

The Influence of Principal Transformational Leadership, Teacher Pedagogical Competence, and School Partnership with Dudika on The Competence of State Vocational High School Graduates in Kendal District

Ana Marwani¹, Bunyamin¹, Yovitha Yuliejantiningih¹

¹Magister of Education Management Study Program Postgraduate University of The Republic of Indonesia Teachers Association Semarang, Indonesia

Corresponding author e-mail: anamarwanixy@gmail.com

Article History: Received on November 4, 2025, Revised on March 14, 2026, Published on March 30, 2026

Abstract: This research is intended to investigate the influence of transformational leadership, teachers' pedagogical competence, and school collaboration with DUDIKA on the competency of graduates from public vocational high schools in Kendal Regency. A quantitative research design was employed, and the data were collected using questionnaires. The study population consisted of all teachers working in public vocational high schools across Kendal Regency, while the sample consisted of 217 teachers selected through proportional random sampling. The data analysis was conducted through descriptive statistical techniques, assumption testing, and hypothesis examination using both simple and multiple regression methods. The findings from the multiple regression analysis reveal that transformational leadership, teachers' pedagogical competence, and school partnerships with DUDIKA simultaneously have a positive and significant influence on graduate competency, accounting for 48.2% of the variance. Nevertheless, the simultaneous analysis also revealed a methodological limitation. Although the overall regression model was statistically significant, the individual regression coefficients for teachers' pedagogical competence and school partnerships with DUDIKA were not statistically significant when tested together in the multivariate model. This finding suggests the possibility of multicollinearity or overlapping explanatory effects among the independent variables, which may reduce the strength of their individual contributions when analyzed simultaneously.

Keywords: Transformational, leadership, pedagogical competence, DUDIKA, graduate competence.

A. Introduction

The transformation of the labor market in the era of the Industrial Revolution 4.0 and Society 5.0 demands human resources who are not only equipped with technical expertise but also possess higher-order thinking skills, creativity, adaptability, and strong digital literacy competencies. In this context, Vocational High Schools (Sekolah Menengah Kejuruan/SMK) hold a strategic position in preparing competent and work-ready graduates through curriculum alignment with industrial needs, the strengthening of partnerships with business and industrial sectors, and the development of competencies that are relevant to contemporary workforce demands. As emphasized by Tilaar (2012), vocational education must be responsive to socio-

economic changes by producing graduates who not only master productive skills but are also capable of adapting to the dynamic nature of the labor market.

Nevertheless, empirical evidence indicates that the expected level of graduate competence has not yet been fully achieved. Based on data released by the Badan Pusat Statistik (BPS) of Kendal Regency in 2024, only 61.67% of graduates from public vocational high schools were successfully absorbed into the workforce. This relatively moderate absorption rate suggests that the competency standards of graduates remain suboptimal and require further academic examination. Several factors are assumed to contribute to this condition, including the principal's transformational leadership, teachers' pedagogical competence, and the effectiveness of school partnerships with the business sector, industry, and the world of work (DUDIKA).

Transformational leadership plays a significant role in driving school improvement by enhancing motivation, encouraging innovation, and facilitating teachers' professional development. Bernard M. Bass and Bruce J. Avolio (1994) argued that transformational leaders are capable of inspiring organizational members to exceed expected performance through vision, intellectual stimulation, and individualized support. However, preliminary findings indicate that the implementation of transformational leadership in public vocational schools in Kendal Regency remains less than optimal, as reflected in limited support for teacher reflective practices and the relatively low level of participation in the Platform Merdeka Mengajar. Similarly, teachers' pedagogical competence has not yet been maximized, with instructional practices still predominantly focused on hard skills and limited integration of soft skills development. In addition, school partnerships with DUDIKA also remain relatively weak, as indicated by the link-and-match achievement rate of only 55.94%.

