



The Influence of Learning Communities and Participatory Leadership on the Leadership of Driving Teachers

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Abstract: The leadership of driving teachers is crucial in the learning process, especially when facing technological advancements supporting educational processes. This study aims to analyze the influence of learning communities and participatory leadership on the leadership of driving teachers. The approach used is quantitative with a correlational research design. The research population consists of 70 teachers, who are also used as the sample. Data was collected through questionnaires and analyzed using descriptive analysis techniques and prerequisite tests (normality test, multicollinearity, heteroscedasticity, and linearity). Hypothesis testing was carried out through simple and multiple linear regression. The study results show that the learning community has a correlation of 0.738 and significantly influences the leadership of driving teachers by 74.5%. Participatory leadership correlates 0.781 and significantly influences the leadership by 70.9%. Simultaneously, the learning community and participatory leadership significantly influence the leadership of driving teachers with a coefficient of determination of 73.5%. The regression equation is $\hat{Y} = 12.383 + 1.020 X_1 + 1.881 X_2$. This study provides insights for schools and policymakers to develop collaborative learning strategies and more inclusive leadership.

Keywords: learning community; participatory leadership; transformational teacher leadership

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INTRODUCTION

Education strategically creates high-quality and competitive human resources (Mudin & Maunah, 2024). Educational reforms in Indonesia emphasize the importance of improving the quality of learning to address the challenges of the digital era. One of the key initiatives in this reform is the "Guru Penggerak" program, introduced by the Ministry of Education, Culture, Research, and Technology (Hutabarat et al., 2024). This program aims to enhance teacher's leadership capacity in learning so that they act not only as facilitators but also as leaders who can create interactive, innovative, and effective learning environments (Damayanti et al., 2024). However, in its implementation, this program still faces various challenges, particularly in the effectiveness of transformational teacher leadership within schools (Aviyanto et al., 2024). In the former Kawedanan Boja, Kendal Regency, the number of transformational teacher leaders remains very limited, comprising only about 3.97% of the total number of teachers in the region. This figure is relatively low compared to the schools' need to enhance student-centered learning quality. The limited number of transformational teacher leaders results in suboptimal impacts on improving education quality in the area. Additionally, their presence has not yet fully brought significant changes to learning patterns, indicating challenges in the program's implementation (Pratama, 2024).

Several major issues in the transformational teacher leadership program include limitations in communication skills, classroom management, and the application of innovative teaching strategies (Prasetyo et al., 2024). Based on evaluations conducted by school supervisors, more than 60% of transformational teacher leaders tend to be preoccupied with administrative tasks rather than focusing on learning development in the classroom. Furthermore, their teaching skills have not developed optimally and do not show significant differences compared to non-participating teachers. In classroom management, non-participating teachers were more proficient than transformational teacher leaders (Fitriyah et al., 2023). One of the primary causes of this condition is the lack of a supportive environment for transformational teacher leaders to continuously enhance their professional capacity (Fatimatuazzahroh & Zumrotun, 2023).

Learning communities are expected to be a platform for transformational teacher leaders to discuss and share best practices to improve their competencies (Giyanto et al., 2023). However, in the former Kawedanan Boja, learning communities have not been running optimally due to a lack of coordination, facilitation, and resource support. Many teachers still develop creativity independently without a structured mentoring system, while knowledge transfer within learning communities remains limited. With only 3.97% of teachers being transformational leaders, they struggle to guide and motivate non-participating teachers. Low participation in learning communities further exacerbates the cycle of professional development limitations. Learning

communities must be managed more systematically to address these challenges with competent facilitators, support from school principals, and relevant discussion agendas (Arifin & Hanif, 2024). If optimized, learning communities can enhance transformational teacher leadership and foster a more collaborative and innovative educational environment (Lutfi et al., 2024).

Apart from learning communities, school participatory leadership also influences transformational teacher leadership (Erwandi & Marianita, 2023). Participatory leadership refers to a leadership model that involves teachers and education staff in decision-making processes and the implementation of educational programs (Hidayatulloh & KR, 2024). This leadership model enables collaboration between school principals, teachers, and educational staff in designing and implementing school policies. With participatory leadership, teachers do not merely act as policy implementers but also play an active role in designing more effective learning strategies tailored to students' needs (Jamil, 2023). However, evaluations indicate that more than 70% of school principals in the former Kawedanan Boja still make decisions independently without involving teachers in broader discussions. However, top-down decisions are often ineffective in improving learning quality as they do not consider the classroom conditions and challenges teachers face. Consequently, transformational teacher leaders, who should act as change agents, experience limitations in implementing their ideas and innovations. The lack of participation in school policy-making also reduces their motivation to fulfill leadership roles in the educational environment. Therefore, a more optimal implementation of participatory leadership is crucial in creating a more democratic, innovative, and collaborative learning environment (Siregar et al., 2023).

