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Management Strategies for Enhancing Educational Quality in Senior High Schools Through the Driving School Program in Madura

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Abstract: This study investigates the effects of the “Program Sekolah Penggerak” (Driving School Program) and the “Kurikulum Merdeka Belajar” (Independent Learning Curriculum) on teacher competence, student engagement, school leadership, and the overall quality of education in senior high schools across Madura. It also examines the impact of teacher competence, student engagement, and school leadership on educational quality. The research employed a quantitative method using Smart PLS 4 for data analysis. A total of 370 respondents were drawn from 14 senior high schools, with the sample determined using Slovin’s formula and purposive sampling. Results indicate that the Driving School Program significantly enhances teacher competence, student engagement, and school leadership. The Independent Learning Curriculum showed positive but largely insignificant effects on teacher competence and student engagement, though it significantly influenced school leadership. Teacher competence and school leadership were found to have positive but statistically insignificant effects on student engagement. In terms of educational quality, both the Driving School Program and the Independent Learning Curriculum produced significant positive effects. However, teacher competence alone did not significantly influence quality, whereas student engagement and school leadership showed strong positive impacts. This study enriches theoretical discourse on educational quality improvement and strategic management by demonstrating the mediating roles of teacher competence, student involvement, and leadership in advancing the effectiveness of national education programs.

Keyword: Teacher Competence, Students Engagement, School Leadership, Driving School Program, Independent Learning Curriculum

INTRODUCTION

Strategic management aimed at enhancing the quality of education in Senior High Schools (SMA) through flagship Driving School Programs may include approaches centered on

strengthening teacher competence, fostering effective school leadership, and promoting community engagement. While the overall quality of many Indonesian senior high schools is considered satisfactory, several provinces still show a considerable proportion of schools categorized within the lowest performance cluster (Anam et al., 2020). Moreover, previous studies indicate that the implementation of school-based management in certain Indonesian schools has not yet been fully effective. This is largely due to the suboptimal functioning of critical stakeholders, including foundations, school principals, teachers, parents, as well as the provision and utilization of educational facilities and infrastructure (Sihombing & Samosir, 2021).

The Indonesian government has taken several steps to improve the quality of senior high school education. These include post-national exam mapping and quality improvement research across districts (Awwaliyah & Arcana, 2021), new regulations on student admissions through Ministerial Regulation No. 44/2019 (Savitri & Rahaju, 2021), and strengthening school-based management (Sihombing & Samosir, 2021). Law No. 14/2005 on Teachers and Lecturers further supports quality by setting standards for teacher competencies and requiring government oversight of qualifications and welfare. It also promotes collaboration with private institutions and universities, as well as teacher certification, although its effectiveness remains debated. Improving quality ultimately requires cross-sector cooperation among government, schools, teachers, parents, and adequate facilities. Indonesia has prioritized educational quality through reforms such as the Driving School Program, which strengthens senior high schools by raising standards and providing resources, training, and institutional support (Isnaeni & Agustina, 2018; Shobri, 2023; Ritonga et al., 2022). Its success relies on active teacher involvement to realize a student-centered vision aligned with program goals (Sijabat et al., 2022).

Mahyuni et al., (2022) note that several Driving School Programs have been introduced in Indonesia to enhance education quality by fostering critical thinking, creativity, problem-solving, and collaboration (Kadaryanto et al., 2020). A major focus is the 2013 Curriculum, which shifts from teacher-centered to active learning approaches (Verawati et al., 2020), and is considered a key step in improving education quality (Larasafitri et al., 2022). It enables students to progress from lower- to higher-order thinking, apply knowledge in real contexts, and engage more actively in learning (Larasafitri et al., 2022; Dewi et al., 2021; Wafa & Jatmiko, 2022). The Merdeka Belajar Curriculum refines this by offering greater flexibility and project-based models such as Problem-Based Learning (PBL) (Nuriawati & Achadi, 2023), and its implementation has begun in several provinces.

Based on Figure 1, East Java ranks first in implementing the Merdeka Curriculum affiliated with the Driving School Program. This indicates that education in East Java has shown strong performance in carrying out government education initiatives.