Although previous studies have investigated these variables separately, only a limited number of studies have examined their simultaneous influence within an integrated analytical framework, particularly in the specific context of Kendal Regency. Existing research tends to emphasize partial relationships among variables, thereby limiting a comprehensive understanding of how leadership, pedagogical competence, and industrial collaboration interact in shaping graduate competence. Moreover, no prior study has comprehensively integrated the three independent variables (X1, X2, and X3) to explain the competency gap of graduates, despite the clear empirical urgency demonstrated by the moderate workforce absorption rate and the documented shortcomings in school leadership, teacher competence, and industry collaboration.

Therefore, this study is considered essential to address this research gap by examining the simultaneous influence of principals' transformational leadership, teachers' pedagogical competence, and school partnerships with DUDIKA on the competence of graduates from public vocational high schools in Kendal Regency. The findings of this research are expected to provide a more comprehensive empirical basis for formulating strategic policies and intervention programs aimed at strengthening graduate competence and improving workforce absorption outcomes.

B. Methods

This study employed a survey-based quantitative approach aimed at determining the influence of transformational leadership of school principals, teachers' pedagogical competence, and school-industry (DUDIKA) partnerships on the competency of

graduates from public vocational high schools (SMK) in Kendal Regency. The research population consisted of all teachers from public vocational schools, and proportional random sampling technique was adopted to ensure proportional representation of respondents from each school. Data were obtained using a Likert-scale questionnaire that had undergone instrument validation through both Content Validity and Construct Validity testing. Content validity was evaluated through expert judgment by specialists in vocational education and educational management to ensure that each item was relevant, clear, and aligned with the conceptual definitions of the variables.

Construct validity was analyzed using item–total correlation (Pearson Product Moment) with a critical r -value of 0.361 as the minimum criterion for item acceptance, and items falling below this threshold were subsequently revised or removed. Instrument reliability was measured using Cronbach’s Alpha coefficient, with all variables achieving coefficients of $\alpha \geq 0,600$, indicating strong internal consistency. Data analysis consisted of descriptive and regression analyses, where descriptive analysis identified the tendency of each variable using average scores categorized into five levels: very high, high, moderate, low, and very low. while bivariate and multivariate regression analyses examined the partial and simultaneous effects of the independent variables on the dependent variable. Prior to regression testing, Classical assumption tests, including normality, multicollinearity, and heteroscedasticity tests, were performed to ensure the validity and reliability of the regression model, and all analyses were processed using SPSS version 24 to maintain objectivity and analytical precision.

C. Results and Discussion

Data Description

The research questionnaire consisted of four main variables, namely the transformational leadership of the school principal, teachers’ pedagogical competence, school–industry (DUDIKA) partnership, and vocational high school (SMK) graduate competence. The data description was carried out for each of these variables to provide an overview of the respondents’ responses and the overall tendency of each indicator. All data derived from the questionnaire were processed and analyzed using SPSS version 24. Descriptive statistics for each variable are provided in table 1.

Table 1. Research Data for Each Research Variable.

	X1	X2	X3	Y
Mean	146,9954	148,9908	130,2074	167,682
Standard Error	0,666555	0,473436	0,616308	0,719327
Median	148	150	132	170
Mode	131	152	136	170
Standard Deviation	9,818962	6,974153	9,078788	10,59635
Sample Variance	96,41202	48,6388	82,42439	112,2827
Kurtosis	1,448775	3,504155	3,708443	0,97624
Skewness	-0,82972	-1,1552	-1,49971	-1,35918
Range	54	47	50	42
Minimum	116	123	96	142
Maximum	170	170	146	184
Sum	31898	32331	28255	36387
Count	217	217	217	217

The descriptive analysis results indicate that the school principals' transformational leadership in public vocational high schools (SMK) in Kendal Regency is perceived as moderate, with a mean score of 146.9, where 43% of respondents rated it high and 37% moderate. The teachers' pedagogical competence is considered fairly high, with a mean score of 149, and most respondents (46%) rated it moderate and 43% high. The school-industry (DUDIKA) partnership received a high perception, with a mean score of 130.2, where 52% of respondents rated it high and 29% very high. Finally, the competence of vocational high school graduates is also perceived as high, with a mean score of 167.68, as 48% of respondents rated it high and 24% very high. Overall, the findings suggest that all four variables—school leadership, teacher competence, school-industry partnership, and graduate competence—are generally perceived positively, though leadership and pedagogical competence still have room for improvement.

