

# The influence of leadership, teacher commitment, and organizational culture through the independent learning curriculum on improving education quality

Silvius Rejaan<sup>1\*</sup>,  Fathur Rokhman<sup>2</sup>,  Heri Yanto<sup>3</sup>,  Wasino<sup>4</sup>

<sup>1,2,3,4</sup>Graduate School, Educational Management, Universitas Negeri Semarang, Indonesia;

silviusrejaan26@students.unnes.ac.id (S.R.) fathurrokhman@mail.unnes.ac.id (F.R.) heri.yanto@mail.unnes.ac.id (H.Y.)

wasino@mail.unnes.ac.id (W.)

**Abstract:** This study aims to analyze the influence of school principal leadership, teacher commitment, and organizational culture on improving education quality by implementing the independent learning curriculum in Southeast Maluku Regency senior high schools/vocational schools. The study employed a quantitative approach using a survey method with 250 respondents, comprising 230 teachers and 20 school principals, analyzed using Partial Least Squares - Structural Equation Modeling (PLS-SEM). The results indicated that school leadership and organizational culture positively and significantly influenced the implementation of the Merdeka Belajar curriculum, while teacher commitment did not show a significant influence. Furthermore, implementing the Merdeka Belajar curriculum was found to have a positive and significant impact on improving educational quality. These findings highlight the importance of strengthening the role of school principals and developing an organizational culture that supports the successful implementation of the Merdeka Belajar curriculum to enhance educational quality.

**Keywords:** *Independent learning curriculum, Organizational culture, Quality of education, School leadership, Teacher commitment.*

## 1. Introduction

The transformation of education systems has become a global phenomenon as countries worldwide strive to adapt their curricula to meet the demands of the 21st century. From Finland's phenomenon-based learning to Singapore's "Teach Less, Learn More" philosophy, education reforms increasingly emphasize student autonomy, critical thinking, and flexible approaches to teaching and learning. This global shift has prompted many countries to rethink traditional leadership paradigms and organizational structures within educational institutions. Particularly in developing countries, the implementation of progressive curricula faces significant challenges related to leadership capacity, teacher readiness, and organizational culture.

The concept of leadership in educational settings is closely linked to the quality of education delivered. School leadership must adopt transformational and instructional leadership styles to motivate teachers and enhance the overall learning environment. Research indicates that effective leadership practices significantly improve school quality, particularly in remote areas, where leaders employ diverse spiritual and entrepreneurial leadership styles to foster educational effectiveness [1].

In the Merdeka Belajar Curriculum, which aims to foster student-centered learning and agility in educational content, the role of teachers has become increasingly important. They are not merely facilitators but play a crucial role in shaping how the curriculum is implemented in practice. Teachers' commitment to curriculum principles such as flexibility and autonomy influences how effectively educators can engage with students [2, 3]. Empirical studies indicate that teacher readiness,

professional development, and the strategic use of different learning tools are crucial for the successful implementation of the curriculum [4–6]. This aligns with observations that curricula designed for greater autonomy allow educators more autonomy, enabling them to tailor learning experiences to better meet the needs of diverse student demographics, ultimately improving educational outcomes [7, 8].

An important aspect of implementing the Merdeka Belajar Curriculum is the organizational culture within educational institutions. An organizational culture that supports fostering an environment where innovative teaching practices can thrive. Aligning school culture with the goals of the Merdeka Belajar Curriculum, which prioritizes character development and skill mastery over rote learning, has been proven to have a significant impact on student engagement and learning outcomes [9–11]. Teachers' perceptions and experiences regarding curriculum adaptation, influenced by organizational support structures, significantly impact the quality of the learning environment that can be created [3, 11].

Research emphasizes that the impact of the Merdeka Belajar Curriculum increases in contexts where teachers' capabilities are continuously developed through professional learning opportunities. This commitment not only strengthens teachers' ability to implement innovative pedagogical strategies but also enhances their capacity to nurture students' talents and interests effectively in alignment with educational goals [12, 13]. Thus, the interaction between leadership quality, teacher commitment, and organizational culture underpins the success of improving educational quality through the lens of the Merdeka Belajar Curriculum.

Despite extensive research on the individual components of educational reform, there remains a critical gap in understanding the interrelated influence of leadership, teacher commitment, and organizational culture on educational quality in the specific context of the self-directed learning curriculum. The urgency of this research lies in the rapid adoption of the curriculum in various educational settings without sufficient empirical evidence regarding the effectiveness and sustainability of its implementation. Therefore, this study aims to analyze how leadership practices, teacher commitment, and organizational culture collectively influence the successful implementation of the Merdeka Belajar Curriculum to improve educational quality in Indonesian schools.

## 2. Theoretical Analysis and Research Hypothesis

### 2.1. School Leadership and Educational Quality

School leadership is an important element that influences the quality of education in schools, affecting teacher performance and student outcomes. The nature and effectiveness of leadership practices used by school principals can be directly correlated with student academic achievement and the overall school environment. Certain competencies and behaviors characterize effective school leadership. Leadership competencies serve as the basic elements necessary for effective educational management, especially for principals operating in challenging areas [14]. In addition, leadership behavior influences teacher performance, indicating that strong and proactive school leadership fosters an environment conducive to educational effectiveness [15]. School leadership is a determining factor in improving educational quality [16]. Transformational leadership, characterized by inspiring and motivating teachers, has been associated with improved performance [17]. This style promotes a collaborative culture that can enhance educational effectiveness [18]. Additionally, leadership roles focused on improving teaching and learning have been identified as important aspects that school principals must adopt to positively impact schools [19]. The implementation of effective leadership styles varies depending on the context and specific needs of the educational environment. Flexibility in leadership emphasizes the importance of contextual relevance in applying transformational leadership practices [20].

*H<sub>1</sub>: School leadership has a positive and significant influence on improving the quality of education.*

## 2.2. Teacher Commitment and Education Quality

Teachers' commitment is important in fostering an environment conducive to effective teaching and learning. Teachers' dedication to their professional role is closely related to the quality of education provided to students [21-23]. Teachers' commitment is very important in facing challenges in the educational environment [24]. Despite increasing pressures, teachers continue to demonstrate strong dedication to their work [25]. Committed teachers not only reflect their dedication to educational standards but also engage students in the learning process [26]. Teacher commitment leads to transformational impacts in the classroom environment, which influence overall educational outcomes [27].

