The Influence of Transformational Leadership and Work Culture on the Quality of Elementary School Learning

Eli Erlinawati [1], Bunyamin [2], I Made Sudana [3]

[1] University of the Teachers Association of the Republic of Indonesia, Semarang, Indonesia;
   ellierlinawati@gmail.com

[2] University of the Teachers Association of the Republic of Indonesia, Semarang, Indonesia;
   bunyamin@upgris.aci.id

[3] University of the Teachers Association of the Republic of Indonesia, Semarang, Indonesia;
   sudana080556@gmail.com

Abstract	This study aims to analyze the influence of transformational leadership and work culture on the quality of learning in elementary schools of the Baskara Sumirat Cluster, Tembalang District. This study uses a quantitative approach with an ex post facto design. Data collection is carried out through standardized questionnaires. The validity and reliability test was carried out using SPSS version 26. Data analysis includes descriptive statistics, key component analysis (PCA), and simple and multiple linear regressions. The results showed that transformational leadership had a significant influence of 60.4% on the quality of learning. Work culture contributed 35.4%, and simultaneously, the two variables explained 69.0% variability. The regression coefficient shows a greater influence of transformational leadership than work culture. This study highlights integrating leadership approaches and work culture in public elementary schools. This study reinforces the position of transformational leadership variables as a key factor that is more dominant than work culture, while providing an empirical data-based predictive model in the context of Indonesian basic education.
Keywords	Learning Quality; Transformational Leadership; Work Culture

Corresponding Author
Eli Erlinawati
University of the Teachers Association of the Republic of Indonesia, Semarang, Indonesia;
ellierlinawati@gmail.com

1. INTRODUCTION

The quality of learning in elementary schools is the main indicator in assessing the success of primary education (Arnyana et al., 2022; Hardy et al., 2019; Setiawati, 2020). Good learning reflects an effective, interactive, and meaningful learning process for students (Masih & Ali, 2021; Roesminingsih et al., 2025). Improve the quality of learning through curriculum reform, teacher capacity building, and strengthening educational facilities, but the impact has not been fully distributed. Some schools show high achievements, while others still face fundamental problems in improving the quality of learning (Husna et al., 2024; Kahangwa et al., 2024).

The uneven quality of learning is reflected in the data on Education Report Cards from 2023 to 2025 in the Baskara Sumirat Cluster, Tembalang District. The data shows a tendency to stagnate and decline

in learning quality scores in most schools. SD Islam Al Maarif recorded the lowest score of 61.00 in 2025, while SD Negeri Tandang 01 experienced a sharp decline from 73.84 to 69.00. This phenomenon shows that some schools are experiencing setbacks in learning management, even though quality improvement policies have been rolled out nationally.

The low quality of learning in several schools raises questions about the factors that play a role in the managerial and cultural processes of schools (Fadila et al., 2024; Nykiel et al., 2019). The principal's leadership plays a crucial role in determining the course and achievement of the learning process. The leaders who can inspire, motivate, and encourage positive change will improve the performance of educational organizations. Transformational leaders form collective commitments and empower their members to realize a shared vision (Marks & Printy, 2003).

Based on the initial survey results, transformational leadership in elementary schools has not been fully realized evenly. As many as 70% of respondents stated that the principal did not involve stakeholders in developing the school's vision, and 63% of respondents assessed that the principal had not identified the problem thoroughly. The principal can also not be an inspiration or problem solver in the school environment. This condition impacts the weak direction of teacher development and the lack of optimal learning innovation. The work culture among teachers significantly influences the overall quality of the learning experience. Teachers' discipline, collaboration, responsibility, and professionalism show a strong work culture. Work culture is a collection of values, norms, and beliefs that shape work behavior in an organization. A healthy work culture encourages the achievement of educational institutions' goals collectively and sustainably (Ahmad, 2021; Chalwe & Nyimbili, 2024; Robertson et al., 2002).

Initial surveys of teachers in the Baskara Sumirat Cluster show that the work culture is still not fully formed optimally. As many as 67% of teachers do not prepare materials before teaching and do not assess learning outcomes promptly and objectively. Most teachers have not shown a full commitment to professionalism standards, even though the level of discipline, such as on-time attendance, has reached 83%. This inequality in work culture shows that efforts are still needed to foster and strengthen teachers' work ethic systemically.

