the dimensions *of input, process, and output* with 45 statements; the principal's managerial competency questionnaire (X1) which measures the dimensions *of technical skills, human skills, and conceptual skills* with 36 items of statement; and a teacher performance questionnaire (X2) which measures the dimensions of pedagogic, professional, social, and personality competencies with 60 statements. Before use, all instruments were tested on 30 respondents from outside the study sample to test validity using *Pearson's* Product Moment correlation and reliability using *Cronbach's Alpha* with a threshold of 0.6.

The data analysis technique was carried out through a series of prerequisite tests and hypothesis tests using IBM SPSS version 25. The prerequisite test consists of four stages. First, the normality test using *One-Sample Kolmogorov-Smirnov Test* to verify that the



residual data is normally distributed, where the test results show a significance value of 0.058 that exceeds the threshold of 0.05, so that the assumption of normality is met (Sianturi, 2025; Wara, Adziima, Nasrudin, & Pratama, 2025). Second, the linearity test using *Test for Linearity* that produces significance values *linearity* by 0.000 is good for the relationship YX1 and YX2, which indicates that the relationships between variables are significantly linear. Third, the heteroscedasticity test was carried out through analysis *scatterplot* between *standardized residual* and *standardized predicted value*, and the test results show a pattern of randomly scattered points without forming a specific pattern, so that the regression model is free from heteroscedasticity problems. Fourth, the multicollinearity test is carried out by observing the value of *Variance Inflation Factor* (VIF) and *Tolerance*, where the test results resulted in a VIF value of 1,001 and *Tolerance* of 0.999 for both independent variables, which is well below the VIF threshold > 10 and *Tolerance* < 0.10 , so that no symptoms of multicollinearity were found (Ghozali, 2016). Once all the prerequisite tests were met, the analysis was continued with the hypothesis test using multiple linear regression analysis with the equation $Y = a + b_1X_1 + b_2X_2$. Partial test (*T test*) is used to test the effect of each independent variable individually on the bound variable, whereas simultaneous tests (*F test*) was used to test the influence of the two independent variables together on school quality with a significance level of 5%. The entire analysis procedure is systematically designed to produce valid, reliable, and generalizable findings on the population of elementary school teachers in Warureja District, Tegal Regency.

RESULTS AND DISCUSSION

Description of Research Data

This study involved 157 respondents of State Elementary School teachers in Warureja District, Tegal Regency. Data collection produced scores for three variables, namely school quality (Y), principal's managerial competence (X1), and teacher performance (X2). A summary of the descriptive statistics of the three variables is presented in the following table.

Table 1. Descriptive Statistics of Research Variables

Variabel	N	Minimum	Maximum	Red	Std. Deviation
School Quality (Y)	157	38,00	190,00	114,00	39,158
KS Managerial Competence (X1)	157	34,00	160,00	—	—
Teacher Performance (X2)	157	35,00	175,00	—	—

Source: SPSS data processing results version 25

The descriptive data above indicates a fairly high variation in the three variables, which is reflected in the wide range of minimum and maximum scores and the standard score of school quality deviation of 39.158.

Analysis Prerequisites Test

Before the hypothesis test is carried out, a series of prerequisite tests are carried out to ensure the validity of the regression model. The results of the normality test using the *One-Sample Kolmogorov-Smirnov Test* produced an *Asymp. Sig. (2-tailed)* value of 0.058,



which exceeded the significance limit of 0.05, so that the residual data was declared to be normally distributed. The results of the linearity test showed a *significance value* of 0.000 for the relationship between Y to X1 and Y to X2, which indicates that the relationship between variables is significantly linear. The recapitulation of the results of the linearity test is presented in the following table.

Table 2. Linearity Test Results

Variable Relationships	F Linearity	Sig. Linearity	Sig. Deviation from Linearity	Remarks
Y * X1	21,896	0,000	0,873	Linear
Y * X2	107,890	0,000	0,573	Linear

Source: SPSS data processing results version 25

The results of the heteroscedasticity test through a *scatterplot* between *standardized residual* and *standardized predicted value* show a pattern of randomly scattered points without forming a systematic pattern, as shown in the following figure.