Literature reviews suggest that learning communities play a significant role in enhancing teacher professionalism. A study revealed that learning communities provide a platform for teachers to discuss various learning issues and find solutions collectively. However, another study by the Kendal Regency Education Office Evaluation found that learning communities in several regions have not effectively facilitated non-participating teachers, limiting their impact on learning quality improvement. This indicates a gap between theory and practice in implementing school learning communities. Similarly, participatory leadership has been widely studied in the context of education. Anwar et al. (2022) found that participatory leadership practiced by school principals can increase teacher's involvement in decision-making and create a more collaborative work environment. However, an evaluation by School Supervisors in the former Kawedanan Boja showed that more than 80% of school principals are still reluctant to delegate tasks to transformational teacher leaders due to a lack of confidence in their competencies. This signifies a gap between the theory of participatory leadership and its practical application in schools.

The discrepancy between previous research and real-world conditions indicates that although learning communities and participatory leadership have great potential to enhance transformational teacher leadership, their implementation remains suboptimal. Several studies have highlighted the benefits of these two factors separately, but few have examined how the interplay between learning communities and participatory leadership simultaneously impacts transformational teacher leadership. Therefore, this study addresses this gap by identifying how learning communities and participatory leadership significantly influence transformational teacher leadership, particularly in the former Kawedanan Boja, Kendal Regency. With an effective learning community, transformational teacher leaders are expected to have the space to continuously enhance their leadership capacity through discussions, collaboration, and reflection on innovative teaching practices (Pribadi et al., 2023). On the other hand, participatory leadership can create a more inclusive environment where transformational teacher leaders feel valued and empowered in school decision-making processes. Through integrating learning communities and participatory leadership, transformational teacher leaders can better fulfill their roles as agents of change in schools.

METHODS

The research approach used in this study is quantitative, employing an ex post facto research design. This design aims to analyze the causal relationship between independent and dependent variables based on existing data without any manipulation by the researcher (Ugi et al., 2023). The study was conducted in the former Kawedanan Boja, Kendal Regency, with a research population consisting of 70 transformational teacher leaders. The sampling technique used was purposive sampling, where the entire population was included as the research sample due to its relatively small size and alignment with the research objectives (Lenaini, 2021). Data was collected using a closed-ended questionnaire developed based on research indicators. Before being used in the main study, the questionnaire instrument was tested for validity and reliability through a trial involving 30 teachers who were not part of the main sample. Validity testing was conducted using the Pearson Product Moment correlation test, while reliability was tested using Cronbach's Alpha to ensure the instrument's internal consistency (Darmawan et al., 2024). Data analysis was conducted in several stages, including classical assumption tests such as normality, multicollinearity, linearity, and heteroscedasticity tests, to ensure the data met the requirements for regression analysis (Husdi & Dalai, 2023). Hypothesis testing was performed using the t-test (partial test), F-test (simultaneous test), and structural testing to determine the influence between

variables. Data were analyzed using SPSS version 25 to ensure accuracy and reproducibility for other researchers conducting similar studies (Samal et al., 2021).

RESULT AND DISCUSSION

The normality test aims to examine whether, in the regression model, both the dependent and independent variables follow a normal distribution (Silalahi et al., 2024). It is well known that the t-test and F-test assume that residual values follow a normal distribution. If this assumption is violated, statistical tests become invalid for small sample sizes. The normality test used in this study is the non-parametric Kolmogorov-Smirnov (K-S) test. Data that meet the normality assumption are those with a Kolmogorov-Smirnov probability value more significant than the research significance level (Sig. > 0.05).