### *H<sub>2</sub>: Teacher Commitment and Education Quality*

## 2.3. Organizational Culture and Educational Quality

First, a positive organizational culture creates an environment conducive to collaboration and innovation among educators [28]. Educational institutions can improve quality assurance practices and enhance student outcomes through effective leadership and a strong commitment to fostering an inclusive culture. This cultural approach fosters a more dynamic academic climate, where faculty members are motivated to collaborate creatively, thereby directly influencing the delivery of high-quality education [29]. An organizational culture that promotes active engagement and participation among educators.

The development and sharing of core values among educators are closely aligned with the overall effectiveness of educational institutions. Organizational culture dynamics impact the quality of educational services, emphasizing that a cohesive culture is essential for achieving high educational standards [30]. Cultivating a culture of organizational commitment among educators can lead to improved educational quality [31]. As educational institutions embrace a strong organizational culture characterized by shared values and participatory leadership, they create a more stable and attractive environment [28].

Cultivating a positive organizational culture influences direct educational outcomes and extends its influence to educational institutions' long-term effectiveness and sustainability. A strong and positive organizational culture is crucial for educators' retention and psychological empowerment, essential for maintaining high-quality educational practices over time. A developing cultural environment leads to improved educational quality [32].

### *H<sub>3</sub>: Organizational Culture has a Positive and Significant Effect on Improving the Quality of Education*

## 2.4. Organizational Culture and The Quality of Education

As an instructional leader, the principal is tasked with administrative duties and improving the quality of education through transformational leadership. This includes establishing a clear school vision and fostering a supportive environment for teachers and students [33]. The principal's leadership style influences the extent to which teachers are satisfied and committed to their work, directly affecting overall performance and the quality of education delivered. The alignment between the principal's leadership and teacher commitment is directly correlated with improvements in educational quality, as committed teachers are more likely to embrace self-directed learning curricula and engage actively with students [34].

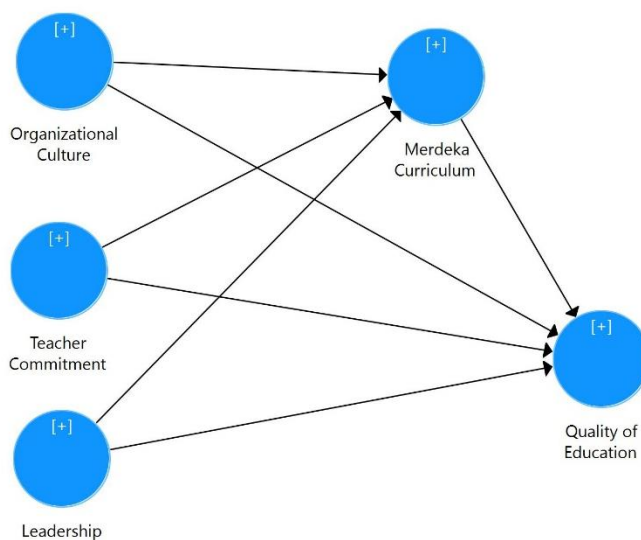
The adoption of self-directed learning curricula is significantly influenced by school leadership approaches. Effective educational leaders foster a framework that supports self-directed learning, facilitating an environment where students can thrive through self-directed educational pathways. Teachers, empowered by strong leadership, implement innovative teaching methods aligned with this curriculum, thereby enhancing student engagement and learning quality [34, 35]. Instructional leadership, as identified by several studies, plays a crucial role in guiding curriculum implementation and teacher engagement [33].

School leadership, characterized by transformational and effective instructional practices, is essential for fostering teacher commitment, implementing self-directed learning curricula, and improving educational quality. The literature emphasizes that the leadership style adopted by school principals significantly impacts all aspects of school operations, from teacher performance to student outcomes, establishing a comprehensive framework for sustainable educational improvement [36, 37].

*H<sub>3</sub>: Implementation of the Independent Learning Curriculum Mediates the Relationship between School Leadership, Teacher Commitment, and Organizational Culture on the Improvement of Education Quality.*

### 2.5. Conceptual Model

The conceptual model explains the relationship between leadership, teacher commitment, organizational culture, independent curriculum, and educational quality. School leadership, teacher commitment, and organizational culture are independent variables that directly influence educational quality. In addition to direct influence, these three variables also indirectly influence educational quality through the implementation of an independent curriculum as a mediating variable. In other words, school leadership, teacher commitment, and organizational culture impact educational quality directly and through the role of the self-directed curriculum as a catalyst in creating adaptive and high-quality learning. This model reflects how the interconnections between these variables can support holistic improvements in educational quality.



**Figure 1.**  
Conceptual model.

## 3. Materials and Methods

### 3.1. Research Design

This study uses a quantitative approach with an explanatory research design that aims to explain the causal relationship between the research variables. The research method used is a survey method with a cross-sectional approach, where data is collected in a specific period. The quantitative approach was chosen because it can test theories objectively by examining the relationship between variables that can be measured and analyzed using statistical procedures [38]. An explanatory research design was used to explain the causal relationship between school leadership, teacher commitment, and organizational culture on education quality through the implementation of the independent learning curriculum. The survey method was chosen because it allows researchers to collect data from a relatively large sample efficiently to obtain a representative picture of the population.

### 3.2. Sampling and Data Collection

The population in this study included all high school principals and teachers in Southeast Maluku Regency, with a total population of 606 people, consisting of 348 high school teachers, 220 vocational school teachers, and 28 principals. To determine the sample, this study used purposive sampling, a sampling technique based on certain criteria considered relevant to the study. A sample of 250 people was taken from the total population, consisting of 115 high school teachers, 115 vocational school teachers, and 20 principals. This method was chosen to ensure good representation of the population and efficiency in terms of time, cost, and energy.

Data were collected using a questionnaire designed to measure the research variables: school principal leadership, teacher commitment, organizational culture, implementation of the independent learning curriculum, and education quality. The questionnaire used a Likert scale with five response options, namely Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree, to capture respondents' perceptions of each statement. This technique allows researchers to collect data systematically, efficiently, and in a structured manner for further analysis.