The problem of non-optimal learning quality is caused by the weak integration between transformational leadership and work culture in elementary schools (Setiyanti et al., 2025; Utami et al., 2024). Education policies that focus on technical aspects have not been able to address the root of managerial and cultural problems in schools. Theoretical studies show that the synergy between school principals as change leaders and teachers as implementers of learning is an important foundation in building high-quality learning (Hallinger & Liu, 2018; Huang et al., 2021). There is still little research that specifically examines the contribution of these two factors simultaneously, especially in the context of public elementary schools in urban areas.

This research has a high urgency to provide an empirical foundation in formulating strategies to improve the quality of learning based on leadership and school organizational culture. The low quality of learning reflects the need for interventions that are not only technical but also target the principal's leadership aspects and the teachers' work ethic. The results of this research are expected to be a guideline in developing data-based principles and teachers, and enrich academic treasures related to improvement.

This research examines the impact of transformational leadership and work culture on the quality of education in elementary schools within the Baskara Sumirat Cluster, Tembalang District. The main questions in this study include: (1) whether transformational leadership affects the quality of learning, (2) whether work culture affects the quality of learning, and (3) whether the two factors contribute simultaneously to improving the quality of learning.

2. METHODS

This study uses a quantitative approach with an ex-post facto type (Creswell, 2013; Sugiyono, 2017). The variable in research is transformational leadership and work culture, which occurred before observations were made on the bound variable in the form of learning quality. One hundred seventy teachers in the Baskara Sumirat Cluster will be the population in this study. The research sample totaled 119 teachers, selected by proportional random sampling to represent all schools in the group fairly and proportionally. This technique represents population characteristics, especially regarding school background and differences in learning quality scores based on Education Report Cards.

The main instrument in data collection is a closed questionnaire in the form of a Likert scale. This questionnaire was compiled based on theoretical indicators of transformational leadership variables, work culture, and learning quality, which have been developed and tested for validity and reliability in previous studies. Each item of the statement in the questionnaire measures teachers' perception of the real conditions in their respective schools. The collected data were analyzed using simple linear regression and multiple linear regression. Simple linear regression was applied to test the influence of each independent variable on the dependent variable. In contrast, multiple linear regression was employed to examine the combined effect of both variables simultaneously. All statistical tests were performed using the help of SPSS software version 26. The instruments are as follows:

Table 1. Summary Table of Research Instrument Grids

Variable	Dimension	Indicators	No. Item	Stuttgart
Learning Quality	1. Classroom Management	a. Regularity of the classroom atmosphere	1–5	5
		b. Application of positive discipline	6–10	5
	2. Learning Methods	a. Adaptive instructions	11–15	5
		b. Learner instructions	16–20	5
	3. sychological Support	a. Constructive feedback	21–25	5
		b. Attention and care	26–30	5
		c. Student expectations	31–35	5
		Total		**35**
Transformational Leadership	1. Individualized Influence	a. Respect	1–4	4
		b. Confident	5–8	4
	2. Inspiration Motivation	a. Raise enthusiasm and hope	9–12	4
		b. Spread visic	13–16	4
		c. Commitment to purpose	17–20	4
	3. Intellectual Stimulation	a. Creative ideas	21–24	4
		b. Problem solving	25–28	4
	4. Individualized Consideration	a. Career development		4
		b. Appreciate the results of the work		4
		c. Subordinate relations		4
		Total		**40**
Work Culture	1. Disciplined Behavior	a. Punctuality	1–3	3
		b. Teaching discipline	4–6	3
	2. Openness	a. Motivational	7–9	3
		b. Obey the rules	10–12	3
		c. Independence	13–15	3
	3. Respect Each Other	a. Friendliness	16–18	3

Variable	Dimension	Indicators	No. Item	Stuttgart
		b. Loyalitasc	19–21	3
		c. Involvement	22–24	3
	4. Commitment	a. Job satisfaction	25–27	3
		b. Task completion	28–30	3
		Total		**30**
Learning Media	1. Relevance	a. Learning objectives	1–3	3
		b. Characteristics of students	4–6	3
		c. Ease of use	7–9	3
	2. Benefits	a. Artib	10–12	3
		b. Useful value	13–15	3
		c. Ease of understanding	16–18	3
	3. Material Suitability	a. Basic competencies	19–21	3
		b. Accuracy	22–24	3
		c. Up-to-date	25–27	3
	4. Graphic	a. Size	28–30	3
		b. Design	31–33	3
		c. Media content	34–36	3
		Total		**36**

This research procedure begins with the preparation stage of instruments and the collection of permits from the local education office and school principals. The researchers compiled questionnaire grids based on theoretical indicators and then tested the questionnaires on small groups outside the main sample to ensure readability and consistency.

