Journal of Social Work and Science Education
Volume 7 (2) 2026, 983-996
E-ISSN 2723-6919, P-ISSN 2746-0827

Determinants of Educational Quality in Vocational Schools: The Role of Principal Leadership, Teacher Competence, and School Well-Being in Merlung, Indonesia

Luthfiani[1,2], Madhakomala[1], Hendri Budi Utama[2]
[1]Universitas Negeri Jakarta, Jakarta, Indonesia, [2]Universitas Negeri Padang, West Sumatra, Indonesia

Corresponding author e-mail: luthfiani@fip.unp.ac.id

Article History: Received on 13 December 2025, Revised on 30 December 2025, Published on 7 April 2026

Abstract: Indonesia has made substantial efforts to improve the quality of education by strengthening leadership, developing teacher competencies, and creating supportive school environments. However, gaps in school performance persist, particularly in vocational schools located in developing areas. This study aimed to analyze the determinants of education quality by examining the influence of principal leadership, teacher competency, and school well-being in vocational high schools in Merlung Regency, Jambi Province. By using a quantitative design, the data were collected from 40 teachers through a validated questionnaire that measured the role of the principal, teacher competency, school well-being, and education quality based on national education standards. The data was analyzed using SPSS 25 to find descriptive statistics, classical assumption testing, multiple regression, and analysis of determination. The results indicated that all three variables: principal leadership, teacher competency, and school well-being jointly have a significant simultaneous effect on education quality ($F = 3.037$, Sig. = 0.041). However, a partial t-test indicated no significant individual effect of each variable on education quality. The coefficient of determination indicated that 20.2% of the variance in educational quality is explained by the combined predictors. This finding suggested that while leadership, teacher competency, and school well-being collectively contribute to school quality, none of the three independently demonstrated strong predictive power, likely due to limited optimization of leadership practices, inadequate teacher development, and inconsistencies in school well-being. This study highlighted the need for more responsive leadership, continuous professional development, and a stronger emphasis on creating a supportive school climate to improve the overall quality of vocational education.

Keywords: Educational Quality, Principal Leadership, School Well-Being, Teacher Competence, Vocational Schools

A. Introduction

The 2018 PISA results showed that Indonesia and the Philippines were in the bottom ten. However, the 2022 PISA results show that Indonesia is ranked above the Philippines and Thailand (Ministry of Education, Culture, Research, and Technology, 2023). The government provided this support through the distribution of ICT devices, training to improve teacher competency, and adjustments to more adaptive materials and curricula, especially during the pandemic. These results demonstrate that the government has made significant efforts to improve the quality of education. These government efforts must continue in the hope that quality education in Indonesia will be sustainable. This is in line with Mhlanga and Moloi (2020), who explained that realizing educational transformation must be supported by leadership principles that include a clear vision, human resource readiness, and a commitment to sustainable change.

The principal is a leader who will determine the quality of education in the school. A competent principal will support teachers to improve student learning outcomes. Alanoglu et al. (2022) argued that resistance to change often arises when teachers are not actively involved in the change process and do not receive ongoing mentoring. Mergonia et al. (2026) stated that improved school performance occurs when the principal can inspire teachers to work effectively. Therefore, the principal must master the various skills needed for a quality school. Understanding the role of the principal is expected to help the principal determine the appropriate leadership attitudes and approaches to use in the school. Yukl and Gardner (2020) state that effective leadership enables the principal to adapt and overcome various situations and challenges that arise.

Teachers are considered key figures in the quality of education. According to Law Number 14 of 2005 concerning Teachers and Lecturers, teacher competencies include pedagogical competency, professional competency, personality competency, and social competency. Teachers who master these four competencies will create better quality learning. Therefore, they need support from their environment to develop themselves as professional teachers. Teachers who learn from their communities and receive support from schools and the government have demonstrated professional development in teaching (Darling-Hammond et al., 2017). However, Fullan (2007) argued that external support has not yet shown a sustained improvement in teacher teaching. In line, Matuscheck and Hackenberg (2023) emphasized that unsustainable and context-inappropriate training fails to build teacher confidence and competence.