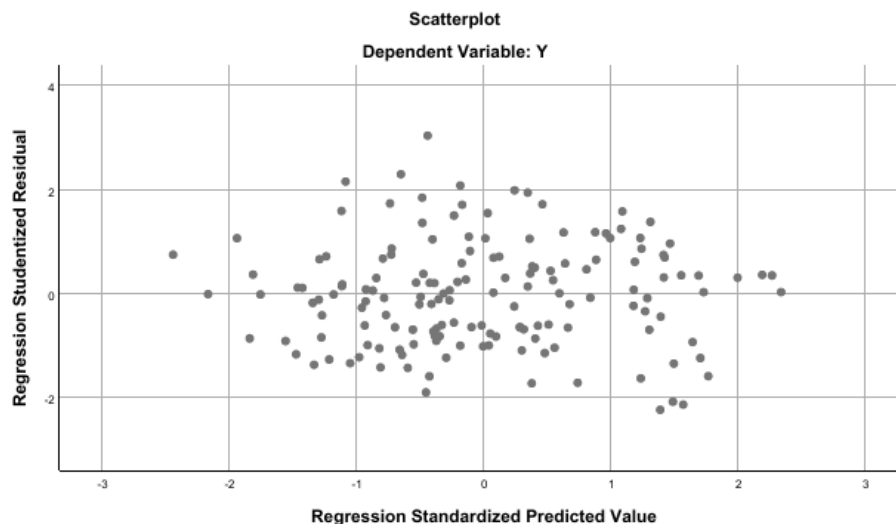


Figure 1. Scatterplot Heteroscedasticity Test

The results of the multicollinearity test resulted in a *Tolerance* value of 0.999 and a *Variance Inflation Factor* (VIF) of 1.001 for both independent variables, which were overall far from the critical threshold (VIF > 10 and *Tolerance* < 0.10). This condition confirms that the regression model is free of the symptoms of multicollinearity. A recapitulation of the results of the multicollinearity test is presented in the following table.

Table 3. Multicollinearity Test Results

Variabel	Tolerance	LIVE	Remarks
KS Managerial Competence (X1)	0,999	1,001	Multicollinearity does not occur
Teacher Performance (X2)	0,999	1,001	Multicollinearity does not occur

Source: SPSS data processing results version 25



Hypothesis Test Results

Hypothesis testing was carried out using multiple linear regression analysis. The results of the regression model analysis as a whole are presented in the following table.

Table 4. Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,754	0,569	0,563	25,881

Source: SPSS data processing results version 25

The value of the determination coefficient (R Square) of 0.569 showed that 56.9% of the variation in school quality was able to be explained together by the variables of the principal's managerial competence and teacher performance, while the remaining 43.1% was influenced by other variables that were not studied in this study.

Table 5. Simultaneous Test Results (F Test)

Model	Sum of Squares	df	Mean Square	F	Say.
Regression	136051,002	2	68025,501	101,553	0,000
Residual	103156,998	154	669,851		
Total	239208,000	156			

Source: SPSS data processing results version 25

The F value of 101.553 with a significance of 0.000 (< 0.05) indicates that the managerial competence of the principal and the performance of the teacher simultaneously have a significant effect on the quality of the school.

Table 6. Partial Test Results (t-Test) and Regression Coefficient

Variabel	B	Std. Error	Beta	t	Say.
(Constant)	-2,933	8,728		-0,336	0,737
KS Managerial Competence (X1)	0,458	0,062	0,391	7,388	0,000
Teacher Performance (X2)	0,695	0,056	0,654	12,360	0,000

Source: SPSS data processing results version 25

Based on the above results, the multiple linear regression equation formed is as follows.

$$Y = -2,933 + 0,458X_1 + 0,695X_2$$

The equation means that every one increase in the principal's managerial competence will increase the quality of the school by 0.458 units, and every increase in one unit of teacher performance will increase the quality of the school by 0.695 units, assuming that other variables are constant. Partially, the variable X1 produces a calculated t-value of 7.388 with a significance of 0.000 (< 0.05), so the first hypothesis is accepted. The variable X2 produces a t-value of 12.360 with a significance of 0.000 (< 0.05), so the second hypothesis is accepted.



The Influence of Principals' Managerial Competence on School Quality

The managerial competence of school principals has been proven to have a positive and significant influence on the quality of State Elementary Schools in Warureja District, Tegal Regency. These findings emphasize that the excellence of school principals in carrying out managerial functions in an integrated manner including strategic planning, resource organization, program implementation, and continuous supervision significantly contributes to improving the quality of educational services in basic education units. The principal who masters *technical skill*, *human skill*, and *conceptual skill* integratively it has been proven to be able to mobilize all potential school resources optimally so as to produce high-quality educational output. Comprehensive mastery of managerial competencies allows principals not only to maintain institutional stability, but also to accelerate changes that lead to quality improvement in a planned and measurable manner. The managerial competence of school principals is a determining factor that directly determines the institutional capacity of schools in achieving quality standards set nationally (Laela, Hanafi, & Sudadio, 2023).