The One-Sample Kolmogorov-Smirnov (K-S) test determines whether the residual distribution is normal. The decision criteria for this test are as follows: if the Asymp. Sig. (2-tailed) value is greater than the 5% significance level (0.05), the residual values are normally distributed. Conversely, if the Asymp. Sig. (2-tailed) value is less than 0.05, and the residuals are not normally distributed. The following section discusses the prerequisite tests for multiple linear regression analysis. The normality test conducted in this study used the non-parametric Kolmogorov-Smirnov statistical test. Data that meet the normality assumption are those with a Kolmogorov-Smirnov probability value greater than the research significance level (Sig. > 0.05).

Table 1. Normality Test Results

		Learning Community	Participatory Leadership	Transformational Teacher Leadership
	N	70	70	70
Normal Parameters ^{a,b}	Mean	87.24	90.11	92.90
	Std. Deviation	9.172	9.296	10.617
	Absolute	.082	.074	.070
	Positive	.082	.074	.070
	Negative	.046	.058	.047
	Test Statistic	.082	.074	.070
	Asymp. Sig. (2-tailed)	.200 ^{c,d}	.220 ^{c,d}	.180 ^{c,d}

Based on Table 1, the SPSS analysis results show that the significance values for the three variables are as follows: Learning Community (X1) with Sig. = 0.200 > 0.05, Participatory Leadership (X2) with Sig. = 0.220 > 0.05, and Transformational Teacher Leadership (Y) with Sig. = 0.180 > 0.05. Since the significance values for all three variables exceed 0.05, it can be concluded that the data for Learning Community, Participatory Leadership, and Transformational Teacher Leadership are normally distributed. A regression equation is used to examine the nature of the influence between one or more variables. The form of this influence can be observed as linear, depending on the data and assumptions used by the researcher (Hasibuan, 2023). The assumption of linearity states that the relationship between the variables being analyzed follows a straight line so that when the regression equation is graphed, it forms a linear line. This study employs an ANOVA table to examine the significance of linearity and deviation from linearity for each independent variable about the dependent variable. If the significance value of linearity is smaller than the significance level, then linear regression can be used to explain the influence between variables. Meanwhile, the significance value of deviation from linearity indicates how linear the data is. If the deviation from the linearity significance value is greater than the significance level, then linear regression can be used to explain the relationship between variables. The research findings are as follows:

Table 2. Linearity Test of Transformational Teacher Leadership (Y) and Learning Community (X1)

ANOVA			Sum of Squares	Df	Mean Square	F	Sig.
Transformational Teacher Leadership * Learning Community	Between Groups	(Combined)	5985.883	30	199.529	4.341	.000
		Linearity	4239.292	1	4239.292	92.240	.000
		Deviation from Linearity	1746.591	29	60.227	1.310	.213
	Within Groups		1792.417	39	45.959		
	Total		7778.300	69			

(Source: Processed data, 2025)

Table 2 shows the deviation from linearity value for the Learning Community and Transformational Teacher Leadership variables is 0.213. This value is more significant than 0.05 (0.213 > 0.05), indicating that

the relationship between these variables is linear.

Table 3. Linearity Test of Transformational Teacher Leadership (Y) and Participatory Leadership (X2)
ANOVA

			Sum of Squares	Df	Mean Square	F	Sig.
Transformational Teacher Leadership * Participatory Leadership	Between Groups	(Combined)	6046.833	31	195.059	4.281	.000
		Linearity	4738.776	1	4738.776	104.001	.000
		Deviation from Linearity	1308.057	30	43.602	.957	.545
		Within Groups	1731.467	38	45.565		
		Total	7778.300	69			

Table 3 shows the deviation from the linearity value for the Participatory Leadership and Transformational Teacher Leadership variables, which is 0.545. This value is greater than 0.05 ($0.545 > 0.05$), indicating that the relationship between these variables is linear. Since the data meet the prerequisite tests, multiple linear regression analysis can be conducted to examine the influence between independent and dependent variables, specifically Learning Community and Participatory Leadership on Transformational Teacher Leadership, leading to hypothesis testing. The heteroscedasticity test is used to determine whether there is a violation of the classical assumption of heteroscedasticity, where residual variance is unequal across observations in the regression model. A necessary condition for regression models is the absence of heteroscedasticity.