### 3.3. Data Analysis Technique

The data in this study were analyzed through two main stages: research instrument analysis and data analysis. Instrument analysis was conducted to test the validity and reliability of the questionnaire. Validity testing was conducted using Outer Loading, where indicators were considered valid if the outer loading value was  $\geq 0.7$  and Average Variance Extracted (AVE) with a minimum value of 0.5 as a condition for convergent validity. Reliability testing was conducted using Composite Reliability (CR) and Cronbach's Alpha, with a value of more than 0.7 to indicate good reliability.

Data analysis was conducted using the Partial Least Squares - Structural Equation Modeling (PLS-SEM) method operated through the SmartPLS program. This method was used to test the relationships between variables in a complex model simultaneously and is suitable for data with a small sample size or non-normal data distribution. PLS-SEM analysis involves several stages, including testing the measurement model to assess validity and reliability using Outer Loading, AVE, Composite Reliability, and Cronbach Alpha, as well as testing the structural model to examine relationships between variables using Path Coefficient, R-Square, and Effect Size ( $f^2$ ). Additionally, model evaluation is conducted using Predictive Relevance ( $Q^2$ ), which indicates the model's ability to predict endogenous variables, where a  $Q^2$  value above zero indicates that the model has good predictive capability. This technique is designed to provide valid, reliable research results that can be used to answer research objectives.

## 4. Result

This study used the SmartPLS method to test the relationship between school leadership, teacher commitment, organizational culture, independent curriculum, and education quality. Convergent validity was tested by examining the outer loading values, where items below 0.7 were excluded. After modification, all items met the convergent validity criteria with outer loading values above 0.7 and AVE values above 0.5, indicating that the model is convergent valid Table 1.

**Table 1.**  
Construct Reliability and Validity.

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Improving Education Quality	0.762	0.779	0.864	0.680
Merdeka Curriculum	0.870	0.873	0.912	0.722
Organizational Culture	0.814	0.821	0.915	0.843
Principal Leadership	0.820	0.841	0.880	0.648
Teacher Commitment	1.000	1.000	1.000	1.000

The path coefficients in the regression output model are shown in Table 2.

**Table 2.**  
Model Regression Output.

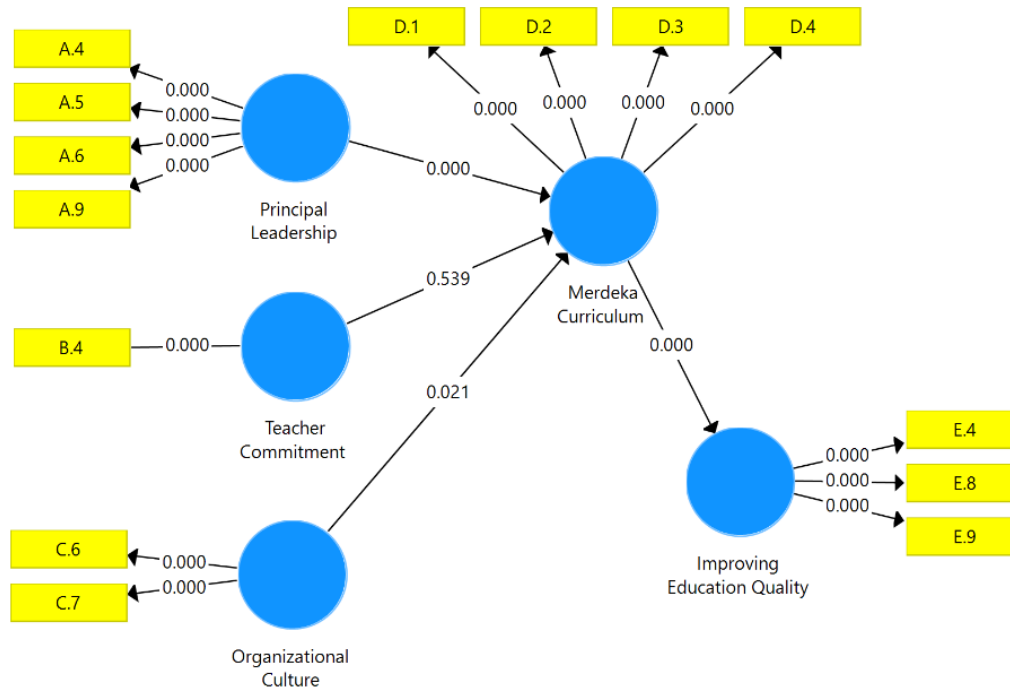
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	R Square
Principal Leadership -> Merdeka Curriculum	0.448	0.455	0.079	5.635	0.000	0.391
Teacher Commitment -> Merdeka Curriculum	0.032	0.034	0.051	0.637	0.525	
Organizational Culture -> Merdeka Curriculum	0.238	0.231	0.103	2.321	0.021	
Merdeka Curriculum -> Improving Education Quality	0.548	0.555	0.084	6.560	0.000	0.300

The results of the regression analysis in Table 3 show that school principal leadership has a significant positive influence on the implementation of the Merdeka Curriculum (coefficient 0.448,  $p < 0.000$ ), which in turn has a positive impact on improving the quality of education (coefficient 0.548,  $p < 0.000$ ).

Conversely, Teacher Commitment does not significantly influence the Merdeka Curriculum (coefficient 0.032,  $p = 0.525$ ), indicating its limited role in supporting curriculum implementation. However, Organizational Culture significantly and positively influences the Independent Curriculum (coefficient 0.238,  $p < 0.021$ ), indicating that a supportive school culture plays an important role in implementing this curriculum. Overall, school leadership and organizational culture are the main factors contributing to successfully implementing the Merdeka Curriculum, which impacts education quality improvement. At the same time, teacher commitment must be enhanced to support more effective implementation.

The R-Square value for the relationship between School Leadership, Teacher Commitment, and Organizational Culture toward the Merdeka Curriculum is 0.391. This means that these three variables can explain 39.1% of the variation in the Merdeka Curriculum, while the remaining 60.9% is influenced by other factors not included in this model. Meanwhile, the R-squared value for the influence of the Merdeka Curriculum on Educational Quality Improvement is 0.300, meaning that implementing the Merdeka Curriculum can explain 30% of the variation in educational quality improvement. In comparison, the remaining 70% is caused by other factors outside the scope of this research model.