Variable Dimension Test

The factorial analysis of 217 respondents' perceptions toward four research variables—transformational leadership, teachers' pedagogical competence, school-industry partnerships (DUDIKA), and vocational graduates' competence—showed varied strengths and weaknesses. The strongest dimensions were intellectual stimulation (0.891) for leadership, curriculum development (0.785) for pedagogical competence, student competence improvement (0.863) for partnerships, and graduates' independence (0.830). Conversely, the weakest were idealized influence (0.598), assessment and evaluation (0.654), industry support for facilities (0.645), and civic responsibility (0.653). These findings indicate that while schools excel in stimulating innovation, developing curriculum, and enhancing student competence and independence, they still need to strengthen moral leadership, assessment skills, industry collaboration in infrastructure, and civic character among graduates.

Assumption Tests

Prior to regression analysis, assumption tests including normality, linearity, multicollinearity, and homogeneity were conducted to ensure data validity. The Kolmogorov-Smirnov test confirmed that all variables were normally distributed (Sig. > 0.05). Linearity testing revealed that the independent variables had linear relationships with the dependent variable (Deviation from Linearity > 0.05). Multicollinearity tests indicated no strong correlations among independent variables, with Tolerance levels above 0.10 and VIF values under 10. Lastly, the Levene Test results (Sig. > 0.05) verified that the data were homogeneous. These findings confirm that all classical assumptions were met, making the regression model was appropriate for further analysis.

Hypothesis Testing Results

Several statistical tests were used, including the t-test (partial) to determine the individual effect of each independent variable on the vocational high school graduates' competence, the F-test (simultaneous) to test the joint effect of all independent variables, and the coefficient of determination (R^2) to determine how much the independent variables contribute to explaining the dependent variable.

1. The Influence of Principals' Transformational Leadership on Vocational High School Graduates' Competence

Table 2. Results of the Correlation Test between X1 and Y Correlations

		X1	Y
X1	Pearson Correlation	1	,652**
	Sig. (2-tailed)		0,000
	N	217	217
Y	Pearson Correlation	,652**	1
	Sig. (2-tailed)	0,000	
	N	217	217

** Correlation is significant at the 0.01 level (2-tailed).

Table 3. The Results of the ANOVA Test between X1 and Y ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2376,605	1	2376,605	159,333	,000 ^b
	Residual	3206,925	215	14,916		
	Total	5583,530	216			

a. Dependent Variable: Competencies of Graduates of State Vocational Schools in Kendal Regency (Y)

b. Predictors: (Constant), Transformational Leadership of School Principals (X1)

Table 4. The Results of the Determination Test between X1 and Y Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,652 ^a	0,426	0,423	3,862

a. Predictors: (Constant), Transformational Leadership of School Principals (X1)

b. Dependent Variable: Competencies of Graduates of State Vocational Schools in Kendal Regency (Y)

The analysis results show a strong relationship between principals' transformational leadership and graduates' competence, with a correlation coefficient of 0.652 and a significance value of $0.000 < 0.05$. The F-test result ($F_{\text{count}} = 159.333 > F_{\text{table}} = 2.65$) indicates a significant effect.

Table 5. Results of the Regression Coefficient Test Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	104,163	5,325		19,561	0,000		
	X1	0,451	0,036	0,652	12,623	0,000	1,000	1,000

a. Dependent Variable:

Y

According to Ghazali (2020), an R Square value of 0.426 falls within the moderate category, indicating that 42.6% of graduates' competence is influenced by principals' transformational leadership. This suggests that while transformational leadership significantly contributes to improving graduates' competence, it is not yet the dominant determining factor. The regression analysis ($\hat{Y} = 104.163 + 0.451X_1$) further confirms a positive relationship, meaning that the more effectively principals demonstrate transformational leadership, the higher the competence of vocational high school

graduates in Kendal Regency.