For teacher professional development to be effective, it is necessary to analyze teacher needs and policies that support them in becoming experts in their fields. Well-being is another factor that must be considered when talking about quality. Konu and Rimpel (2002) defined well-being as the connection between teaching and education, then

learning and achievement. Furthermore, Van Loon-Dikkers (2024) categorized school well-being into three parts: 1) attachment to school, which is related to a sense of belonging; 2) teacher well-being, including teachers' sense of safety and comfort at school, good relationships between teachers and an environment that supports teacher development; 3) student well-being, referring to students' sense of safety and relationships with teachers and fellow students. Schools that prioritize well-being will improve the quality of education (Ruggeri et al. 2020).

Fomba et al. (2021) explain that low-quality education is a crucial problem facing many developing countries. Quality is the assurance that services provided meet standards. Juran and Goffrey (1999) explain that quality relates to standardized products that meet customer satisfaction. In education, quality is defined as the efficiency and effectiveness of educational services provided by an institution, while still adhering to established standards (Pedraja-Rejas et al. 2023). Therefore, quality must be continuously monitored to maintain its quality. Donkoh (2023) states that quality is a space for evaluating teacher pedagogy and student performance. Through this evaluation, policymakers can understand the needs of teachers and students (Darling-Hammond et al. 2017).

Most research on educational quality focuses on the role of the principal and teacher competency. This is in line with Day et al. (2016), who explain that principal leadership can improve the quality of learning and positively contribute to the well-being of teachers and students. However, research directly exploring the relationship between quality and school well-being is still very limited. However, Kesici and Ceylan (2020) stated that a pleasant school environment can improve academic success. This ensures that everyone at school will feel safe and happy, which will increase healthy hormones. Schools are no longer just places for learning but also pleasant environments that can help improve the quality of life (Kesici & Cavus, 2019). For this reason, researchers are interested in analyzing the influence of school well-being on educational quality. This study will examine in depth how the combination of the principal's role, teacher competency, and school well-being work to improve the quality of education at vocational high schools in Merlung District, West Tanjung Jabung Regency, Jambi Province.

B. Methods

This study employed a quantitative explanatory research design using a cross-sectional survey approach. The research was conducted in two state vocational high schools located in Merlung Regency, Jambi Province, Indonesia. The participants consisted of 40 teachers selected from both vocational schools. Data were collected using a structured questionnaire comprising four scales: the principal's role, adapted from Riani and Ain (2022); teacher competence from Luthfiani et al. (2022), school well-being based on the model developed by Konu and Rimpela (2002), and educational quality measured using

indicators derived from the Indonesian National Education Standards (SNP). All instruments underwent validity testing before data collection.

The collected data were analyzed using SPSS version 25. Descriptive statistics were used to describe respondent perceptions, followed by classical assumption tests including normality, multicollinearity, heteroscedasticity, and linearity. Hypothesis testing was conducted using multiple regression analysis to examine both the simultaneous and partial effects of principal leadership, teacher competence, and school well-being on educational quality. The coefficient of determination (R^2) was used to assess the explanatory power of the model. Then the results of the statistical analyses were interpreted to provide a comprehensive understanding of the factors influencing educational quality in vocational high schools in Merlung.