**Figure 2.**  
Path diagram output.

Based on the path diagram shown in Figure 2, there are several main variables that are interrelated with significance, indicating the strength and direction of influence.

1. Principal Leadership positively influences the Merdeka Curriculum with a significance of 0.000. This indicates that the better the principal's leadership, the greater their influence on implementing the Merdeka Curriculum.
2. Teacher Commitment has a very low and insignificant influence on the Independent Curriculum, with a significance of 0.539, indicating that teacher commitment does not contribute significantly to the implementation of the Independent Curriculum.
3. Organizational Culture has a positive influence on the Independent Curriculum with a significance of 0.021, indicating that a strong organizational culture can support the implementation of the Independent Curriculum.
4. The Merdeka Curriculum, in turn, significantly affects Improving Education Quality with a significance of 0.000, indicating that implementing the Merdeka Curriculum plays an important role in improving education quality.

Meanwhile, the outer loading values for each item (indicated by the numbers on the path to the yellow box) indicate how strongly each item contributes to explaining the related construct. Overall, this model shows how various factors such as leadership, commitment, and organizational culture contribute to the successful implementation of the Merdeka Curriculum, which in turn impacts education quality.

**Table 3.**  
Indirect Influence Results.

Variable Relationship	Value	Sig.	Description
School Principal Leadership -> Independent Curriculum	0,448	0,000	There is a significant positive influence of school principal leadership on the implementation of the Independent Curriculum, indicating that good leadership contributes to the success of the curriculum.
Teacher Commitment -> Independent Curriculum	0,032	0,539	There is no significant influence of teacher commitment on the Independent Curriculum, indicating that this factor may have little effect on curriculum implementation.
Organizational Culture -> Independent Curriculum	0,238	0,021	Organizational culture significantly influences the independent curriculum, indicating that a supportive culture can improve curriculum effectiveness.
Independent Curriculum -> Improving Education Quality	0,548	0,000	There is a significant positive influence of the Independent Curriculum on improving education quality and an indirect influence from school leadership and organizational culture through the Independent Curriculum, indicating that this curriculum contributes to better educational outcomes.

## 5. Discussion

This study found that school leadership positively and significantly influences the implementation of the independent learning curriculum. School leadership is very important in implementing the Independent Learning Curriculum because effective leadership practices significantly influence educational outcomes. Research indicates that school principals perform various roles as educators, managers, and motivators, collectively creating an environment that supports curriculum implementation [39, 40]. Leadership styles, especially transformational leadership, increase teacher engagement and enthusiasm, and promote a culture that encourages instructional improvement and student-centered learning [41, 42]. Furthermore, the successful implementation of the Merdeka Belajar Curriculum requires readiness among school principals and teachers for systemic change, which depends on strong leadership and adequate support structures in schools [43-45]. The effectiveness of professional learning communities led by school principals has been proven to strengthen teachers' informal leadership [46, 47]. Thus, principals not only play a role as key decision-makers but also as catalysts for holistic educational reform that improves the quality of learning in schools implementing the Merdeka Belajar Curriculum [48, 49].

Contrary to initial expectations, this study found that teacher commitment did not significantly influence the implementation of the Merdeka Belajar curriculum. The relationship between teacher commitment and implementing the Merdeka Belajar Curriculum is complex and multifaceted. Research shows that effective curriculum implementation is not guaranteed even with teacher commitment. Lack of professionalism and creativity among teachers can hinder the desired changes [50]. Teacher commitment does not lead to consistent implementation of the social-emotional learning (SEL) curriculum, indicating that commitment alone may not be sufficient for effective implementation [51]. Teacher perceptions also play an important role [52, 53]. Emphasize that the rigid implementation of ethnomathematics in the curriculum reflects a failure to adapt teaching to students' contextual needs, making successful implementation difficult. Teachers may prepare instructional materials effectively, but this does not guarantee better implementation in practice, reinforcing that preparation must be combined with professional performance during teaching [54]. Overall, these studies collectively underscore that commitment alone is insufficient; factors such as professional preparation, adaptability, and alignment with curriculum principles are crucial for the effective implementation of the Merdeka Belajar Curriculum [5, 55, 56].

This study found that organizational culture positively and significantly influences the implementation of the Merdeka Belajar curriculum. Organizational culture is crucial in facilitating the



successful implementation of the Merdeka Belajar curriculum in educational institutions. A study found that schools with strong organizational cultures are better able to adapt to the demands of educational reforms, such as the Merdeka Belajar initiative, which emphasizes independent learning and flexibility in pedagogical practices [8, 57]. The implementation of differentiated learning strategies within this framework is positively influenced by an adaptive organizational culture that promotes innovation and collaboration among educators [58, 59]. Such an environment not only encourages teachers to interpret and apply the curriculum to meet the diverse needs of students, but also fosters community engagement, thereby improving the overall quality of education [12, 60]. This aligns with the idea that strong organizational values and shared practices can significantly strengthen the effectiveness of curriculum initiatives aimed at enhancing students' competencies in a competitive global landscape [61].

This study found that implementing the independent learning curriculum has a positive and significant effect on improving the quality of education. Implementing the Independent Learning Curriculum has been proven to significantly improve the quality of education. This curriculum promotes flexibility, enabling educators to develop personalized learning experiences tailored to students' individual needs and competencies, thereby fostering a more engaging and supportive educational environment [8]. By integrating academic and non-academic skills, this curriculum supports character development and equips students to better face contemporary challenges [11]. This curriculum enables the use of innovative teaching methods and differentiated learning approaches, tailored to the unique context of each educational unit, enhancing overall student engagement [54, 62]. The Merdeka Belajar Curriculum addresses previous shortcomings in education, particularly those exacerbated by the COVID-19 pandemic, and works to produce competent and broad-minded individuals ready to face future challenges [63-65].