2. The Influence of Teachers' Pedagogical Competence on Vocational High School Graduates' Competence

Table 6. Results of the Correlation Test between X2 and Y Correlations

		X2	Y
X2	Pearson Correlation	1	,692**
	Sig. (2-tailed)		0,000
	N	217	217
Y	Pearson Correlation	,692**	1
	Sig. (2-tailed)	0,000	
	N	217	217

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7. Results of the ANOVA Test between X2 and Y ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2674,491	1	2674,491	197,665	,000 ^b
	Residual	2909,039	215	13,530		
	Total	5583,530	216			

a. Dependent Variable: Competencies of Graduates of State Vocational Schools in Kendal Regency (Y)

b. Predictors: (Constant), Teacher Pedagogical Competence (X2)

The F-test result ($F_{\text{count}} = 197.665 > F_{\text{table}} = 2.65$) shows a significant influence. Thus, it can be concluded that the second hypothesis (H_2), which states that there is an influence of teachers' pedagogical competence on the competence of vocational high school (SMK) graduates in Kendal Regency, is accepted. This result indicates that teachers' pedagogical competence makes a significant contribution to improving graduates' competence.

Table 8. Results of the Determination Test between X2 and Y Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,692 ^a	0,479	0,477	3,678

a. Predictors: (Constant), Teacher Pedagogical Competence (X2)

b. Dependent Variable: Competence of State Vocational High School Graduates in Kendal Regency (Y)

Table 9. Results of the Regression Coefficient Test Coefficients^a

Model		Unstandardized Coefficients		Standar dized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	60,442	7,889		7,662	0,000		
	X2	0,739	0,053	0,692	14,059	0,000	1,000	1,000

a. Dependent Variable: Competence of Graduates of State Vocational Schools in Kendal Regency (Y)

There is a strong and significant correlation ($r = 0.692$, $p < 0.05$) between teachers' pedagogical competence and vocational high school graduates' competence. Regression analysis shows $R^2 = 0.479$, meaning 47.9% of graduates' competence is explained by teachers' pedagogical competence. The F-test confirms a significant influence ($F_{\text{count}} = 197.665 > F_{\text{table}} = 2.65$), and the regression equation ($\hat{Y} = 60.442 + 0.739X_2$) indicates

that each one-unit increase in teachers' pedagogical competence raises graduates' competence by 0.739 units. Overall, teachers' pedagogical competence plays a key role in enhancing graduates' competence.

3. The Influence of School-Industry Partnerships (DUDIKA) on Vocational High School Graduates' Competence.

Table 10. Results of the Correlation Test between X3 and Y

		Correlations	
		X3	Y
X3	Pearson Correlation	1	,679**
	Sig. (2-tailed)		0,000
	N	217	217
Y	Pearson Correlation	,679**	1
	Sig. (2-tailed)	0,000	
	N	217	217

** . Correlation is significant at the 0.01 level (2-tailed).

Table 11. Results of the ANOVA Test between X3 and Y

		ANOVA ^a				
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2575,551	1	2575,551	184,092	,000 ^b
	Residual	3007,979	215	13,991		
	Total	5583,530	216			

a. Dependent Variable: Competencies of State Vocational High School Graduates in Kendal Regency

b. Predictors: (Constant), School-Industry Partnerships

Table 12. Results of the Determination Test between X3 and Y

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,679 ^a	0,461	0,459	3,740

a. Predictors: (Constant), School-Industry Partnerships (X3)

b. Dependent Variable: Competencies of State Vocational High School Graduates in Kendal Regency (Y)

Table 13. Results of the Regression Coefficient Test

		Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	93,583	5,734		16,322	0,000		
	(X3)	0,587	0,043	0,679	13,568	0,000	1,000	1,000

a. Dependent Variable: Competence of Graduates of State Vocational Schools in Kendal Regency (Y)

The correlation coefficient of 0.679 with a significance value of 0.000 < 0.05 indicates a strong relationship. The F-test result (Fcount = 184.092 > Ftable = 2.65) confirms a significant effect. The R² value of 0.461 shows that 46.1% of graduates' competence is influenced by school-industry partnerships. The regression equation obtained is $\hat{Y} = 93.583 + 0.587X_3$.

4. The Combined Influence of Transformational Leadership, Pedagogical Competence, and School Industry Partnerships on Vocational High School Graduates' Competence.