SPPS as a means of assisting the instrument of validity and reliability. All valid question items were obtained based on the instrument's validity results, then continued with the results of instrument reliability.

Table 2. Result Validity and Reliability Instrument

Variabel	Cronbach's Alpha	Information
Learning Quality	0,80	Reabel
Transformational Leadership	0,86	Reabel
Work Culture	0,61	Reabel
Learning Media	0,70	reabel

Based on the table above, data were obtained on the learning quality variable of 0.80 with real information, on the transformational leadership variable, a score of 0.86, on the work culture variable, a score of 0.61, and on the learning media variable, a score of 0.70 with real information. The test results can be concluded to meet the requirements for validity and reliability, so that the instrument can be used in this study. Based on the test results, it can be concluded that it has met the requirements for validity and reliability, so that the instrument can be used in this study.

The next stage is the implementation of data collection, namely distributing questionnaires to teachers in 11 elementary schools in the Baskara Sumirat Cluster directly. Filling out the questionnaire was done individually and anonymously within one week. After all the data is collected, the researcher carries out the process of input and processing of statistical data, starting from classical assumption tests, regression analysis, to interpretation of test results. The series of procedures is systematically

arranged to ensure that the data obtained is valid and that the analysis can empirically answer the research objectives.

Before the regression analysis, the data were tested using a classical assumption test as a condition for model feasibility. The classical assumption test carried out includes the normality test, the linearity test, the multicollinearity test, and the heteroscedasticity test.

After the data met the classical assumptions, regression analysis was performed to test the research hypothesis quantitatively. The analysis results were interpreted based on the significance value (p-value), regression coefficient, and determination coefficient (R^2). The p-value is used to determine the acceptability of a hypothesis at a certain level of significance. The regression coefficient shows the direction and magnitude of the influence between variables. The coefficient of determination indicates how large a proportion of the dependent variable the independent variable can explain.

3.   FINDINGS AND DISCUSSIONS

This study involved 119 elementary school teachers from the Baskara Sumirat Cluster, Tembalang District, Semarang City. Descriptive analysis was used to describe teachers' perceptions of three main variables, namely transformational leadership (X_1), work culture (X_2), and learning quality (Y). The descriptive statistical results of each variable are shown in the following Table 3:

Table 3. Descriptive Statistics of Each Variable

Variable	N	Minimum	Maximum	Average	Baku Junction
Learning Quality (Y)	119	94	163	130,82	±10,826
Transformational Leadership (X_1)	119	105	180	145,66	±11,258
Work Culture (X_2)	119	73	141	112,92	±9,383

Table 4. Categorial interval Score

Category	Score Range
Low	< 120
Middle	120- 145
High	>145

The quality of learning is the main indicator to assess the effectiveness of the teaching and learning process. The research data showed that the quality of learning was in the medium category with an average score of 130.82. The wide variation in scores, from a minimum of 94 to a maximum of 163, shows that there is still inconsistency in implementing learning practices in each school. This condition is consistent with previous research, which revealed that variations in learning quality often occur due to differences in teachers' professional capacities and the learning methods used (Widaningsih, 2023; Syaifudin, 2023).

Transformational leadership is the ability of the principal to motivate and direct teachers in carrying out their professional duties. This variable has the highest average of 145.66, with a minimum value of 105 and a maximum of 180. However, teachers consider implementing transformational leadership to be only a formality. School principals have not been optimal in motivating teachers effectively, so the benefits of this leadership style have not been fully felt. Previous research has shown that the effectiveness of transformational leadership is largely determined by the principal's ability to provide individual attention and be an inspirational role model for teachers (Bakker et al., 2022; Chen

& Jiang, 2018; Erkutlu, 2008; Lu et al., 2020).