## 6. Conclusions

Based on the results of the study and discussion, it can be concluded that school leadership and organizational culture have a positive and significant influence on the implementation of the independent learning curriculum, which in turn has a positive effect on improving the quality of education. This study validates hypotheses H1 and H3, which state that school leadership and organizational culture positively affect the quality of education. In contrast, hypothesis H2 regarding the influence of teacher commitment is not supported. School leadership is the strongest determinant of the successful implementation of the independent learning curriculum, emphasizing the importance of school leaders in directing and facilitating educational change. A supportive organizational culture has also been proven to be important in creating an environment conducive to pedagogical innovation and the application of independent learning curriculum principles. Although teacher commitment did not show a significant influence in this study, this does not mean that this factor is unimportant. These findings indicate the need for greater attention to strengthening the capacity and support of teachers as the primary implementers of the curriculum at the classroom level. Continuous professional development and teacher empowerment need to be the focus of strategies for implementing the independent learning curriculum. The independent learning curriculum has been proven effective as a mediator in improving the quality of education, confirming hypothesis H4. This shows that student-centered and flexible curricular reform can be an effective instrument for educational transformation. However, its successful implementation is highly dependent on supporting institutional and leadership factors. Overall, this study provides empirical evidence of the complex relationship between leadership, organizational culture, and curriculum implementation in the context of educational reform in Indonesia. These findings emphasize the importance of a systemic and integrated approach in efforts to improve education quality, involving strengthening leadership capacity, developing a supportive organizational culture, and empowering teachers as the primary agents of change.

### 6.1. Practical Implications of Research

This study has several practical implications that can be applied to improve the effectiveness of implementing the independent learning curriculum and the quality of education. First, strengthening the leadership capacity of school principals needs to be a priority in professional development programs. Training and mentoring programs focused on transformational and instructional leadership can improve principals' ability to lead curricular change processes. Education agencies and related institutions must develop comprehensive and sustainable leadership development programs. Second, developing an organizational culture that supports innovation and collaboration must be facilitated through structured organizational development programs. These can include workshops on developing shared values, participatory leadership practices, and strategies for building school professional learning communities. Third, although teacher commitment did not significantly influence this study, efforts to strengthen teacher capacity and motivation remain important. Professional development programs that focus on a deep understanding of the principles of the independent learning curriculum and strategies for its implementation in the classroom need to be developed. Creating effective support and incentive systems is also necessary to increase teacher motivation. Fourth, strategies for implementing the independent learning curriculum must be designed considering the local context and institutional capacity. A "one size fits all" approach will not be effective given Indonesia's diversity of school conditions. Implementation strategies must consider the school readiness level, human resource capacity, and available supporting infrastructure. Fifth, a comprehensive monitoring and evaluation system needs to be developed to monitor the implementation process of the curriculum and its impact on the quality of education. The data collected can be used to continuously improve and adjust implementation strategies as needed. Finally, collaboration among various stakeholders, including schools, education offices, universities, and the community, needs to be strengthened to create a supportive ecosystem conducive to implementing the independent learning curriculum and improving education quality.

### 6.2. Limitations and Future Research

This study has several limitations that need to be considered in interpreting the results and can serve as a basis for further research. First, this study is limited to the context of secondary schools (SMA/SMK) in Southeast Maluku Regency, so generalizing the results to a broader context must be done cautiously. Future research could expand the geographical scope and educational levels to better understand the implementation of the independent learning curriculum in various contexts. Second, this study used a cross-sectional design that only captured the relationship between variables at a single point in time. Longitudinal research that follows the curriculum implementation process and its impact on the quality of education over time could provide a deeper understanding of the dynamics of educational change. Third, this study explains only 39.1% of the variation in the implementation of the independent learning curriculum and 30% of the variation in improvements in education quality, indicating that other factors are not covered in the research model. Future research could explore additional variables such as infrastructure support, parent and community involvement, or socioeconomic factors influencing curriculum implementation and education quality. Fourth, this study uses perception data collected through questionnaires, which may be influenced by respondents' subjective biases. Further research could integrate more diverse data collection methods, including classroom observation, document analysis, or student learning outcome measurements, to triangulate data and validate findings. Fifth, findings indicating the insignificant influence of teacher commitment require further investigation. In-depth qualitative research on teachers' experiences and perspectives in implementing the independent learning curriculum can provide insights into the factors influencing teacher commitment and effectiveness. Finally, this study focuses on curriculum implementation as a mediator between institutional factors and educational quality. Future research could explore alternative mediation pathways or moderation mechanisms that may influence the relationship between

variables, such as the role of school socioeconomic conditions, student leadership, or broader community involvement in education.

### Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

### Copyright:

© 2025 by the authors. This open-access article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