Table 14. Results of the ANOVA Test for Variables X1, X2, and X3 on Y
 ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2692,470	3	897,490	66,123	,000 ^b
	Residual	2891,060	213	13,573		
	Total	5583,530	216			

a. Dependent Variable: Competence of State Vocational High School Graduates in Kendal Regency (Y)

b. Predictors: (Constant), Principal Transformational Leadership (X1), Teacher Pedagogical Competence (X2), School Partnership with DUDIKA (X3),

Table 15. Results of Multiple Regression

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	,694 ^a	0,482	0,475	3,684	

a. Predictors: (Constant), School-Industry Partnerships, Principal Transformational Leadership, Teacher Pedagogical Competence

b. Dependent Variable: Competence of State Vocational High School Graduates in Kendal Regency

Table 16 Results of Multiple Regression Coefficient Test
 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	105,927	14,669		7,221	0,000
	X1	0,293	0,097	0,272	3,008	0,003
	X2	0,029	0,130	0,019	0,224	0,823
	X3	0,110	0,101	0,094	1,090	0,277

a. Dependent Variable: Competence of Vocational School Graduates (Y)

The simultaneous test result ($F_{count} = 66.123 > F_{table} = 2.65$) with a significance value of $0.000 < 0.05$ indicates that the three variables jointly have a significant effect on graduates' competence. The Adjusted R^2 value of 0.482 reveals that 48.2% of graduates' competence is explained by these three variables, while 51.8% is influenced by other factors not included in the model.

The multiple regression analysis revealed that teachers' pedagogical competence (X_2) and school-industry partnerships (X_3) were not significant predictors in the simultaneous model ($Sig. > 0.05$), despite both showing significant effects in the partial analyses. This inconsistency suggests a more complex interaction among the variables. One plausible explanation is the presence of a suppressor effect, in which the shared variance between predictors reduces the unique contribution of X_2 and X_3 once transformational leadership (X_1) enters the model. In this case, transformational leadership may absorb or overlap the predictive variance of the other variables, causing their effects to diminish in the simultaneous test.

Another possibility is that the influence of pedagogical competence and industry partnerships operates indirectly, implying a potential moderating or mediating mechanism where their effectiveness depends on the strength of school leadership. These findings highlight the dominant role of transformational leadership in shaping graduate competency and suggest that future research should explore mediation, moderation, or path analysis models to better understand the structural relationships among these variables.

D. Conclusions

The study findings demonstrate that transformational leadership of school principals, teachers' pedagogical competence, and school partnerships with the business and industrial world (DUDIKA) have a positive and significant influence on the competency of vocational high school (SMK) graduates in Kendal Regency, both partially and simultaneously. Partially, transformational leadership of school principals has a strong correlation of 0.652 and contributes 42.6% to graduates' competency, with the regression equation $\hat{Y} = 104.163 + 0.451X_1$. Teachers' pedagogical competence also shows a strong correlation of 0.692 and contributes 47.9%, with the regression equation $\hat{Y} = 60.442 + 0.739X_2$. Meanwhile, school partnerships with DUDIKA demonstrate a strong correlation of 0.679 and contribute 46.1%, with the regression equation $\hat{Y} = 93.583 + 0.587X_3$. Simultaneously, the three independent variables—transformational leadership of school principals, teachers' pedagogical competence, and school partnerships with DUDIKA positively and significantly affect graduates' competency by 48.2%, with the regression equation $\hat{Y} = 105.927 + 0.293X_1 + 0.029X_2 + 0.110X_3$. This finding indicates that improving the competency of SMK graduates is greatly influenced by the quality of school leadership, teachers' pedagogical abilities, and the effectiveness of partnership between schools and the business and industrial sectors.

E. Acknowledgement

An acknowledgement section should be provided at the end of the paper to recognize any financial or non-financial support for the research.