Table 4. Heteroscedasticity Test Results
Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	12.383	7.637		1.621	.000
	Learning Community	1.020	.469	.881	2.174	.000
	Participatory Leadership	1.881	.463	1.647	4.064	.000

a. Dependent Variable: Transformational Teacher Leadership

Based on Table 4, the significance values for Learning Community (X1) and Participatory Leadership (X2) are both 0.000 (< 0.05). This indicates no heteroscedasticity, meaning the regression model is appropriate for use. Multicollinearity in a regression model is identified by examining each variable's Variance Inflation Factor (VIF) values.

Table 5. Multicollinearity Test Results
Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients	Sig.	Collinearity Statistics	
Model		B	Std. Error	Beta		Tolerance	VIF
1	(Constant)	12.383	7.637		1.621		
	Learning Community	1.020	.469	.881	2.174	.333	3.151
	Participatory Leadership	1.881	.463	1.647	4.064	.333	3.151

a. Dependent Variable: Transformational Teacher Leadership

Since the VIF values are below 10 ($3.151 < 10$) and tolerance values exceed 0.1 ($0.333 > 0.1$), it can be concluded that there is no multicollinearity between Transformational Teacher Leadership and Learning Community variables. Simple linear regression analysis is used to examine the effect of an independent variable on a dependent variable. This regression model is developed to test the hypotheses formulated in the study (Matdoan et al., 2024). The first hypothesis tested in this study is the effect of Learning Community (X1) on Transformational Teacher Leadership (Y) in the Former Kawedanan Boja, Kendal Regency. The results of the simple regression test using SPSS are presented in Table 6.

Table 6. Correlation Between Learning Community (X1) and Transformational Teacher Leadership (Y)

		Learning Community	Transformational Teacher Leadership
Learning Community	Pearson Correlation	1	.738**
	Sig. (2-tailed)		.000
	N	70	70
Transformational Teacher Leadership	Pearson Correlation	.738**	
	Sig. (2-tailed)	.000	
	N	70	70

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

Based on Table 6, the correlation between the Learning Community variable and Transformational Teacher Leadership is positive, as indicated by the r-value of 0.738 (strong). The Sig. (1-tailed) value of 0.000 indicates a direct relationship between X1 and Y with a strong connection since the value is less than 5% ($0.000 < 0.05$). In conclusion, the Learning Community variable strongly correlates with Transformational Teacher Leadership at 0.738. To determine whether Hypothesis 1 is accepted or rejected, the ANOVA test results are shown in Table 7.

Table 7. ANOVA Test Results for Learning Community (X1) and Transformational Teacher Leadership (Y)

ANOVA ^a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	4239.292	1	4239.292	81.456	.000 ^b
Residual	3539.008	68	52.044		
Total	7778.300	69			

a. Dependent Variable: Transformational Teacher Leadership

b. Predictors: (Constant), Learning Community

Based on Table 7, the obtained F-value is 81.456, while the F-table value for alpha 5% (0.05) and $df_1 = 1$; $df_2 = 68$ is 3.13. Since $F\text{-value} > F\text{-table}$ ($81.456 > 3.13$) and the significance value is 0.000, which is less than the significance level of 0.05 ($0.000 < 0.05$), H_0 is rejected, and H_a is accepted. Thus, it can be concluded that Hypothesis 1, which states, "There is an effect of Learning Community (X1) on Transformational Teacher Leadership (Y) in the Former Kawedanan Boja, Kendal Regency," is accepted. To determine the magnitude of the effect of Learning Community (X1) on Transformational Teacher Leadership (Y), the R Square test results are presented in Table 8.

Table 8. Model Summary of Learning Community (X1) and Transformational Teacher Leadership (Y)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.738 ^a	.745	.638	7.214

Predictors: (Constant), Learning Community

Based on Table 8, the R Square value is 0.745. This means that the strong influence of the Learning Community (X1) on Transformational Teacher Leadership (Y) is 74.5%, while the remaining 25.5% of Transformational Teacher Leadership (Y) is influenced by other variables not examined in this study. Additionally, the r-value of 0.738 (strong) indicates a significant impact of Learning Community (X1) on Transformational Teacher Leadership (Y). Thus, it can be concluded that Learning Community (X1) positively and strongly affects Transformational Teacher Leadership (Y), with a total influence of 74.5%. The coefficient of determination between the Learning Community variable and Transformational Teacher Leadership is shown in Table 9.