### References

- [1] J. Juharyanto, I. Arifin, S. Sultoni, M. A. Adha, and M. I. Qureshi, "Antecedents of primary school quality: The case of remote areas schools in Indonesia," *Sage Open*, vol. 13, no. 1, p. 21582440221144971, 2023. <https://doi.org/10.1177/21582440221144971>.
- [2] S. Anisah and Z. Qamariah, "The teacher's role in the implementation of Curriculum Merdeka in English classroom," *Jurnal Ilmu Pendidikan Nasional*, vol. 1, no. 3, pp. 111-117, 2023. <https://doi.org/10.59435/jipnas.v1i3.104>.
- [3] S. D. Wulandari, Y. D. Irawati, and N. Aprilia, "Teachers' perceptions of implementing and making learning tools in the independent curriculum at SMA Negeri 1 Pleret," *Biology Education Research Symposium*, vol. 3, p. 356, 2023. <https://doi.org/10.26555/symbion.11735>.
- [4] N. Widyawati, A. Mudiono, and S. Arifin, "The readiness of elementary school teachers in implementing the independence curriculum," *Journal of Academic Research and Sciences*, vol. 9, no. 1, pp. 1-9, 2024. <https://doi.org/10.35457/jares.v9i1.2802>.
- [5] C. Afriani, G. Gimin, and H. Hendripides, "Analysis of teacher readiness in implementing the independent learning curriculum," *Journal of Education Technology Information Social Sciences and Health*, vol. 2, no. 2, pp. 1670-1677, 2023. <https://doi.org/10.57235/jetish.v2i2.780>.
- [6] N. Nursyaidah, Y. E. Putri, and A. A. Lubis, "Implementation of independent curriculum in learning indonesian in elementary school," presented at the Syekh Nurjati International Conference on Elementary Education, 2023.
- [7] D. Sidauruk, M. A. Nugraha, and S. Aisyah, "Qualitative study of the challenges and strategies of history teachers at sman 2 medan in implementing the independent curriculum," *Puter. Hijau J. Pendidik. Sej*, vol. 9, no. 2, p. 363, 2024. <https://doi.org/10.24114/ph.v9i2.57870>.
- [8] P. Permatasari, K. Aldi, A. Nidiatika, and G. Maja, "Implementation of the independent curriculum in improving the quality of education in SMA Negeri 1 Belitang III," *Sciencetechno: Journal of Science and Technology*, vol. 2, no. 2, pp. 125-135, 2023. <https://doi.org/10.55849/sciencetechno.v2i2.164>.
- [9] X. Wang, Y. Chen, and W. Zhu, "A survey on curriculum learning," *IEEE transactions on Pattern Analysis and Machine Intelligence*, vol. 44, no. 9, pp. 4555-4576, 2021. <https://doi.org/10.1109/TPAMI.2021.3069908>.
- [10] S. E. Wibowo, B. Saptono, A. Hastomo, H. Herwin, and A. R. Ardiansyah, "The implementation of independent curriculum on mover schools," *International Journal of Education and Learning*, vol. 4, no. 3, pp. 214-223, 2022. <https://doi.org/10.31763/ijelev.v4i3.925>.
- [11] A. Wahyuni, M. Hasbi, and R. Kanada, "Implementation of the independent curriculum: educational innovation that encourages learning independence," *International Journal of Applied Educational Research*, vol. 2, no. 5, pp. 365-378, 2024. <https://doi.org/10.59890/ijaer.v2i5.2544>.
- [12] A. N. Zafa, "Analysis of student learning readiness to fulfil achievements independent curriculum with differentiated learning," *LEARNING: Jurnal Inovasi Penelitian Pendidikan dan Pembelajaran*, vol. 4, no. 4, pp. 992-998, 2024. <https://doi.org/10.51878/learning.v4i4.3452>.
- [13] S. Y. Azizah, A. Khairat, U. Barroso, and G. Maja, "Implications of the implementation of the independent curriculum for the development of students' talents and interests," *Lingeduca: Journal of Language and Education Studies*, vol. 2, no. 3, pp. 187-195, 2023. <https://doi.org/10.55849/lingeduca.v2i3.311>.
- [14] D. Silam, D. Lajium, and V. Pang, "Leadership competency of an island school principals in sabah," *International Journal of Academic Research in Progressive Education and Development*, vol. 10, no. 4, pp. 1-10, 2021. <https://doi.org/10.6007/IJARPED/v10-i4/11690>.
- [15] D. Pristiyowati, S. Rahayu, W. Wahidmurni, and A. S. Supriyanto, "The education function of effectiveness on leadership behavior, school climate, and teacher performance," *MANAGERIA: Jurnal Manajemen Pendidikan Islam*, vol. 6, no. 1, pp. 37-48, 2021. <https://doi.org/10.14421/manageria.2021.61.03>.

- [16] Hanafiah, M. Firman, and U. Gunawan, "Leadership of school principal in developing education management standards at mts Yaspida Sukabumi," *Indonesian Journal of Educational Development*, vol. 4, no. 2, pp. 259-265, 2023. <https://doi.org/10.59672/ijed.v4i2.2973>
- [17] S. Asimiran, Y. A. Moshood, and S. A. Kadir, "Relationship impact of principals' transformational leadership style and effectiveness of school as perceived by teacher's in Lagos state secondary schools, Nigeria," *International Journal of Academic Research in Progressive Education and Development*, vol. 9, no. 3, pp. 160-169, 2020. <https://doi.org/10.6007/IJARPED/v9-i3/8055>
- [18] A. Rashid, R. ul Amin, and I. Amin, "Analyzing principals' leadership styles and student academic performance in secondary schools in Dir Upper Khyber Pakhtunkhwa," *Journal of Social Sciences Review*, vol. 1, no. 3, pp. 31-44, 2021. <https://doi.org/10.54183/jssr.v1i3.26>
- [19] C. D. Anub, "Instructional leadership practices, teachers' satisfaction and school performance indicators," *Journal of World Englishes and Educational Practices*, vol. 2, no. 4, pp. 50-64, 2020. <https://doi.org/10.32996/jweep.2020.2.4.6>
- [20] N. Nisar, A. Shahzad, and M. Rabica, "Transformational leadership style training for school leaders," *International Journal of Innovation in Teaching and Learning*, vol. 6, no. 1, pp. 17-34, 2020. <https://doi.org/10.35993/ijitl.v6i1.867>
- [21] S. D. Sugiyanti, R. Widayanti, M. B. Ulum, G. Firmansyah, and A. H. Azizah, "Design dashboard monitoring teacher performance assessment at Cinta Kasih Tzu Chi High School," *IAIC Transactions on Sustainable Digital Innovation (ITSDI)*, vol. 4, no. 1, pp. 46-56, 2022. <https://doi.org/10.34306/itsdi.v4i1.569>
- [22] A. Tarlina, A. Cahyadi, and S. Sari, "Relationship between teacher competence and motivation with student learning outcomes in subjects of elementary school people in Tujuh Belas Sub District," *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, vol. 7, no. 2, pp. 516-525, 2023. <https://doi.org/10.33369/jk.v7i2.28527>
- [23] I. L. Nida and S. K. Ningsih, "Investigating EFL teachers' perceptions towards professional engagement," *Journal of English Teaching & Applied Linguistic*, vol. 4, no. 2, pp. 46-53, 2023. <https://doi.org/10.36655/jetal.v4i2.965>
- [24] M. Keleynikov, J. Benatov, and R. Berger, "Preschool teachers' psychological distress and work engagement during COVID-19 outbreak: The protective role of mindfulness and emotion regulation," *International Journal of Environmental Research and Public Health*, vol. 19, no. 5, p. 2645, 2022. <https://doi.org/10.3390/ijerph19052645>
- [25] H. S. Aljohani and K. Agarwal, "Digital skills and digital literacy: New trends in vocational training emotional state of teaching personnel in times of pandemic," *Journal of Pharmaceutical Negative Results*, vol. 13, no. 9, pp. 7772-7781, 2023. <https://doi.org/10.47750/pnr.2022.13.S09.910>
- [26] K. F. Wijaya, "Exploring teachers' resilience in Indonesian EFL learning contexts," *LET: Linguistics, Literature and English Teaching Journal*, vol. 11, no. 1, pp. 1-19, 2021. <https://doi.org/10.18592/let.v11i1.4539>
- [27] N. H. Ismail, M. R. Yusof, M. Y. Ibrahim, M. S. O. Fauzee, and R. Ismail, "Validating suburban teachers' commitments: Let's appreciate their blood, sweat, and tears," *International Journal of Instruction*, vol. 15, no. 3, pp. 103-116, 2022. <https://doi.org/10.29333/iji.2022.1536a>
- [28] O. Amtu, F. Fakhruddin, H. Haryono, and M. Muhsin, "Improve the quality of higher education through leadership roles and organizational culture," in *Proceedings of the 5th International Conference on Science, Education and Technology, ISET 2019 (29th June 2019, Semarang, Central Java, Indonesia)*. EAI, 2020.
- [29] D. Suma and B. A. Siregar, "Performance of Indonesian higher education under the influence of organizational culture and lecturer performance," *Strategic Management Business Journal*, vol. 2, no. 02, pp. 126-135, 2022. <https://doi.org/10.55751/smbj.v2i02.48>
- [30] B. D. Pratomo and Z. Arifin, "The effect of school principal's servant leadership of vocational schools in Temanggung Regency," *International Journal of Applied Business and International Management*, vol. 5, no. 3, pp. 1-12, 2020. <https://doi.org/10.32535/ijabim.v5i3.975>
- [31] E. S. Mubarak, "The effect of internal communication on employee performance in informal education institutions: The role of organizational commitment as a mediation variable," *European Journal of Business and Management*, vol. 12, no. 32, pp. 28-35, 2020. <https://doi.org/10.7176/EJBM/12-32-05>
- [32] H. Zeb, J. S. Albert, S. P. Rasheed, and A. Younas, "Nurse educators' perceived organizational factors affecting their psychological empowerment: An exploratory qualitative study," *Nursing Forum*, vol. 54, no. 4, pp. 681-689, 2019. <https://doi.org/10.1111/nuf.12396>
- [33] A. T. R. Nelrita, S. S. Rossa, and A. Sudrajat, "The influence of the school principal's leadership, supervision system, and teacher performance on the quality of education at state junior high school, Solok, West Sumatra," *International Journal of Science and Society*, vol. 4, no. 4, pp. 489-505, 2022. <https://doi.org/10.54783/ijssoc.v4i4.598>
- [34] P. E. Puspitasari and R. D. Utami, "Analysis of teachers' readiness in implementing the independent curriculum in elementary schools," *DIDAKTIKA TAUHIDI: Jurnal Pendidikan Guru Sekolah Dasar*, vol. 10, no. 2, pp. 145-156, 2023. <https://doi.org/10.30997/dt.v10i2.9761>
- [35] N. P. Shabalala, H. Hebe, and L. Mnguni, "Characterization of curriculum leadership by South African school leaders and teachers in environmental education," *Problems of Education in the 21st Century*, vol. 81, no. 3, pp. 401-415, 2023. <https://doi.org/10.33225/pec/23.81.401>
- [36] N. A. B. Asmuri and M. I. M. Hamzah, "The relationship between headmaster's instructional leadership practices and teacher's job satisfaction," presented at the 2nd Padang International Conference on Educational Management and Administration 2021 (PICEMA 2021), 2022.