C. Results and Discussions

Results

1. Descriptive Analysis

The descriptive analysis data results can be seen in the following table:

Table 1. Descriptive Statistics

	Mean	Std. Deviation	N
Y Quality of Education	3.1643	.16669	40
X1 Principal's Role	3.3107	.22152	40
X2 Teacher Competency	3.3000	.13183	40
X3 School Well-Being	3.1625	.12223	40

The descriptive results showed that, overall, respondents gave quite positive responses to all the variables measured in this study. The average score for Quality of Education was 3.16, which indicated that most respondents felt the level of education in their school was generally good. The standard deviation was small, which implied their answers were also quite similar to each other. Among all variables, the Principal's Role (X1) has the highest mean (3.31). This suggested that respondents tend to see the principal as playing an active and positive role in supporting the school. Although there was some variation in responses, most of them still shared similar views. Teacher Competency (X2) also received a high average score (3.30). This reflected that teachers were generally capable of carrying out their duties. The relatively small standard deviation indicated that most respondents agree on a good level of teacher competency. Meanwhile, School Well-Being (X3) had an average of 3.16, indicating that students and teachers felt comfortable and

supported in the school environment. The answers were consistent; most respondents were similarly experienced in the school climate.

2. Prerequisite Analysis Testing

Normality Test

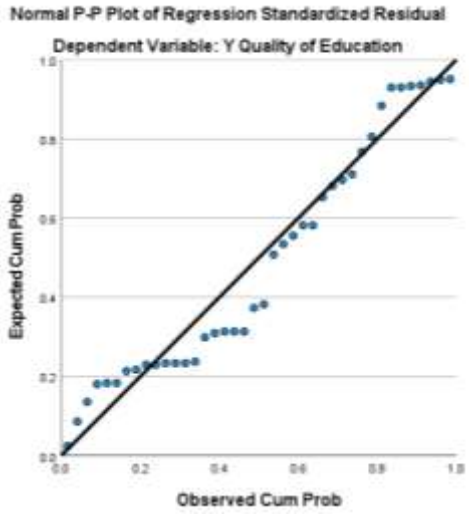

Figure 1. P-P Plot

The picture above, Normal P-P Plot of standardized residuals, showed that most data points were close to the diagonal reference line, indicating the pattern of residuals had a normal distribution. Although there were minor deviations at the lower and upper ends of the line, these variations are relatively small and still within an acceptable range. Overall, the distribution of residuals was consistent with the assumption of normality. The general alignment of the points with the diagonal suggested that the regression was normal. In conclusion, the P-P plot assumption of normality was adequately met.

Multicollinearity Test

Multicollinearity is a classic assumption test used to identify the feasibility of a regression model. This test is performed to determine the perfect relationship between independent variables.

Table 2. Multicollinearity Test Results

Coefficients[a]							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1(Constant)	1.662	1.039		1.600	.118		
X1 Principal Role	.203	.117	.270	1.734	.091	.917	1.090
X2 Teacher Competency	.359	.192	.284	1.872	.069	.966	1.035
X3 School Well-Being	-.112	.210	-.082	-.533	.598	.937	1.067
a. Dependent Variable: Y Quality of Education							

a. The principal role tolerance value was 0.917 > 0.10, so there was no multicollinearity, while the VIF value was 1.090<10, so there was no multicollinearity in the proposed regression model;
b. The teacher competency tolerance value was 0.966 > 0.10, so there was no multicollinearity, while the VIF value was 1.035<10, so there was no multicollinearity in the proposed regression model;
c. The school well-being tolerance value was 0.937 > 0.10, so there was no multicollinearity, while the VIF value was 1.067<10, so there was no multicollinearity in the proposed regression model.

Heteroscedasticity Test with Scatterplot

This test is used to determine whether there is a difference in variance in the residuals of all observations in the regression model.