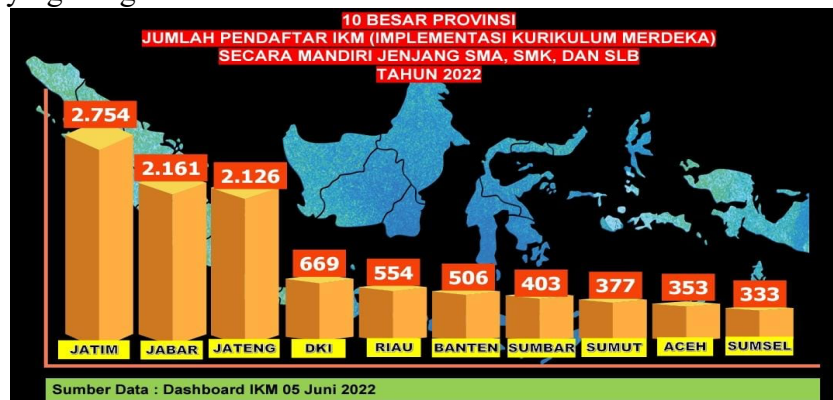


Figure 1 Implementing of National Independent Learning Program 2022

Source: <https://surabayapostnews.com>

Nevertheless, strong performance has not been accompanied by corresponding improvements in teacher quality, which remains a key determinant of educational quality in Indonesia (Muslim & Mulloh, 2022). This condition is illustrated in Figure 2 below.

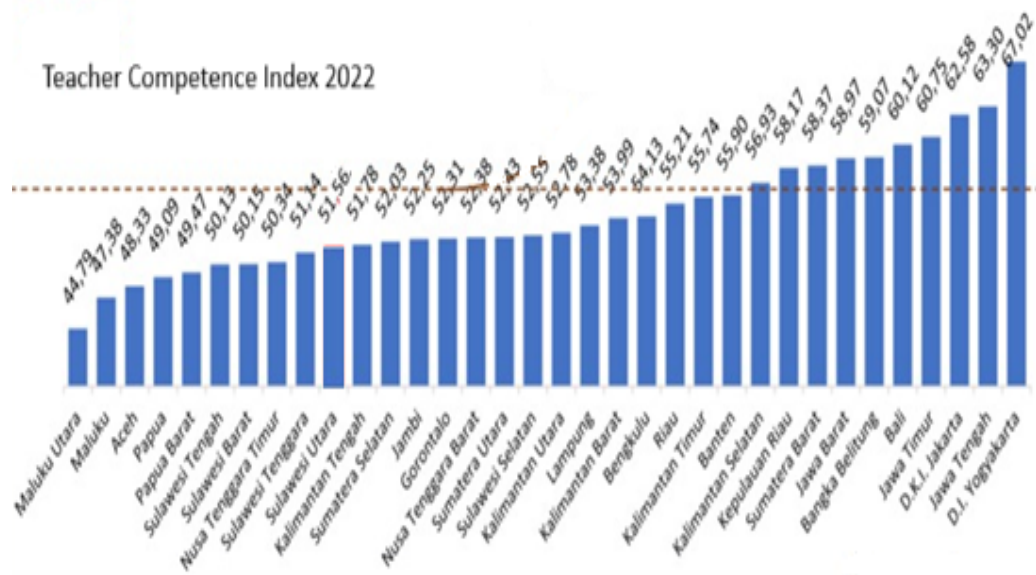


Figure 2 Teachers Competence Index 2022

Source: gtk.kemdikbud.go.id 2022

Figure 1.2 shows that East Java ranks first in implementing the Merdeka Curriculum under the Driving School Program, yet only fourth in teacher competency with a score of 60.75, behind Central Java at 63.30. This gap highlights a mismatch between curriculum implementation and educator quality. To address this, the author proposes a new research framework, which represents the originality of this study.

METHOD

Research Design

This study employed a quantitative, explanatory research design to verify causal relationships between variables through hypothesis testing (Sugiyono, 2013). The research was conducted at 14 senior high schools in Madura, involving principals, teachers, and students. Data were collected using questionnaires and documentation, with purposive sampling applied. A Likert scale was used, while validity and reliability tests were conducted with SPSS 25, and data were analyzed using SEM-PLS.

Data Collection

Data were collected primarily through questionnaires designed to capture indicators related to educational quality, *Program Sekolah Penggerak*, *Kurikulum Merdeka Belajar*, teacher competence, student engagement, and school leadership.

Types and Sources of Data

The study used both quantitative (numerical, statistically analyzed) and qualitative (descriptive, non-numerical) data (Silaen, 2018; Miles et al., 2023). Primary data were obtained directly from principals, teachers, and students, while secondary data were sourced from journals, books, reports, and institutional records.

Population and Sample

The research population consisted of 4,825 individuals across selected schools. Using Slovin's formula with a 95% confidence level and 5% margin of error, 370 respondents were sampled, comprising 14 principals/vice principals, 49 teachers, and 307 students. A total of 375 valid responses were collected and coded for analysis using SmartPLS 3.