Table 9. Determination Coefficient of Learning Community on Transformational Teacher Leadership

Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	T
1	(Constant)	18.344	8.306		2.209
	Learning Community	.855	.095	.738	9.025

a. Dependent Variable: Transformational Teacher Leadership

Based on Table 9, the regression analysis results for Learning Community on Transformational Teacher Leadership show a constant value of 18.344 with a coefficient of 0.855 and a significance value of 0.000. Therefore, the regression equation can be written as: $\hat{Y} = 18,344 + 0,855 X_1$. The regression coefficient of the Learning Community variable (X_1) is 0.855, with a positive sign indicating that if the Learning Community increases by one unit, assuming other independent variables remain constant, Transformational Teacher Leadership will increase by 0.855. The t-test is used to determine whether the independent variable (Learning Community) has a significant partial effect on the dependent variable (Transformational Teacher Leadership). If the probability significance value is < 0.10 , the variable significantly explains the dependent variable. Based on Table 9, the significance value is 0.000 ($0.000 < 0.10$), meaning the independent variable significantly explains the dependent variable. Decision-making through the Partial t-test is based on the calculated t-value and the table t-value. From Table 9, the calculated t-value is 9.025, while the table t-value for 70 respondents with a 5% significance level, two-tailed test, and degrees of freedom (df) = $n-k-1 = 70-1-1 = 68$ is 1.667572. Since the calculated t-value $>$ table t-value ($9.025 > 1.667572$), the Learning Community variable has a significant partial effect on the Transformational Teacher Leadership variable. To further examine the extent of the influence of the Learning Community (X_1) on Transformational Teacher Leadership (Y), a structural test is conducted, as shown in Table 10.

Table 10. Structural Test of Learning Community on Transformational Teacher Leadership

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.510	.304		4.971	.000
Learning Community	.435	.111	.430	3.925	.000

a. Dependent Variable: Transformational Teacher Leadership

Based on Table 10, the probability value between the Learning Community and Transformational Teacher Leadership is $0.000 < 0.05$, and the t-statistic value ($3.925 > 1.96$) at a 5% significance level indicates that the Learning Community variable significantly influences Transformational Teacher Leadership. The second hypothesis to be tested in this study is the influence of Participatory Leadership (X_2) on Transformational Teacher Leadership (Y) in the former Kawedanan Boja, Kendal Regency. The results of the simple regression test using SPSS can be seen in Table 10.

Table 11. Correlation Measure of Participatory Leadership (X_2) on Transformational Teacher Leadership (Y)

		Participatory Leadership	Transformational Teacher Leadership
Participatory Leadership	Pearson Correlation	1	.781**
	Sig. (2-tailed)		.000
	N	70	70
Transformational Teacher Leadership	Pearson Correlation	.781**	
	Sig. (2-tailed)	.000	
	N	70	70

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

Table 11 shows the correlation between the Participatory Leadership variable and Transformational Teacher Leadership is positive, with an r-value of 0.784 (strong). Meanwhile, the Sig (1-tailed) value of 0.000 shows a unidirectional relationship between X_2 and Y , which is very strong, as the value is less than 5% or $0.000 < 0.05$. The conclusion is that the Participatory Leadership variable has a strong relationship with Transformational Teacher Leadership, with a correlation value 0.784. The results of the ANOVA test in Table 11 can be examined to determine whether the second hypothesis is accepted or rejected.

Table 12. ANOVA Test Results of Participatory Leadership (X_2) on Transformational Teacher Leadership (Y)

ANOVA ^a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	4738.776	1	4738.776	106.016	.000 ^b
Residual	3039.524	68	44.699		
Total	7778.300	69			

a. Dependent Variable: Transformational Teacher Leadership

b. Predictors: (Constant), Participatory Leadership

Based on Table 12, the F-value obtained is 106.016, and the F-table value for an alpha of 5% (0.05) with $df_1 = 1$ and $df_2 = 68$ is 3.13. Since $F_{\text{calculated}} > F_{\text{table}}$ ($106.016 > 3.13$) and the significance value is 0.000, which is smaller than the significance level of 0.05 ($0.000 < 0.05$), the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted. Thus, it can be concluded that the second hypothesis, stating "There is an influence of Participatory Leadership (X2) on Transformational Teacher Leadership (Y) in the former Kawedanan Boja, Kendal Regency," is accepted. To determine the extent of the influence of the Participatory Leadership (X2) variable on Transformational Teacher Leadership (Y), the R Square test results in Table 13 can be examined.