Work culture encompasses the habits and behaviors teachers carry out collectively within the school organization. Data shows that work culture averages 112.92 with a value range between 73 to 141. This condition shows that the work culture that is implemented still needs to be improved. Teachers in the Baskara Sumirat Cluster still tend to work individually rather than in teams, which leads to low synergy in improving the quality of learning. Previous research has identified that a strong and collaborative work culture can significantly support the improvement of learning quality and encourage the active participation of teachers in the learning process.

In general, these descriptive statistical results show that although transformational leadership has the highest average scores, the actual practice of this variable is still less effective. Despite having a lower average score, the work culture requires serious attention to support efforts to significantly improve the quality of learning in the primary school environment. This is reinforced by previous research that states that integrating transformational leadership and a solid work culture is the key to achieving optimal learning quality at the primary education level (Mukaddamah, 2024; Rahyasih et al., 2025; Scott, 2024).

Principal Component Analysis (PCA) is used to identify the dominant indicators of each research variable. The indicators used to measure the quality of learning consist of three aspects: classroom management, learning methods, and psychological support. The results of the analysis of the contribution of learning quality indicators are shown in Table 5 as follows:

Table 5. Contribution of Indicators to Learning Quality

Indicators	Extraction Value
Classroom Management	0,332
Learning Methods	0,794
Psychological Support	0,541

Learning methods were the most dominant indicator that affected the quality of learning based on PCA results, with an extraction value of 0.794. Teachers consider that teaching methods have the greatest contribution in determining the level of learning quality compared to aspects of classroom management and psychological support. These findings are consistent with previous research results showing that the quality of learning methods directly contributes to improving student learning outcomes and the effectiveness of the learning process in the classroom (Marliah & Muthukrishnan, 2025; Nurlaelah, 2023). Meanwhile, the classroom management indicator with the lowest extraction value, 0.332, indicates that teachers still see classroom management needing improvement in daily learning practices. This condition aligns with the study's findings (Muis et al., 2024; Putri et al., 2024; Tufail et al., 2019). This confirms that weak classroom management can significantly reduce the effectiveness of learning. Psychological support with an extraction value of 0.541 shows the importance of emotional aspects in learning, even though it is not as large as the learning method. These findings support the results of previous research by Gao et al. (2025), Liu et al. (2025), and Rehman et al. (. This explains that good psychological support can increase students' motivation to learn optimally. The results of the analysis of the variables of transformational leadership variables are presented in Table 6:

Table 6. Contribution of Indicators to Transformational Leadership

Indicators	Extraction Value
Individualized Influence	0,583
Inspirational Motivation	0,781
Intellectual Stimulation	0,758
Individualized Consideration	0,857

The individualized consideration indicator is the dominant aspect in the transformational leadership variable based on the extraction value of 0.857. Teachers view that the individual attention aspect of the principal has a significant influence on improving the quality of learning. These findings are consistent with the results of Arif Syaifudin's (2023) research, which confirms that individual principals' attention to teachers is important in supporting the effective development of teachers' professional capacity. On the other hand, the individualized influence indicator had the lowest contribution with an extraction value of 0.583. The data show that school principals are not optimal as inspirational role models in the development of teacher independence (Mthanti & Msiza, 2023). The analysis of work culture indicators yielded the findings presented in the following Table 7:

Table 7. Contribution of Indicators to Work Culture

Indicators	Extraction Value
Disciplined Behavior	0,704
Openness	0,760
Mutual Respect	0,712
Commitment	0,787

Commitment is the dominant indicator in the work culture variable with an extraction value of 0.787. Teachers view commitment as the main factor in building a school environment conducive to learning. These findings align with research (Garg, 2024). This states that teachers' commitment to the task greatly determines the effectiveness of the learning process in schools. On the other hand, the indicator of disciplined behavior had the lowest contribution with an extraction value of 0.704. Teachers still face challenges in implementing discipline collectively and consistently in schools. This condition is in line with the results of Mulyasa's (2018) research, which states that weak collective discipline in schools can hinder the creation of a conducive work environment and interfere with the overall effectiveness of learning. Improving disciplined behavior in schools is an important priority to improve the quality of work culture that contributes to effective learning.