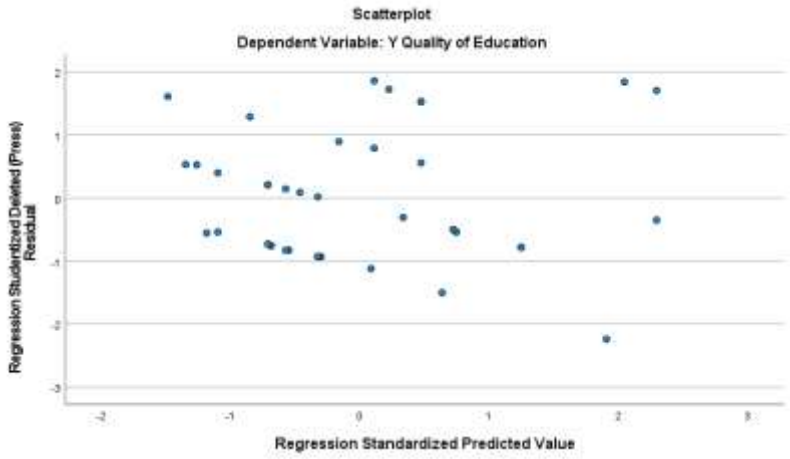

Figure 2. Scatterplot

Based on the scatterplot pattern above, the data points appeared to have been distributed randomly and did not form a specific pattern. It is assumed that the variance difference between the residual values is met.

Linearity Test

The linearity test is conducted to determine the linear relationship between the dependent variable and each independent variable being tested. A linear regression model cannot be used if it does not meet the linearity requirements.

Table 3. Linearity Test Results Between Quality of Education and Principal Role

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Y Quality of Education * X1 Principal's Role	Between Groups	(Combined)	.252	5	.050	2.065	.094
		Linearity	.125	1	.125	5.106	.030
		Deviation from Linearity	.128	4	.032	1.305	.288
	Within Groups		.831	34	.024		
	Total		1.084	39			

In Table 3, the deviation from linearity sig. 0.288 > 0.05 indicates a significant linear relationship between the quality of education and the principal's role.

Table 4. Linearity Test Results Between Quality of Education and Teacher Competency

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Y Quality of Education * X2 Teacher Competency	Between Groups	(Combined)	.159	3	.053	2.067	.122
		Linearity	.124	1	.124	4.848	.034
		Deviation from Linearity	.035	2	.017	.676	.515
	Within Groups		.924	36	.026		
	Total		1.084	39			

In Table 4, the deviation from linearity sig. 0.515 > 0.05 indicates a significant linear relationship between the quality of education and teacher competency.

Table 5. Linearity Test Results Between Quality of Education and School Well-Being

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Y Quality of Education * X3 School Well Being	Between Groups	(Combined)	.043	3	.014	.496	.687
		Linearity	.033	1	.033	1.152	.290
		Deviation from Linearity	.010	2	.005	.169	.846
	Within Groups		1.041	36	.029		
	Total		1.084	39			

In Table 5, the deviation from linearity sig. 0.846 > 0.05 indicates a significant linear relationship between the quality of education and school well-being.

Hypothesis Testing

Hypothesis testing in this study was conducted through multiple regression analysis to determine whether two or more independent variables (X) influence the dependent variable (Y). Regression analysis conducted using simultaneous tests/F-tests, partial tests/t-tests, and coefficients of determination.

Simultaneous tests/F-tests

Simultaneous significance testing was conducted using F-tests, based on the ANOVA table results. The table results will show the simultaneous significance of the principal's role, teacher competence, and school well-being variables in their influence on the quality of education.

Hypothesis:

H_0 = If the significance value (Sig) < probability 0.05 indicates that variable X has a simultaneous effect on variable Y, or the hypothesis is accepted.

H_1 = If the significance value (Sig) > probability 0.05 indicates that variable X does not have a simultaneous effect on variable Y, or the hypothesis is rejected.

Table 6. Simultaneous Test/F-Test Results

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.219	3	.073	3.037	.041[b]
	Residual	.865	36	.024		
	Total	1.084	39			

a. Dependent Variable: Y Quality of Education

b. Predictors: (Constant), X3 School Well Being, X2 Teacher Competency, X1 Principal's Role

The table showed the results of the F-test with a significance value of 0.041< 0.05; thus, H_1 was accepted, and H_0 was rejected. This concluded hypothesis was accepted that the principal's role, teacher competence, and school well-being simultaneously affected the quality of education.