Table 13. R Square Model Test Results of Participatory Leadership (X2) on Transformational Teacher Leadership (Y)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.781 ^a	.709	.603	6.686

a. Predictors: (Constant), Participatory Leadership

Based on Table 13, the R Square value is 0.709. This means that the strong influence of Participatory Leadership (X2) on Transformational Teacher Leadership (Y) is 70.9%, while 29.1% of Transformational Teacher Leadership (Y) is influenced by other variables not examined in this study. Additionally, the r-value of 0.781 (strong) indicates a strong influence between Participatory Leadership (X2) and Transformational Teacher Leadership (Y). Therefore, it can be concluded that Participatory Leadership (X2) strongly and positively influences Transformational Teacher Leadership (Y), with a total impact of 70.9%. The determination coefficient between the Participatory Leadership variable and Transformational Teacher Leadership can be seen in Table 14.

Table 14. Determination Coefficient of Participatory Leadership on Transformational Teacher Leadership Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	T Sig.
1	(Constant)	12.568	7.843		1.602 .000
	Participatory Leadership	.891	.087	.781	10.296 .000

a. Dependent Variable: Transformational Teacher Leadership

Based on Table 15, the constant value is 12.568, and the regression coefficient of Participatory Leadership (β_2) is 0.891. Based on this, the regression equation can be written as follows: $\hat{Y} = 12,568 + 0,891 X_2$. This means that if Participatory Leadership increases by one unit, Transformational Teacher Leadership will increase by 0.891. The regression coefficient of the Participatory Leadership variable (X2) is 0.891, with a positive sign indicating that if Participatory Leadership increases by one unit while assuming other independent variables remain constant, Transformational Teacher Leadership will increase by 0.891. A t-test is used to determine whether the independent variable (Participatory Leadership) has a significant partial effect on the dependent variable (Transformational Teacher Leadership). To measure the extent to which the independent variable (Participatory Leadership) influences the dependent variable (Transformational Teacher Leadership) in the former Kawedanan Boja, Kendal Regency, if the probability significance value < 0.10 , then from Table 24, it can be seen that the significance value is 0.000 ($0.000 < 0.10$), meaning that the independent variable significantly explains the dependent variable. Decision-making through the Partial t-test can be determined based on the calculated t-value and the t-table value. Based on Table 14, the calculated t-value is 10.296, while the t-table value for 70 respondents using a significance level of 5%, a two-tailed test, and degrees of freedom (df) = $n - k - 1 = 70 - 1 - 1 = 68$ (where n = number of data points, k = number of independent variables) is 1.667572. Since $t_{\text{calculated}} > t_{\text{table}}$ ($10.296 > 1.667572$), the Participatory Leadership variable has a significant partial effect on the Transformational Teacher Leadership variable. To determine the extent of the influence of the Participatory Leadership (X2) variable on Transformational Teacher Leadership (Y), the structural test results in Table 15 can be examined.

Table 15. Structural Test of Participatory Leadership (X2) on Transformational Teacher Leadership (Y)

		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	T Sig.
1	(Constant)	.974	.290		3.365 .000
	Participatory Leadership	.624	.104	.587	5.985 .000

a. Dependent Variable: Transformational Teacher Leadership

Based on the calculation results in Table 24, it is found that the probability value between Participatory Leadership and Transformational Teacher Leadership is $0.000 < 0.05$. Additionally, the t-statistic value ($5.985 > 1.96$) at a significance level of 5% indicates that the Participatory Leadership variable influences Transformational Teacher Leadership. The third hypothesis is analyzed using multiple regression analysis. This method is used to examine the influence of independent variables on the dependent variable, specifically the effect of Learning Community (X1) and Participatory Leadership (X2) together on Transformational Teacher Leadership (Y) in the former Kawedanan Boja, Kendal Regency. To determine whether the third hypothesis is accepted or rejected, the results of the ANOVA test in Table 25, supported by Table 27 on the determination test of (X1) and (X2) on (Y), are examined.