Table 8. Summary of Linear Regression Analysis Results

Type	R	R Square	Adjusted R^2	F Calculate	Sig.	Interpretation
$X_1 \rightarrow$ Quality of Learning	0,777	0,604	0,600	178,18	0,000	Significant, high contribution
$X_2 \rightarrow$ Quality of Learning	0,595	0,354	0,348	64,12	0,000	Significant, moderate contribution
$X_1 + X_2 \rightarrow$ Learning Quality	0,831	0,690	0,682	85,23	0,000	Significant, high contribution

The linear regression results show that transformational leadership significantly influences elementary school learning quality. The transformational leadership variable explains 60.4% of the variability in the quality of independent learning. The work culture variable contributed 35.4%, while simultaneously the two variables were able to explain the variability of learning quality by 69.0%. Based on the results obtained, the data presented above is statistical data, so that the researcher can generalize the results of this research. However, these findings align with data in the field, that transformational leadership and work culture synergize in improving the quality of learning. Based on the results of field research, some evidence is found, including that transformational leadership can create a positive climate, especially by giving special attention to teachers, such as motivating teachers and becoming role models. In addition, it is also found that in transformational leadership, school principals often play the role of teacher companions, as teacher directors, so that teachers are actively involved in the self-development process. Another finding on work culture, researchers found that in the discipline of teachers, staff, and students in carrying out school rules, such as punctuality, implementation of learning tasks, and classroom order. In addition, rules are enforced and orderly conditions are found in schools thanks to the synergy of teachers and principals. Another finding was that every school resident synergized with each other, as evidenced by the lack of conflict at school, and the high attitude of mutual respect. These findings align with previous research showing that the combination of transformational leadership and work culture significantly determines the quality of learning in the primary education setting. Research (Syam et al., 2022) found that the principal's competence and teachers' performance greatly affected elementary school learning quality. The regression equation formed in this study is that the learning quality equals 12.199 plus 0.532 times transformational leadership plus 0.273 times work culture. This equation shows that transformational leadership has a more dominant influence on improving the quality of learning compared to work culture. The findings confirm that increasing the leadership capacity of school principals has great potential to improve the quality of learning significantly. Principals who can motivate, consider the individual needs of teachers, and create intellectual stimulation contribute greatly to the creation of a better quality of the learning process in the classroom.

Another finding that confirms work culture shows a low influence because the work environment tends to be flexible. As with the disciplined behavior found by almost all respondents, explaining that discipline is formed according to the leader, openness, and mutual respect will also be created if a leader can directly align with the goals to increase the respondents' commitment. These findings align with the research of Fadila et al. (2024) that transformational leadership has a positive and significant effect on employee performance, while organizational culture shows an insignificant and even negative impact on individual performance. However, simultaneously, the combination of the two has a greater positive impact, signaling the importance of transformational leadership as a key driver and work culture as a supporting factor that needs to be strengthened to be effective

Implementing transformational leadership and consistently strengthening the work culture are important strategies in improving elementary school learning quality. Efforts to develop the capacity of school principals and internalize the value of a collaborative work culture must be a top priority in improving the quality of education. A collaborative work culture allows solid teacher teamwork to support the school's vision and mission. This condition positively impacts improving the quality of learning and ultimately strengthens public trust in schools. However, several things need to be considered in its implementation that do not always run smoothly, so that in implementing leadership must also be tolerant to reach all employees' attitudes. Finally, the leadership that is carried out becomes leadership that is not oppressive and makes its subordinates feel pressured.

4. CONCLUSION

Based on the research findings and discussion, it can be concluded that transformational leadership

and work culture significantly affect the quality of learning at SD Gugus Baskara Sumirat, Tembalang District. Transformational leadership shows greater influence than work culture.

The research implications for schools are the importance of transformational leadership in improving elementary school learning quality. Principals must develop a leadership style that can motivate, inspire, and empower teachers and staff through idealizing influence, inspirational motivation, intellectual consideration, and intellectual stimulation. Thus, school principals can create a conducive and innovative learning environment that positively impacts the quality of learning. In addition, a healthy and positive work culture also needs to be built and maintained consistently to support an effective learning process. A good work culture will strengthen teachers' collaboration, discipline, and professionalism to support the school's vision and mission in improving the quality of education.