The significant influence of the competence of school principals on the quality of public elementary schools is also confirmed through empirical studies in various regions with diverse contextual characteristics (Khusnawati, Kusumaningsih, & Miyono, 2024). The managerial capabilities of school principals play a strategic role in accelerating the improvement of education quality in a sustainable manner, because effective school principals are able to direct all the energy of the school organization towards measurable and realistic quality targets (Wahyudi, Nasith, & Bashith, 2025). Strong managerial abilities of principals have a direct impact on improving the professional capacity of teachers, which ultimately leads to overall and systemic improvement of the quality of learning (Lasmi, Lian, & Eddy, 2025). Implicitly, these findings demand serious attention to the development of managerial competence of school principals through structured training, supervision, and mentoring programs, because a strong managerial role has proven to be the main driver of the implementation of real educational quality improvement in the field (Trispiyanti, Arafat, & Eddy, 2023).

The Influence of Teacher Performance on School Quality

Teacher performance has been proven to contribute a more dominant influence than the managerial competence of school principals on school quality. The dominance of teacher performance contributes to this emphasizes the strategic position of teachers as the spearhead of the implementation of learning that is directly in contact with the quality of students' learning experience every day. Teachers who display high performance reflected in superior pedagogic, professional, social, and personality competencies consistently produce a meaningful learning process, which in turn encourages a measurable improvement in the quality of educational outputs and outcomes. Without the presence of high-quality and dedicated teachers, efforts to improve the quality of education will never achieve optimal results even though various programs and policies have been designed to the best of their ability. Improving the performance of school residents, especially teachers, is the main instrument in the implementation of a sustainable and programmatic school quality culture (Erfiyana, Sehabudin, & Gumilar, 2024).



Professionalism and high teacher performance have a direct impact on the quality of graduates produced while strengthening the public's reputation and trust in educational institutions (Dewi & Khotimah, 2020). Optimal teacher performance is a result of a combination of competencies, effective principal leadership support, and an organizational climate conducive to the growth of professionalism (Mardiana, Anas, Simbala, Abbas, & Nur, 2024). In practical terms, these findings imply the urgency of systematically developing teacher professionalism through continuous academic supervision, training programs based on real needs in the field, and the creation of a conducive collaborative learning culture in the school environment, because the continuous improvement of teacher performance ultimately has positive implications for the improvement of the quality of education systemically (Sari, Juliejantiningasih, & Maryanto, 2024).

The Simultaneous Influence of Principals' Managerial Competence and Teacher Performance on School Quality

Simultaneously, the managerial competence of principals and teacher performance together has been shown to have a significant influence on school quality, with a combined contribution that is very substantial in explaining the variation in school quality. These findings confirm that school quality is not the product of a single factor, but rather the result of a synergistic interaction between effective managerial leadership and the performance of highly professional and dedicated teachers. Both operate in a complementary manner and strengthen each other in forming a quality-oriented school ecosystem. A principal, who is managerially competent, is able to create an institutional condition that allows teachers to work optimally, while a high-performing teacher is a tangible manifestation of the quality of managerial leadership run by the principal. The managerial competence of school principals together with other supporting variables together contributes significantly to the improvement of the quality of education that is measurable and sustainable (Sari, Juliejantiningasih, & Maryanto, 2024).

School quality is a result of the complex interaction of effective principal leadership and professional teacher performance in a conducive organizational ecosystem (Harahap, Lapisa, Milana, & Sari, 2023). The empirical condition in Warureja District, which shows that most schools are still in the medium category in the dimensions of literacy, numeracy, and quality of the learning process, further strengthens the relevance of this finding as a strategic foothold for policymakers in designing targeted and integrated quality improvement interventions. The implementation of a strong internal quality assurance system, driven by competent school principals and supported by high-performance teachers, is an absolute prerequisite for the realization of a truly quality basic education unit that is able to meet the real needs of the community (Irnawati, Haryati, & Wuryandini, 2025). Thus, the synergy between strengthening the managerial competence of school principals and improving teacher performance simultaneously is the most effective and efficient intervention strategy in encouraging the improvement of the quality of basic education in Warureja District, Tegal Regency in a comprehensive and sustainable manner (Hamzah, 2021).