Table 16. ANOVA Test Results of Learning Community (X1) and Participatory Leadership (X2) on Transformational Teacher Leadership (Y)

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4939.119	2	2469.559	58.278	.000 ^b
	Residual	2839.181	67	42.376		
	Total	7778.300	69			

a. Dependent Variable: Transformational Teacher Leadership

b. Predictors: (Constant), Learning Community, Participatory Leadership

Based on the data in Table 15, the F-statistic value is 58.278, while the F-table value for alpha 5% (0.05) with $df_1 = 2$ and $df_2 = 68$ is 3.13. Since $F\text{-statistic} > F\text{-table}$ ($58.278 > 3.13$) and the significance value is 0.000, which is smaller than the significance level of 0.05 ($0.000 < 0.05$), the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted. Thus, it can be concluded that Hypothesis 3, which states that "There is an influence of Learning Community (X1) and Participatory Leadership (X2) on Transformational Teacher Leadership (Y) in the former Kawedanan Boja, Kendal Regency," is accepted. Based on the results and discussion above, it can be concluded that Learning Community (X1) and Participatory Leadership (X2) positively influence Transformational Teacher Leadership (Y), with a total impact of 73.5%. This means that as Learning Community (X1) and Participatory Leadership (X2) improve, they will also affect Transformational Teacher Leadership (Y). The R Square model test is examined in Table 17 to determine the extent of this influence.

Table 17. Model Summary of Learning Community (X1) and Participatory Leadership (X2) on Transformational Teacher Leadership (Y)

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.797 ^a	.735	.624	6.510	

a. Predictors: (Constant), Learning Community, Participatory Leadership

From Table 16, the R Square value is 0.735. This indicates a strong influence of Learning Community (X1) and Participatory Leadership (X2) on Transformational Teacher Leadership (Y) by 73.5%, while the remaining 26.5% is influenced by other variables not examined in this study. Furthermore, the R-value of 0.797 indicates a strong relationship between Learning Community (X1) and Participatory Leadership (X2) on Transformational Teacher Leadership (Y). Hence, it can be concluded that Learning Community (X1) and Participatory Leadership (X2) have a strong and positive effect on Transformational Teacher Leadership (Y), with a total impact of 73.5%. The regression coefficients can be observed in Table 18.

Table 18. Correlation Coefficients of Learning Community (X1) and Participatory Leadership (X2) on Transformational Teacher Leadership (Y)

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	12.383	7.637		1.621	.000
	Learning Community	1.020	.469	.881	2.174	.000
	Participatory Leadership	1.881	.463	1.647	4.064	.000

a. Dependent Variable: Transformational Teacher Leadership

From Table 17, the Constant value is 12.383, the Learning Community (X1) coefficient is 1.020, and the Participatory Leadership (X2) coefficient is 1.881. Therefore, the regression equation is: $\hat{Y} = 12,383 + 1,020 X_1 + 1,881 X_2$. Based on the analysis of the regression coefficients, this positive regression indicates that the better

the Learning Community and Participatory Leadership, the higher the Transformational Teacher Leadership. The regression coefficient for Learning Community (X1) is 1.020, meaning that for every increase of 1 unit in Learning Community (X1), Transformational Teacher Leadership increases by 1.020, assuming no other influencing variables. The regression coefficient for Participatory Leadership (X2) is 1.881, meaning that for every increase of 1 unit in Participatory Leadership (X2), Transformational Teacher Leadership increases by 1.881, assuming no other influencing variables.

The significance values presented in Table 17 indicate that the significance value of X1 on Y is 0.000 ($0.000 < 0.05$), implying that the Learning Community (X1) variable has a significant influence on Transformational Teacher Leadership (Y). Similarly, the significance value of X2 on Y is also 0.000 ($0.000 < 0.05$), demonstrating that the Participatory Leadership (X2) variable significantly affects Transformational Teacher Leadership (Y). Furthermore, a partial t-test was conducted based on the calculated and table values. According to Table 17, the t-statistic for X1 on Y is 2.174, while the t-table value is 1.667572. Since the t-statistic exceeds the t-table value ($2.174 > 1.667572$), it confirms that the Learning Community variable significantly influences Transformational Teacher Leadership. Likewise, the t-statistic for X2 on Y is 4.064, with a t-table value of 1.667572. Given that the t-statistic is greater than the t-table value ($4.064 > 1.667572$), it can be concluded that the Participatory Leadership variable also significantly influences Transformational Teacher Leadership. Finally, to further examine the impact of Learning Community and Participatory Leadership on Transformational Teacher Leadership, the structural test is presented in Table 19.