Another implication of this study is aimed at the education office that the results provide empirical evidence that strengthening transformational leadership in elementary schools should be a priority in school development programs. The education office can design special training and coaching for school principals to implement transformational leadership effectively. In addition, strengthening work culture through programs to improve teacher discipline, collaboration, and professionalism also needs to be encouraged systematically

This research has significance in making theoretical and practical contributions to developing the quality of basic education. Theoretically, this study strengthens the understanding of the relationship between transformational leadership and work culture on learning quality, particularly in the context of primary schools in urban environments. Practically, the results of this research can be used by education policy makers, school supervisors, and school principals in designing quality improvement strategies based on strengthening leadership capacity and improving teachers' work culture. The research also provides an empirical basis for schools to reflect on organizational performance and formulate sustainable interventions to achieve high-quality learning and positively impact student achievement.

The suggestion in this study is to strengthen the leadership capacity of school principals through professional development programs such as training, mentoring, and workshops that focus on providing inspirational motivation, individual consideration, and intellectual stimulation so that the quality of learning can be optimally improved. In addition, this study provides input for policymakers and education managers in the Tembalang area to encourage the creating a collaborative work culture in the school environment. Strengthening work culture must improve teachers' discipline and collective commitment to build effective teamwork. School-based policies that support the internalization of professional work values must be developed to create a conducive work environment. This condition will ultimately positively impact the effectiveness of teaching, the achievement of student learning outcomes, and the increase of public trust in the quality of basic education.

The limitations of this study include that this study was only conducted in a certain number of elementary schools, so the results may not be generalized overall for all elementary schools in different regions with different characteristics. In addition, this study only focuses on two main variables, transformational leadership and work culture, without considering other factors that may also affect the quality of learning, such as school facilities, the role of parents, or education policies. Not only that, the data used in this study is mostly quantitative and relies on instruments such as questionnaires, that respondents' subjectivity or limitations may influence in capturing in-depth qualitative aspects. Another limitation is that the assessment of transformational leadership and work culture is highly dependent on the perception of teachers and principals, which may be different and influenced by their own personal experiences or conditions. This research is also limited to a relatively short time, so it does not consider changes and dynamics of leadership and work culture in the long term that can sustain the quality of learning. These limitations need to be considered to develop further research so that the

research results can be more comprehensive and applicable in the context of education in elementary schools.

REFERENCES

Ahmad, M. (2021). *THE IMPACT OF WORK CULTURE ON THE APPARATUS WORK PERFORMANCE. 19*, 253–261. https://doi.org/10.30996/DIA.V19I1.5141

Alykpashova, N., & Shamatov, D. (2025). Teachers' collaborative culture and its impact on professional practice. *Pedagogical Dialogue*. https://doi.org/10.62670/2308-7668.2025.51.1.004

Arnyana, I. B., Suastra, I. W., & Susiani, K. (2022). A study of improving the quality of learning to improve the quality of elementary school education. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*. https://doi.org/10.29210/1202221786

Aswan, M. K., & Hermawan, D. (2025). The Role of Collaborative Work Culture in Enhancing Teacher Effectiveness in SMK Negeri 1 Pabelan. *International Journal of Economics, Business Management and Accounting (IJEBMA)*. https://doi.org/10.59890/ijebma.v7i1.2840

Bakker, A., Espevik, R., Olsen, O. K., & Hetland, J. (2022). Daily transformational Leadership: A source of inspiration for follower performance? *European Management Journal*. https://doi.org/10.1016/j.emj.2022.04.004

Chalwe, D. M., & Nyimbili, L. (2024). Potential Problems with Having a Culture that is Too Strong in Modern Organizations. *International Journal For Multidisciplinary Research*. https://doi.org/10.36948/ijfmr.2024.v06i01.12418

Chen, C., & Jiang, Y. (2018). Integrating Knowledge Activities for Team Innovation: Effects of Transformational Leadership. *Journal of Management, 44*, 1819–1847. https://doi.org/10.1177/0149206316628641

Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches-4th ed. *SAGE Publications, 86(385)*.