- [37] C. Y. Tan and S. Gumus, "How educational leadership promotes equity in student learning outcomes: International evidence," *International Journal of Educational Management*, vol. 38, no. 6, pp. 1561-1562, 2024. <https://doi.org/10.1108/IJEM-10-2024-660>
- [38] J. W. Creswell and J. D. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications, 2017.
- [39] S. Syarifuddin, N. Niswanto, and I. Ismail, "Principal's leadership in implementing the independent curriculum to improve the quality of learning at SMAN 1 Labuhanhaji and SMAN Unggul Darussalam Labuhanhaji South Aceh," *Asian Journal of Social and Humanities*, vol. 2, no. 8, pp. 1763-1783, 2024. <https://doi.org/10.59888/ajosh.v2i8.311>
- [40] M. Mastur, "Strategy the principal's leadership style in implementing 'Merdeka Belajar' in schools," *Kelola: Jurnal Manajemen Pendidikan*, vol. 10, no. 1, pp. 10-21, 2023. <https://doi.org/10.24246/j.jk.2023.v10.i1.p10-21>
- [41] A. Mobonggi, I. R. N. Hula, F. Djafar, F. Hakeu, and A. Mariana, "The principal's managerial influence on mover teachers in the implementation of the independent curriculum," *TEM Journal*, vol. 13, no. 3, pp. 2177-2185, 2024. <https://doi.org/10.18421/TEM133-45>
- [42] L. A. Yulastuti *et al.*, "Principal transformational leadership in improving teacher performance," *TSAQOFAH*, vol. 4, no. 1, pp. 501-15, 2023. <https://doi.org/10.58578/tsaqofah.v4i1.2257>
- [43] E. Puspitadani, F. Yudea, and F. Loo, "Educational leadership and learning quality: The influence of the principal's leadership style on teacher performance," *Jurnal Ilmu Pendidikan Dan Humaniora*, vol. 11, no. 3, pp. 206-220, 2022. <https://doi.org/10.35335/jiph.v11i3.24>
- [44] M. Iqbal, F. Munir, and F. Nawaz, "Comparison of principals' instructional leadership style for quality learning between public and private schools," *Global Educational Studies Review*, vol. 6, no. 1, pp. 1-10, 2021. [https://doi.org/10.31703/gesr.2021\(VI-I\).01](https://doi.org/10.31703/gesr.2021(VI-I).01)
- [45] N. A. Fitri, F. Chan, and I. S. Pamela, "Teachers' readiness in the process of implementing the independent learning curriculum in elementary school," *Tarbiatuna: Journal of Islamic Education Studies*, vol. 4, no. 1, pp. 193-201, 2024. <https://doi.org/10.47467/tarbiatuna.v4i1.5174>
- [46] M. D. O. Abendaño, "Patterns of relationships between college teachers' leadership competence and work engagement in selected private higher education institutions in Davao Region: The mediating impact of school as a professional learning community," *Applied Sciences*, vol. 2, no. 1, pp. 660-672, 2024. [https://doi.org/10.59324/ejtas.2024.2\(1\).57](https://doi.org/10.59324/ejtas.2024.2(1).57)
- [47] D. H. L. Lee and N. K. K. Ip, "The influence of professional learning communities on informal teacher leadership in a Chinese hierarchical school context," *Educational Management Administration & Leadership*, vol. 51, no. 2, pp. 324-344, 2023. <https://doi.org/10.1177/1741143220985159>
- [48] R. Meizatri, "The affecting factors of school readiness for implementing the Merdeka Belajar Policy," *Jurnal Pendidikan Indonesia*, vol. 13, no. 1, pp. 43-51, 2024. <https://doi.org/10.23887/jpiundiksha.v13i1.70599>
- [49] N. Suryani, M. Muspawi, and A. Aprillizavivayarti, "Implementation of the independent learning curriculum in driving schools," *Jurnal Ilmiah Universitas Batanghari Jambi*, vol. 23, no. 1, pp. 773-779, 2023. <https://doi.org/10.33087/jiubj.v23i1.3291>
- [50] M. Baene, H. Piliang, F. Fatmariza, and D. Darmansyah, "Teacher's strategy in implementing the independent learning curriculum in the leading regions, remote, and left behind (3T)," *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, vol. 5, no. 2, pp. 293-307, 2023. <https://doi.org/10.37680/scaffolding.v5i2.2916>
- [51] J. Lee and S. Simmons Zuilkowski, "'I can teach what's in the book': Understanding the why and how behind teachers' implementation of a social-emotional learning (SEL) focused curriculum in rural Malawi," *British Journal of Educational Psychology*, vol. 92, no. 3, pp. 974-993, 2022. <https://doi.org/10.1111/bjep.12483>
- [52] W. R. Purwanto and I. Junaedi, "Teachers' perceptions of ethnomathematics learning in the independent curriculum program in Indonesia," *International Journal of Education and Practice*, vol. 13, no. 1, pp. 98-113, 2025. <https://doi.org/10.18488/61.v13i1.3963>
- [53] S. Septiani, J. Sutarto, C. B. Utomo, and Widiyanto, "Happy teachers, quality schools: improving teacher performance through happiness, motivation, and a good work life," *Perspectives in Science Education*, vol. 72, no. 6, pp. 733-746, 2025. <https://doi.org/10.32744/pse.2024.6.46>
- [54] C. Sutinah, A. R. Riyadi, A. Muftianti, M. A. Wulandari, and S. Ruqoyyah, "Navigating change: An analysis of elementary school teachers' readiness and implementation challenges with the Merdeka curriculum," *Al-ishlah: jurnal pendidikan*, vol. 16, no. 2, pp. 1718-1729, 2024. <https://doi.org/10.35445/alishlah.v16i2.5142>
- [55] M. Hadi, P. Rosadi, and Y. Budi Lestari, "Teachers' reflective practice in implementing the Merdeka curriculum (Case Study at SMA Negeri 1 KURIPAN)," *International Journal of Multicultural and Multireligious Understanding*, vol. 11, no. 3, p. 255, 2024. <https://doi.org/10.18415/ijmmu.v11i3.5531>
- [56] R. T. Mafazi, "Implementing Merdeka curriculum to improve teacher professional services in elementary schools," *Journal La Sociale*, vol. 4, no. 6, pp. 404-408, 2023. <https://doi.org/10.37899/journal-la-sociale.v4i6.933>
- [57] J. Ngo, "Organisational culture in Indonesian schools during covid-19: perceptions of school principals," *Journal of International and Comparative Education*, vol. 13, no. 1, pp. 35-56, 2024. <https://doi.org/10.14425/jice.2024.13.1.1205>
- [58] N. Hidayat, H. Suharyati, and R. Sanubari, "Strategy to increase the effectiveness of differentiated learning," *Journal of Higher Education Theory & Practice*, vol. 24, no. 6, p. 44, 2024. <https://doi.org/10.33423/jhetp.v24i6.7021>