Partial tests/t-tests

The t-test is conducted to determine whether the independent variable (X) partially has an influence on the dependent variable (Y).

Hypothesis:
H_0 = If the significance value (Sig) < probability 0.05 indicates that variable X has an effect on variable Y, or the hypothesis is accepted.
H_1 = If the significance value (Sig) > probability 0.05 indicates that variable X does not affect variable Y, or the hypothesis is rejected.

Table 7. Partial Test/T-Test Results

Coefficients[a]							
Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	1.662	1.039		1.600	.118		
X1 Principal Role	.203	.117	.270	1.734	.091	.917	1.090
X2 Teacher Competency	.359	.192	.284	1.872	.069	.966	1.035
X3 School Well-Being	-.112	.210	-.082	-.533	.598	.937	1.067
a. Dependent Variable: Y Quality of Education							

The significance value of all variables (X1 Principal's Role, X2 Teacher Competency, X3 School Well-Being) > 0.05. H_1 is rejected, and H_0 is accepted, indicating that all variables did not have a significant effect on the quality of education.

Coefficient of Determination Test

The coefficient of determination is a measure that indicates the proportion of changes in the independent variable, or X, that reflect changes in the dependent variable, or Y. The coefficient of determination value is found in the model summary table and is written as R-squared.

Table 8. Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.449[a]	.202	.135	.15499	1.537

a. Predictors: (Constant), X3 School Well Being, X2 Teacher Competency, X1 Principal's Role
b. Dependent Variable: Y Quality of Education

Based on the model summary above, the R-square value was 0.202. This indicated that 20.2% of the variables (X), the principal's role, teacher competence, and school well-being, have a simultaneous influence on the variable (Y) educational quality. The adjusted R-square value was 0.135. This represented 13.5% of the model, indicating that the predictors make a significant, though not extensive, contribution to explaining variation in the outcome.

Discussion

The F-test results indicated that the overall regression model is statistically significant, as evidenced by a significance value (Sig.) of 0.041 < 0.05. This indicated that the variables of the principal's role, teacher competence, and school well-being simultaneously have a significant influence on the quality of education in public vocational schools (SMK) throughout Merlung District, West Tanjung Jabung Regency, Jambi Province. In other words, changes in the principal's role, teacher competence, and school well-being affected the quality of education in these vocational schools. These findings aligned with Knowles (2011), who mentioned in his book that customer focus, leadership focus, and people focus are some of the principles that need to be understood in Quality Management practice.

The role of the principal, teacher competence, and school well-being are crucial factors that support educational quality. If these three components are not met, users of educational services will doubt the quality of education at that school. As stated by Schweder and Raufelder (2024), quality is the perception of teachers and students formed through classroom learning experiences, teaching methods, and the academic atmosphere. Therefore, ensuring that the needs of both internal and external recipients of educational services are met is essential to ensure their satisfaction with the educational services provided. This is in line with Juran and Gofrey (1999), who stated that quality can only be ensured if customers are satisfied.

The t-test results showed a significant value (Sig.) for the principal's role, teacher competence, and school well-being > 0.05. This indicated these variables did not significantly influence the quality of education, partially. There are several reasons for

this situation. First, the principal's role is still not optimal. As stated by Hallinger (2003), an effective leader must be responsive to changes and what they need. The principal is still unable to activate their sensitivity in analyzing school needs and arrange the right strategies to improve the quality of education at their school.

Second, teacher competency still does not support the quality of education. This could be due to teachers receiving insufficient support or opportunities for personal development. Darling-Hammond et al. (2017) explained that continuous professional development provides teachers with opportunities to learn and collaborate with colleagues. This indicated that teaching, as a profession, must continually develop and improve its competency to demonstrate professionalism. This is in line with Hidayati et al. (2023), who emphasized that the better teacher competency, the higher the quality of schools.