Erkutlu, H. (2008). The impact of transformational leadership on organizational and leadership effectiveness. *Journal of Management Development, 27*, 708–726. https://doi.org/10.1108/02621710810883616

Fadila, T. N., Damanik, Y. T., Elfrianto, E., & Ayumi, N. M. (2024). The Leadership Role of The School Principal in Developing School Culture. *Indonesian Journal of Education*. https://doi.org/10.56495/ije.v3i1.649

Gao, J., Liu, J., & Arshad, M. H. (2025). Teacher-student relationships as a pathway to sustainable learning: Psychological insights on motivation and self-efficacy. *Acta Psychologica, 254*, 104788. https://doi.org/10.1016/j.actpsy.2025.104788

Garg, D. (2024). Professional Commitment of Secondary School Teachers in relation to Self-Efficacy and Teacher Effectiveness. *International Journal For Multidisciplinary Research*. https://doi.org/10.36948/ijfmr.2024.v06i02.13727

Hallinger, P., & Liu, S. (2018). Principal Instructional Leadership, Teacher Self-Efficacy, and Teacher Professional Learning in China: Testing a Mediated-Effects Model. *Educational Administration Quarterly, 54*, 501–528. https://doi.org/10.1177/0013161X18769048

Hardy, I., Büttner, G., Decker, A.-T., Fauth, B., Klieme, E., Decristan, J., & Kunter, M. (2019). The effects of teacher competence on student outcomes in elementary science education: The mediating role of teaching quality. *Teaching and Teacher Education*. https://doi.org/10.1016/j.tate.2019.102882

Huang, L., Huang, Y., & Zhou, S. (2021). Examining principal leadership effects on teacher professional learning in China: A multilevel analysis. *Educational Management Administration & Leadership, 51*, 1278–1300. https://doi.org/10.1177/17411432211041626

Husna, F., Melinda, R., Simanjuntak, P. L., Mandala, J., Diani, dan, Putra, A., Pratiwi, A., Hafizan, M., & Ananda, M. (2024). The Influence of Curriculum Changes on Learning Methods at SDN Development 9. *JUPE : Jurnal Pendidikan Mandala*. https://doi.org/10.58258/jupe.v9i2.7137

Kahangwa, G., Kimaro, A., & Suleiman, S. J. (2024). Stakeholders' Perception of the Impact of Curriculum Reform on the Quality of Primary Education in Zanzibar. *East African Journal of Education Studies*. https://doi.org/10.37284/eajes.7.4.2486

Liu, J., Gao, J., & Arshad, M. H. (2025). Teacher-student relationships as a pathway to sustainable learning: Psychological insights on motivation and self-efficacy. *Acta Psychologica*, *254*, 104788. https://doi.org/10.1016/j.actpsy.2025.104788

Lu, S.-C., Lin, C.-C., Tang, H.-C., Lai, F.-Y., & Lee, Y.-C. (2020). Transformational Leadership and Job Performance: The Mediating Role of Work Engagement. *SAGE Open*, *10*. https://doi.org/10.1177/2158244019899085

Marks, H., & Printy, S. (2003). Principal Leadership and School Performance: An Integration of Transformational and Instructional Leadership. *Educational Administration Quarterly*, *39*, 370–397. https://doi.org/10.1177/0013161X03253412

Marliah, E., & Muthukrishnan, P. (2025). Improving Students' Economic Learning Outcomes through Problem-Based Learning Methods. *PPSDP International Journal of Education*. https://doi.org/10.59175/pijed.v4i1.410

Masih, A., & Ali, M. (2021). Enhancing the Quality of Learning through Changes in Students' Approach to Learning. *International Journal of Asian Education*. https://doi.org/10.46966/ijae.v2i3.242

Montenegro-Rueda, M., García-Martínez, I., Molina-Fernández, E., & Fernández-Batanero, J. (2021). Mapping teacher collaboration for school success. *School Effectiveness and School Improvement*, *32*, 631–649. https://doi.org/10.1080/09243453.2021.1925700

Mthanti, B. J., & Msiza, P. (2023). The roles of the school principals in the professional development of teachers for 21st-century Education. *Cogent Education*, *10*. https://doi.org/10.1080/2331186X.2023.2267934

Muis, M. A., Mardiana, M., Putri, N., Febriani, S., & Yuniarti, I. (2024). Peran Manajemen Kelas Dalam Meningkatkan Efektifitas Proses Pembelajaran. *Journal on Education*. https://doi.org/10.31004/joe.v7i2.7808