Table 19. Structural Test of Learning Community (X1) and Participatory Leadership (X2) on Transformational Teacher Leadership (Y)

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
1 Constant)	.992	.302			3.280	.000
Learning Community	.134	.153	.133		2.222	.000
Participatory Leadership	.651	.160	.613		4.058	.000

a. Dependent Variable: Transformational Teacher Leadership

Based on the calculations in Table 18, the probability value between Learning Community and Transformational Teacher Leadership is $0.000 < 0.05$. Similarly, the probability value between Participatory Leadership and Transformational Teacher Leadership is $0.000 < 0.05$. Furthermore, the t-statistic value for Learning Community on Transformational Teacher Leadership is $2.222 > 1.96$, and the t-statistic value for Participatory Leadership on Transformational Teacher Leadership is $4.058 > 1.96$ at a 5% significance level. Therefore, it can be concluded that both Learning Community and Participatory Leadership significantly influence Transformational Teacher Leadership. The findings of this study indicate that Learning Community and Participatory Leadership significantly impact Transformational Teacher Leadership. These findings are based on quantitative data analysis, which shows that Learning Community contributes 74.5% to Transformational Teacher Leadership, while Participatory Leadership influences 70.9%. Learning Community creates a conducive environment for teachers to share experiences and enhance their professional skills. Within a Learning Community, teachers can discuss more effective teaching methods, gain new insights, and increase their confidence in classroom management. Thus, the more actively a teacher engages in a Learning Community, the greater their potential to develop stronger school leadership skills (Harlita & Ramadan, 2024). These results were obtained from data analysis showing a significant positive correlation and supported by literature studies stating that interaction within a Learning Community can improve teacher's pedagogical and leadership skills (Cholivah & Hidayati, 2025). Participatory Leadership also plays a crucial role in enhancing Transformational Teacher Leadership. When principals implement Participatory Leadership, teachers are given more opportunities to contribute to decision-making processes. This, in turn, fosters a sense of ownership and responsibility for the school's development (Tanjung, 2020). A more open relationship between school principals and teachers creates a collaborative and innovative work atmosphere, ultimately improving the effectiveness of Transformational Teacher Leadership (Permana & Karwanto, 2020). However, this study also found several limitations in implementing Participatory Leadership, such as structural barriers in some schools that hinder teachers' active participation in decision-making processes. Therefore, the findings of this study are reinforced by literature stating that the effectiveness of Participatory Leadership highly depends on the school's organizational culture and support from policymakers (Masruhin & Raundoh, 2022).

The findings of this study can be extended to various educational contexts. In schools with low Learning Community participation levels, policies that encourage the establishment of professional communities can serve as a solution to improve teacher leadership quality (Supardi & Herdiana, 2024). Furthermore, in education systems that remain hierarchical, implementing Participatory Leadership can help create a more democratic environment and promote innovation in teaching (Astutik et al., 2021). This study contributes to the scientific

field by demonstrating that the combination of Learning Community and Participatory Leadership can effectively build Transformational Teacher Leadership, especially in schools with rigid administrative structures. The implications of these findings can also be applied to teacher and school principal training programs, emphasizing the importance of collaboration and empowerment in the educational process. This study shows that the learning community significantly enhances teachers' professional skills, particularly in interaction, teaching innovation, and reflective teaching practices. Meanwhile, participative leadership has a more dominant influence in creating an inclusive work environment and encouraging teachers to be actively involved in school policies. The interplay of these factors highlights how transformational leadership is best cultivated when schools actively foster collaboration, encourage shared decision-making, and implement supportive policies. Therefore, this study asserts that the combination of these two factors contributes to the development of Transformational Teacher Leadership at the school level and supports broader improvements in educational quality.

CONCLUSION

Based on the research findings, it can be concluded that Learning Community and Participatory Leadership play a significant role in enhancing the effectiveness of Transformational Teacher Leadership. Learning Community strengthens teacher's professional skills through interaction and innovation in teaching, while Participatory Leadership provides teachers with opportunities to be more actively involved in decision-making, thereby increasing their sense of responsibility and ownership over school development. This study confirms that collaborative and participatory factors are crucial in shaping more effective and innovative teacher leadership. The contribution of this research to the field of education lies in reinforcing the concept of community-based and participatory educational leadership, which can be implemented in educational policies, teacher professional development programs, and school leadership strategies to create a more inclusive and innovative learning environment.

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