Last, school well-being remains a crucial issue for schools. Luthfiani et al. (2023) explained that teachers and students need a conducive learning climate. Schools are not just places where learning takes place, but also must be healthy and enjoyable (Limburg et al. 2025). Yet, school well-being is a benchmark for determining the quality of school life. Unfortunately, the quality of school life remains neglected, even though it significantly impacts academic success (Kesici & Ceylan, 2023).

The quality of education in Indonesia, as a developing country, remains an unresolved challenge. Indonesia's vast territory also creates educational disparities that hinder quality. This aligns with the findings of Fomba et al. (2021), who explained that the quality of education in developing countries tends to be inadequate. The quality of education is not solely the responsibility of educational institutions but must be the responsibility of all parties (Luthfiani et al., 2026). The results of this study also indicated that the roles of principals, teachers, and the environment were still not optimal. Therefore, it is hoped that these three factors can be further optimized in the future to achieve quality education.

D. Conclusions

This study examined the determinants of educational quality in state vocational schools in the Merlung District by analyzing the roles of principal leadership, teacher competence, and school well-being. The findings demonstrated that although these three factors collectively have a significant influence on educational quality, none of them showed a significant independent effect when analyzed separately. This indicated that improvements in school quality rely on the interaction and combined strength of leadership, teacher capacities, and a supportive school climate rather than on any single factor alone. The relatively low coefficient of determination suggests that other variables also play substantial roles in shaping educational outcomes in vocational schools. To

improve the quality of schools, principals need to adopt more instructional and collaborative leadership behavior, teachers should receive continuous competency-based training, and schools must ensure adequate well-being, organizational support, and psychological safety for all staff. Future studies are recommended to use larger samples, involve multiple schools, incorporate qualitative exploration, or apply advanced modelling techniques to better capture the complexity of factors influencing educational quality in vocational contexts.

E. Acknowledgement

We thank all friends from Universitas Negeri Jakarta, and Universitas Negeri Padang who helped us in this article.

References

Alanoglu, M., Aslan, S., & Karabatak, S. (2022). Do Teachers' Educational Philosophies Affect Their Digital Literacy? The Mediating Effect of Resistance to Change. *Education and Information Technologies, 27*, 3447–3466. https://doi.org/10.1007/s10639-021-10753-3

Donkoh, R., Twerefoo, W. O. L., Ahoto, A. T., Akotey, M. K., Donkor, J., & Ntim, S. Y. (2023). Effects of Educational Management on Quality Education in Rural and Urban Primary Schools in Ghana, *Heliyon, e21325*, https://doi.org/10.1016/j.heliyon.2023.e21325

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2017). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791

Day, C., Sammons, P., & Gorgen, K. (2016). *Succesful School Leadership*. Education Development Trust: University of Nottingham.

Fomba, B. K., Talla, D. N. D. F., & Ningaye, P. (2021). Institutional Quality and Education Quality in Developing Countries: Effects and Transmission Channels, J. Knowl. Econ, 1–30, https://doi.org/10.1007/s13132-021-00869-9

Fullan, M. (2007). *The new meaning of educational change, 4th edition*, 35. New York City, NY: Teachers College, Columbia University.

Hallinger, P. (2003). Leading Educational Change: reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33 (3), 329-35,* https://doi.org/10.1080/0305764032000122005

Hidayati, D., Kurniawan, A., & Asakir, A. (2023). The Effect of Teacher Well-Being, Teacher Competency, And Teacher Commitment to Improving School Quality. *Tadbir: Jurnal Studi Manajemen Pendidikan, 7 (1), 103-122,* https://doi.org/10.29240/jsmp.v7i1.5595

Juran, J. M. & Gofrey, A. B. (1999). Juran's Quality Handbook. The McGraw-Hill Companies, Inc: United States of America.