CONCLUSION

Based on the results of data analysis and discussion that have been described, this study produced three substantive findings. First, the managerial competence of school principals has a positive and significant effect on the quality of State Elementary Schools in Warureja District, Tegal Regency, which is evidenced by a t-count value of 7.388 with a significance of 0.000. Second, teacher performance has a positive and significant effect on school quality with a t-score of 12.360 and a significance of 0.000, as well as showing a more dominant contribution than the principal's managerial competency variable. Third, the managerial competence of the principal and the performance of the teacher simultaneously have a significant effect on the quality of the school, as evidenced by the calculated F value of 101.553 with a significance of 0.000 and a determination coefficient of 56.9%, which means that more than half of the variation in school quality can be explained by the two variables together.

Based on these findings, several specific recommendations were put forward as a follow-up. The Tegal Regency Education Office needs to design a program to improve the managerial competence of school principals based on real needs assessments in the field, especially in the aspect of school resource management to improve quality, considering that the 2025 Education Report data shows that 89% of schools are still categorized as lacking in the dimension of resource utilization. School principals need to intensify the implementation of academic supervision accompanied by structured follow-up to encourage continuous improvement of teacher performance. For the next researcher, it is recommended to explore moderation or mediation variables such as the school organizational climate, teachers' work motivation, or school quality culture that have the potential to strengthen or weaken the relationship between the principal's managerial competence and teachers' performance on school quality, so that a more comprehensive and applicable explanatory model is obtained.

BIBLIOGRAPHY

- Agus, T., & Lutfiatul, A. (2022). The influence of the managerial competence of the principal on the performance of teachers at Tahfizh Al-Basyir Junior High School in Bogor. *Tadbiruna Journal*, 1(2). <https://doi.org/10.51192/tadbiruna.v1i2.273>
- Bramastia, & Nurhadi Yasin. (2022). Madrasah Education Quality Management Problems in the Input-Process-Output Perspective. *Risâlah, Journal of Islamic Education and Studies*, 8(3), 1070–1083. <https://doi.org/10.31943/jurnalrisalah.v8i3.325>
- Dewi, R., & Khotimah, S. H. (2020). The Influence of Professionalism and Work Discipline of Teachers on Improving the Quality of Education in Elementary Schools. *ELEMENTARY: Islamic Teacher Journal*, 8(2), 279. <https://doi.org/10.21043/elementary.v8i2.7839>
- Erfiyana, E., Sehabudin, B., & Gumilar, D. (2024). Implementation of School Quality Culture through a Total Quality Management Approach. *Tahsinia*, 5(7), 1055–1066. Retrieved from <https://jurnal.rakeyansantang.ac.id/tahsinia/article/view/380%0Ahttps://jurnal.rakeyansantang.ac.id/tahsinia/article/download/380/323>
- Fitria, A. S., & Limgiani. (2024). The Effect of Workload and Work Discipline on Teacher Performance. *Journal of Management and Economics*, 1(3), 833–842.