References

- Abdullah, et al. (2019). *Pendidikan Islam: Mengupas aspek-aspek dalam dun pendidikan Islam*. Aswaja Presindo.
- Arikunto, S. (2019). *Prosedur penelitian: Suatu pendekatan praktik* (Edisi Revisi XI). PT Rineka Cipta.
- Badan Pengembangan dan Pembinaan Bahasa. (2023). *Kamus Besar Bahasa Indonesia* (versi daring). Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. <https://kbbi.kemdikbud.go.id/entri/penyerapan>
- Badan Pusat Statistik. (2024). *Kabupaten Kendal dalam angka 2024*. BPS Kabupaten Kendal. <https://kendalkab.bps.go.id>
- Baperlitbang Kabupaten Kendal. (2022). *Survei koordinasi antara sekolah dan industri di Kabupaten Kendal*. Baperlitbang Kabupaten Kendal.
- Bass, B. M., & Avolio, B. J. (1994). Transformational leadership and organizational culture. *The International Journal of Public Administration*, 17(3–4), 541–554.

- Darsino. (2023). *Supervisi akademik dan kompetensi pedagogik guru*. Cahya Ghani Recovery.
- Dinas Pendidikan Kabupaten Kendal. (2022). *Laporan evaluasi kurikulum dan fasilitas SMK di Kabupaten Kendal*. Dinas Pendidikan Kabupaten Kendal.
- Direktorat Jenderal Peningkatan Mutu Pendidik dan Tenaga Kependidikan. (2017). *Pedoman pelaksanaan kinerja guru*. Kementerian Pendidikan dan Kebudayaan.
- Direktorat Pembinaan SMK. (2017). *Petunjuk teknis pengembangan kurikulum SMK*. Ditjen Dikdasmen, Kemdikbud.
- Faisal, M. (2017). Dampak kepemimpinan transformasional terhadap kinerja guru dan mutu lulusan di sekolah menengah atas. *Jurnal Ilmu Pendidikan*, 10(4), 67–78.
- Fitrah, M. (2017). Peran kepala sekolah dalam meningkatkan mutu pendidikan. *Jurnal Penjaminan Mutu*, 3(1), 31–42.
- Ghozali, I. (2020). *Aplikasi analisis multivariate dengan program IBM SPSS 21*. Badan Penerbit Universitas Diponegoro.
- Ghazali, I. (2021). *Aplikasi analisis multivariate dengan program IBM SPSS 26* (Edisi 10). Badan Penerbit Universitas Diponegoro.
- Gumus, S., Bellibas, M. S., Esen, M., & Gumus, E. (2018). The role of transformational leadership in building school capacity for improvement. *Educational Management Administration & Leadership*, 46(5), 1–20. <https://doi.org/10.1177/1741143217745877>
- Hidayat, R., et al. (2019). The effect of pedagogic competence on vocational students' work readiness. *Journal of Technical Education and Training*, 11(2), 45–60.
- Indonesia. (2022). *Peraturan Presiden Republik Indonesia Nomor 68 Tahun 2022 tentang Revitalisasi Pendidikan Vokasi dan Pelatihan Vokasi*.
- Ixtiarto, B., & Sutrisno, B. (2016). Kemitraan sekolah menengah kejuruan dengan dunia usaha dan dunia industri. *Jurnal Pendidikan Ilmu Sosial*, 26(1). <https://journals.ums.ac.id/jpis/article/view/2130>
- Janie, D. N. A. (2017). *Statistik deskriptif & regresi linier berganda dengan SPSS*. Semarang University Press.
- Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. (2024). *Rapor Pendidikan Nasional*. Kemdikbudristek.
- Khasanah, U. (2019). *Kepemimpinan transformasional dalam manajemen pendidikan Islam*. Jakad Media Publishing.
- Kusnadi, D. (2020). Strengthening vocational education partnership with industries. *International Journal of Vocational Education and Training*, 28(1), 67–82.
- Kutni, D. (2023). DUDIKA: Kekuatan membangun pendidikan di SMK. *TheJournal.id*. <https://thejournal.id/news/DUDIKA-kekuatan-membangun-pendidikan-di-smk/index.html>
- LSP SMK Negeri 2 Tegal. (2024). Lima kompetensi wajib dimiliki oleh siswa SMK. *LSP SMKN 2 Tegal*. <https://lsp.smkn2tegal.sch.id/berita/detail/lima-kompetensi-wajib-dimiliki-siswa-smk>
- Mahande, R. D. (2023). *Pengantar pendidikan kejuruan*. Indonesia Emas Group.
- Mardizal, & Jalinus. (2023). *Manajemen dan kepemimpinan kepala sekolah kejuruan*. Eureka Media Aksara.
- Mudatsir, M. (2021). Kepemimpinan transformasional kepala sekolah dalam meningkatkan mutu lulusan. *Educational Journal of Islamic Management*, 1(2), 55–67. <https://doi.org/10.47709/ejim.v1i2.1192>
- Mulyono. (2019). *Kompetensi guru dalam pelaksanaan tugas*. Rineka Cipta.
- Munthe, F., & Mataputun, Y. (2021). Analisis kerjasama sekolah dengan dunia usaha dan