Kesici, A. V. & Ceylan, V. K. (2020) Quality of school life in Turkey, Finland and South Korea. *International Journal of Evaluation and Research in Education (IJERE),* 9, (1), 100-108, https://doi.org.10.11591/ijere.v9i1.20522

Kesici, A. E. & Cavus, B. (2019). University Life Quality and Impact Areas. *Universal Journal of Educational Research, 7, (6), 1376-1386,* https://doi.org/10.13189/ujer.2019.070605

Konu, A. & Rimpela, M. (2002). Well-being in schools: a conceptual model. *Health Promotion International, 17 (1), 79-87,* https://doi.org/10.1093/heapro/17.1.79

Knowles, G. (2011). Quality Management. bookboon.com

Limburg, M., Jung-Sievers, C., Cronin, M., McHale, P., Black, M., Inchley, J. C., Rehfuess, E., Tsai, M. C., Jourdan, D., & Gray, N. J. School is more than a place to learn: An intersectoral assessment of adolescent well-being prior to and after the COVID-19 pandemic in the WHO European Region. *Public Health in Practice 10, 100654,* https://doi.org/10.1016/j.puhip.2025.100654

Luthfiani, L., Utama, H. B., & Febrianti, S. (2023). Pengelolaan Kelas Guru Bahasa Inggris Bersertifikasi PPG di Perguruan Tinggi Negeri. *Journal of Educational Administration and Leadership,* 4 (1), 23-31 https://doi.org/10.24036/jeal.v4i1

Luthfiani, L., Widiastuti, W., & Madhakomala, M. (2026). Integrating Total Quality Management into National Education Quality Assurance: A Conceptual Analysis of the Indonesian SPMP. *Journal of Social Work and Science Education, 7 (1), 294-306* https://doi.org/10.52690/jswse.v7i1.1349

Matuschek, L. & Hackenberg, T. (2025). Exploring Conditional Factors in Digital Instructional Development: Insights from Qualitative Interviews with German Teachers. *Teaching and Teacher Education 167 (2025) 10522.* https://doi.org/10.1016/j.tate.2025.105224

Mergonia, A., Camanhob, A., Soncin, M., Agasisti, T., & Witte, K. D. (2026). The influence of School principals' management on school efficiency: Evidence from Italian schools. *European Journal of Operational Research 329, 260–272*, https://doi.org/10.1016/j.ejor.2025.06.020

Mhlanga, D., & Moloi, T. (2020). COVID-19 and The Digital Transformation of Education: What are We Learning on 4IR in South Africa? *Education Sciences, 10*(7), 180. https://doi.org/10.3390/educsci10070180

Pedraja-Reja, L. M., Marchioni-Choque, I. A., Espinoza-Marchant, C. J., & Muñoz-Fritis, Y. C. P. (2019). Liderazgo y cultura organizacional como factores de influencia en la calidad universitaria: un análisis conceptual. Formación Universitaria, 13 (5), 3-14, http://dx.doi.org/10.4067/S0718-50062020000500003

Riani, S. S. & Ain, S. Q. (2022). The Role of the School Principal in Implementing Education Quality Management. *Jurnal Ilmiah Sekolah Dasar, 6 (2), 204-211*, https://doi.org/10.23887/jisd.v6i2.45216

Ruggeri, K., Garcia-Garzon, E., Maguire, A., Matz, S., & Huppert, F. A. (2020). Well-being is more than happiness. *Health and Quality of Life Outcomes*, 18 (192). https://doi.org/10.1186/s12955-020-01423-y

Schweder, S., & Raufelder, D. (2024). Does changing learning environments affect student motivation? Learning and Instruction, 89, Article 101829. https://doi.org/10.1016/j.learninstruc.2023.101829

Van Loon-Dikkers, A. L. C., De Haan, A. D., Luijk, M. P. C. M. & Steketee, M. J. (2024). Bidirectional associations between well-being at school, psychosocial problems and PTSS in children exposed to family violence. *Child Protection and Practice 3*, *100079,* https://doi.org/10.1016/j.chipro.2024.100079

Yukl, G. & Gardner, W. L. (2020). *Leadership in organizations* (9th ed.). Pearson.