- <https://doi.org/10.61722/jrme.v1i3.2268>
- Ghozali, I. (2016). *Application of Multivariate Analysis SPSS 23*.
- Hamzah. (2021). Management of School-Based Education Quality Improvement. *Journal of Scholarly Development*, 2(2). <https://doi.org/10.46838/jbic.v2i2.116>
- Hapsari, P., & Widhianningrum, P. (2016). The Effect of Field Experience Practice on the Performance of Prospective Teacher Students. *Journal of Accounting and Business Education*, 2(1). <https://doi.org/10.26675/jabe.v2i1.6050>
- Harahap, R. R., Lapisa, R., Milana, & Sari, D. Y. (2023). The influence of the principal's leadership and organizational culture on the professionalism of teachers. *Journal of Education Quality Circle*, 8(2), 226–231. <https://doi.org/https://doi.org/10.51169/ideguru.v8i2.537>
- Irnowati, D., Haryati, T., & Wuryandini, E. (2025). Implementation of SPMI in Improving School Quality in MAN 2 Rembang. *ACADEMIC: Journal of Humanist Students*, 5(1), 449–457. <https://doi.org/10.37481/jmh.v5i1.1247>
- Khusnawati, A., Kusumaningsih, W., & Miyono, N. (2024). The Influence of Principal Competence and Community Participation on the Quality of State Elementary Schools in Ngaliyan District, Semarang City. *Journal of Learning Innovation in Schools*, 5(2), 805–812. <https://doi.org/10.51874/jips.v5i2.296>
- Laela, S., Hanafi, S., & Sudadio, S. (2023). Managerial Competence of School Principals in Improving the Quality of Public Elementary Schools. *Journal of Educatio FKIP UNMA*, 9(2), 599–606. <https://doi.org/10.31949/educatio.v9i2.4868>
- Lasmi, L., Lian, B., & Eddy, S. (2025). Managerial Ability of School Principals in Improving Teacher Performance at State Elementary School 41 Plus Banyuasin. *Edu Cendikia: Scientific Journal of Education*, 5(02), 666–674. <https://doi.org/10.47709/educendikia.v5i02.6819>
- Mahiroh, Ktafi, M., & Abidin, M. (2023). Principal's leadership in the implementation of school-based management. *Pendas: Scientific Journal of Basic Education*, 8(1), 3264–3268. <https://doi.org/10.1093/oseo/instance.00208803>
- Mardiana, M., Anas, I., Simbala, W., Abbas, A. L., & Nur, A. (2024). Analysis of the Role of School Supervisors and Managerial Competence of School Principals in Improving Teacher Performance. *Journal of Education Research*, 5(1), 590–600. <https://doi.org/10.37985/jer.v5i1.833>
- Nisa, K., Irmalasari, Nurhasan, & Kaimudin. (2025). Education Quality Management in Improving Human Resources. *Indonesian Journal of Literacy (JLI)*, 2(7), 51–60. Retrieved from <https://jli.staiku.ac.id/index.php/st/article/view/89>
- Sallis, E. (2002). Total Quality Management in Education. In *Kogan Page* (p. 168). Kogan Page. Retrieved from <https://books.google.co.id/books?id=o0w9AAAAIAAJ>
- Sanfo, J.-B. M. B., & Malgoubri, I. (2023). Teaching quality and student learning achievements in Ethiopian primary education: How effective is instructional quality in closing socioeconomic learning achievement inequalities? *International Journal of Educational Development*, 99, 102759. <https://doi.org/https://doi.org/10.1016/j.ijedudev.2023.102759>
- Sari, D. P., Juliejantiningih, Y., & Maryanto, M. (2024). The Influence of Principals' Managerial Competence, Teachers' Commitment and the Role of School Committees on Improving the Quality of Education in Public Elementary Schools. *Journal of Learning*



- Innovation in Schools*, 5(2), 438–447. <https://doi.org/10.51874/jips.v5i2.234>
- Sartika, N., Rukiyah, S., & Missriani, M. (2023). The Problem of Low Quality of Education in Indonesia. *Journal Innovation In Education*, 1(4), 57–64. <https://doi.org/10.59841/inoved.v1i4.581>
- Sianturi, R. (2025). Normality test as a condition for hypothesis testing. *SIGMA JOURNAL OF LEARNING AND MATHEMATICS (JPMS)*, 11, 1–14. <https://doi.org/10.36987/jpms.v11i1.7091>
- Sidik, W. P., Rahmatuloh, R., Nurohmah, V. S., Setiawan, A., & Nurmalasari, N. (2024). Efforts to improve the quality of the school. *Innovative and Cultured Scholars*, 1(3), 220–226. <https://doi.org/10.59996/cendib.v1i3.274>
- Siregar, M. S. (2022). Managerial Competence of School Principals in Improving the Quality of Learning. *Curere*, 64(1), 57–67. Retrieved from <https://journal.an-nur.ac.id/index.php/unisanjournal/article/view/2449>
- Sugiyono. (2022). Qualitative qualitative research methods and R&D. *Alfabeta, Bandung*.
- Trispiyanti, D., Arafat, Y., & Eddy, S. (2023). Implementation of Improving the Quality of Education through the Managerial Role of School Principals at SDN 212 Palembang City. *Naturalistic: Journal of Education and Learning Studies and Research*, 8(1), 115–126. <https://doi.org/10.35568/naturalistic.v8i1.3258>
- Wahyudi, A. N., Nasith, A., & Bashith, A. (2025). Managerial Competence of School Principals in Improving the Quality of Education. *JiIP - Scientific Journal of Educational Sciences*, 8(7), 6961–6967. <https://doi.org/10.54371/jiip.v8i7.8299>
- Wara, S. S. M., Adziima, A. F., Nasrudin, M., & Pratama, A. R. (2025). Evaluation of Normality Test Performance on Variety of Distribution and Sample Size. *Journal of Differential Medicine*, 7(2), 172–183. <https://doi.org/10.35508/jd.v7i2.24042>