- [59] J. Gorzelany *et al.*, "Finding links between organisation's culture and innovation. The impact of organisational culture on university innovativeness," *Plos one*, vol. 16, no. 10, p. e0257962, 2021. <https://doi.org/10.1371/journal.pone.0257962>
- [60] M. Mustari, M. Zubair, E. Kurniawansyah, and L. Sumardi, "Analysis of the implementation of adaptive school-based management in the independent curriculum in West Lombok high schools," *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran*, vol. 10, no. 1, pp. 195-205, 2024. <https://doi.org/10.33394/jk.v10i1.10819>
- [61] E. C. Kornegay, T. H. Jackson, A. LaGarry-Cahoon, J. M. Reside, M. D. Wolcott, and R. B. Quinonez, "'I don't think the problem's the student... I think it's us': Engaging faculty in curriculum innovation," *Journal of Dental Education*, vol. 85, no. 4, pp. 582-588, 2021. <https://doi.org/10.1002/jdd.12495>
- [62] Amiruddin, F. R. Baharuddin, Takbir, and W. Setialaksana, "May student-centered principles affect active learning and its counterpart? An empirical study of Indonesian curriculum implementation," *Sage Open*, vol. 13, no. 4, p. 21582440231214375, 2023. <https://doi.org/10.1177/21582440231214375>
- [63] N. E. Wardani, S. Suwandi, C. Ulya, and T. Setiyoningsih, "Differences in learning Indonesian literature in the 2013 curriculum and the independence curriculum in junior high schools in Indonesia," *KnE Social Sciences*, pp. 1209-1218, 2023. <https://doi.org/10.18502/kss.v8i18.14322>
- [64] I. D. Wijayanti, "Analysis of implementation of independent curriculum: Diagnostic assessment and differentiated learning in elementary schools," in *Syekh Nurjati International Conference on Elementary Education*. <https://doi.org/10.24235/sicee.v1i0.14654>, 2023, vol. 1, pp. 134-143.
- [65] Q. Aini, "Implementation of an independent curriculum in supporting students' freedom to create and learn," *Journal of Scientific Research, Education, and Technology*, vol. 2, no. 3, pp. 999-1008, 2023. <https://doi.org/10.58526/jsret.v2i3.187>