- dunia industri dalam meningkatkan mutu lulusan sekolah menengah kejuruan. *Jurnal Penelitian Pendidikan Indonesia*, 7(2), 312–319. <https://doi.org/10.29210/020211156>
- Nurfuadi, & Afandi. (2024). *Manajemen kompetensi pedagogik guru berbasis Kurikulum Merdeka*. Wawasan Ilmu.
- Oktaviastuti, & Nurmalasari. (2024). *Kajian vocational attitude dan technical skill pada pendidikan kejuruan*. Deepublish Digital.
- Peraturan Menteri Pendidikan dan Kebudayaan Nomor 16 Tahun 2007 tentang Standar Kualifikasi Akademik dan Kompetensi Guru.
- Peraturan Menteri Pendidikan Dasar dan Menengah Nomor 10 Tahun 2025 Pasal 10.
- Purnamawati, & Yahya. (2019). *Model kemitraan SMK dengan dunia usaha dan dunia industri*. Badan Penerbit Universitas Negeri Makassar.
- Rachmawati, et al. (2021). *Teori dan konsep pedagogik*. Penerbit Insania.
- Rahayu, S. (2020). Kepemimpinan transformasional kepala sekolah dan dampaknya terhadap kualitas pendidikan di sekolah menengah kejuruan. *Prosiding Seminar Nasional Pendidikan Vokasi*, 123–130.
- Robbins, S. P., & Judge, T. A. (2015). *Perilaku organisasi*. Salemba Empat.
- Rohaeni, N. (2023). *Model kepemimpinan transformasional CISMA bagi kepala sekolah*. Indonesia Emas Group.
- Rusdiana, & Heryati, Y. (2019). *Pendidikan profesi keguruan*. Pustaka Setia.
- Setiawan, B., & Muhith. (2013). *Transformational leadership: Ilustrasi di bidang organisasi pendidikan*. Rajawali Pers.
- Soemanto, W. (2006). *Manajemen pendidikan kejuruan*. Rineka Cipta.
- Sugiyono. (2020). *Metode penelitian pendidikan*. Alfabeta.
- Sumbung, A. B. (2022). Pengaruh kepemimpinan transformasional kepala sekolah dan integritas guru terhadap mutu lulusan SMA di Kabupaten Toraja Utara (Disertasi doctoral, Universitas Kristen Indonesia).
- Susanto, B., et al. (2021). Industry collaboration in vocational education: Challenges and solutions. *Education and Training Journal*, 63(5), 543– 561.
- Umar. (2021). *Pengantar profesi keguruan*. PT Raja Grafindo Persada.
- Undang–Undang Republik Indonesia Nomor 14 Tahun 2005 tentang Guru dan Dosen.
- Undang–Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional.
- UNESCO. (2018). *Strategy for Technical and Vocational Education and Training (TVET) 2016–2021*. UNESCO Publishing.
- Wardoyo, S., et al. (2024). Pengaruh keterkaitan kompetensi guru SMK terhadap daya saing lulusan dalam dunia industri: Systematic literature review. *Vocational: Jurnal Inovasi Pendidikan Kejuruan*, 3(4), 184–192. <https://doi.org/10.51878/vocational.v3i4.3874>