Mukaddamah, I. (2024). Peran Kepemimpinan Transformasional Kepala Sekolah dalam Meningkatkan Kinerja Guru: Studi Kasus di Sekolah Dasar. *AL-MIKRAJ Jurnal Studi Islam Dan Humaniora (E-ISSN 2745-4584)*. https://doi.org/10.37680/almikraj.v5i01.5834

Nurlaelah, N. (2023). Problem-Based Learning Method for Improving the Learning Achievement of Students. *Edunesia: Jurnal Ilmiah Pendidikan*. https://doi.org/10.51276/edu.v4i2.330

Nykiel, A., Hill, S., Lock, G., Morris, J. E., Lummis, G. W., & Ferguson, C. (2019). The role of leadership in establishing a positive staff culture in a secondary school. *Educational Management Administration & Leadership*, *48*, 802–820. https://doi.org/10.1177/1741143219864937

Putri, N., Febriani, S., Muis, M. A., Mardiana, M., & Yuniarti, I. (2024). Peran Manajemen Kelas Dalam Meningkatkan Efektifitas Proses Pembelajaran. *Journal on Education*. https://doi.org/10.31004/joe.v7i2.7808

Rahyasih, Y., Abubakar, A., Nurdin, N., & Aziz, C. N. (2025). Transformational leadership and the development of professional learning communities in elementary schools. *Journal of Educational Management and Instruction (JEMIN)*. https://doi.org/10.22515/jemin.v5i1.9930

Rehman, A., Bhuttah, T. M., & You, X. (2020). Linking Burnout to Psychological Well-being: The Mediating Role of Social Support and Learning Motivation. *Psychology Research and Behavior Management*, *13*, 545–554. https://doi.org/10.2147/PRBM.S250961

Robertson, C., Al-Habib, M. I., & Al-Khatib, J. (2002). The relationship between Arab values and work beliefs: An exploratory examination. *Thunderbird International Business Review*, *44*, 583–601. https://doi.org/10.1002/TIE.10036

Roesminingsih, E., Wardoyo, W., Sunikan, & Tri, D. (2025). The Principal's Strategy for Enhancing Learning Quality. *Journal of Information Systems Engineering and Management*. https://doi.org/10.52783/jisem.v10i18s.2915

Setiawati, L. (2020). *Impact of Teacher Certification on Learning Quality: A Case Study in Elementary School*.

151–154. https://doi.org/10.2991/aebmr.k.200108.036

Setiyanti, W., Kusumaningsih, W., & Nurkolis, N. (2025). THE INFLUENCE OF PRINCIPAL'S TRANSFORMATIONAL LEADERSHIP STYLE, SCHOOL CULTURE, AND TEACHER PROFESSIONALISM ON LEARNING QUALITY IN JUNIOR HIGH SCHOOL. *Prima Magistra: Jurnal Ilmiah Kependidikan*. https://doi.org/10.37478/jpm.v6i2.5133

Sugiyono. (2017). *Quantitative, qualitative, and R&D research methods.* Alphabeta.

Syam, R. Z. A., Achmad, W., & Rostini, D. (2022). The Significance of Principal Management on Teacher Performance and Quality of Learning. *AL-ISHLAH: Jurnal Pendidikan*. https://doi.org/10.35445/alishlah.v14i2.1721

Toloy, M. C. (2024). Transforming Challenges to Victories: An Inquiry into Transformational Leadership of School Leaders in the Public Elementary Schools. *International Journal of Innovative Science and Research Technology (IJISRT)*. https://doi.org/10.38124/ijisrt/ijisrt24apr2440

Tufail, I., Zaini, Z. A. H., & Rodliah, S. (2019). Classroom Management In Improving Learning Effectiveness. *Jurnal At-Tarbiyat: Jurnal Pendidikan Islam*. https://doi.org/10.37758/jat.v6i1.622

Utami, B. Y., Nelitawati, N., & Al-Kadri, H. (2024). The Influence of Principal Transformational Leadership on Teacher Performance and Learning Quality in Schools. *International Journal of Educational Dynamics*. https://doi.org/10.24036/ijeds.v6i2.488