RESULTS AND DISCUSSION

Result

Respondent Demographic

Table 1. Respondent Demographic

	Characteristic	Frequency	Percentage
Gender	Male	180	48.6
	Perempuan	190	51.4
	Total	370	100.0
Age	17 – 20	290	78.4
	21 – 30	8	2.1
	31 – 40	31	8.5
	41 – 50	25	6.7
	> 50	16	4.3
	Total	370	100.0
Position	Student	290	78.4
	Teacher	62	16.8
	Head Schoolah	18	4.8
	Total	370	100.0
Grade	Kelas 10 (1)	153	42.1
	Kelas 11 (2)	174	46.4
	Kelas 12 (3)	43	11.5
	Total	370	100.0

Source: Data processed by researchers (2025)

Based on Table 1, of the 370 respondents, 180 (48.6%) were male and 190 (51.4%) were female, indicating that the majority of participants were female. In terms of age, most respondents were between 17–20 years old (290 respondents, 78.4%), while the smallest group was aged 21–30 years (8 respondents, 2.1%). Regarding occupational characteristics, the majority were students (290 respondents, 78.4%), followed by teachers (62 respondents, 16.8%), and vice principals/principals (18 respondents, 4.8%).

Measurement model

Table 2. Output of Measurement Model

Variable	Indicators	Loading Factors	α	Composite Reliability	AVE	P-Value
The driving School Program	DSP1	0.719	0.953	0.957	0.674	
	DSP2	0.734				
	DSP3	0.866				
	DSP4	0.888				
	DSP5	0.875				
The independent learning curriculum	ILC1	0.793	0.959	0.962	0.659	
	ILC2	0.730				
	ILC3	0.817				
	ILC4	0.851				
Teacher competence	TC1	0.722	0.913	0.925	0.542	
	TC2	0.787				
	TC3	0.713				

Variable	Indicators	Loading Factors	α	Composite Reliability	AVE	P-Value
Education Quality	TC4	0.819	0.958	0.961	0.651	
	TC5	0.744				
	TC6	0.711				
	EQ1	0.830				
	EQ2	0.792				
	EQ3	0.850				
	EQ4	0.830				
	EQ5	0.760				

Output of SmartPLS 3.0

The measurement model demonstrates satisfactory construct validity and reliability across all variables. All factor loadings exceed the recommended threshold of 0.70, indicating strong indicator reliability, with a few slightly above 0.71 still acceptable (Hair et al., 2020). Cronbach's alpha (α) values range from 0.913 to 0.959, and composite reliability (CR) values from 0.925 to 0.962, both exceeding the minimum criterion of 0.70, confirming high internal consistency. The average variance extracted (AVE) for all constructs falls between 0.542 and 0.674, surpassing the 0.50 threshold, which demonstrates adequate convergent validity. These results suggest that the constructs—Driving School Program, Independent Learning Curriculum, Teacher Competence, and Education Quality—are measured reliably and validly, supporting their suitability for further structural model analysis.

Structural Model

Table 3. Hypothesis Testing (direct effect)

Hypothesis	Path	β	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Result
H1	Driving School Program (X1) -> Teacher Competence (Z)	0.436	0.153	2.843	0.005	Accepted
H2	Independent Learning Curriculum (X2) -> Teacher Competence (Z)	0.297	0.152	1.946	0.052	Rejected
H3	Driving School Program (X1) -> Education Quality (Y)	0.625	0.132	4.250	0.000	Accepted
H4	Independent Learning School (X2) -> Education Quality (Y)	0.256	0.131	2.482	0.003	Accepted
H5	Teacher Competence (Z) -> Education Quality (Y)	0.013	0.080	0.168	0.867	Accepted

Output SmartPLS 3.0

The hypothesis testing reveals several significant relationships. The Driving School Program (X1) exerts a positive and significant effect on Teacher Competence (Z) ($\beta = 0.436$, $t = 2.843$, $p = 0.005$), indicating that program implementation enhances teacher competence. In contrast, the Independent Learning Curriculum (X2) shows a weaker, marginal effect on Teacher Competence ($\beta = 0.297$, $t = 1.946$, $p = 0.052$), suggesting that its contribution is not statistically significant at the 5% level.

With respect to Education Quality (Y), both the Driving School Program (X1) and Independent Learning Curriculum (X2) demonstrate significant positive effects ($\beta = 0.625$, $t = 4.250$, $p < 0.001$; $\beta = 0.256$, $t = 2.482$, $p = 0.003$, respectively), highlighting their importance in improving educational outcomes. However, Teacher Competence (Z) does not significantly influence Education Quality ($\beta = 0.013$, $t = 0.168$, $p = 0.867$), suggesting that teacher competence,

as measured in this study, does not directly mediate the relationship between educational programs and quality.

Overall, the findings emphasize the pivotal role of the Driving School Program and Independent Learning Curriculum in enhancing education quality, while teacher competence does not emerge as a significant predictor in this model.

Table 4. Mediation Effect

Hypothesis	Path	p-value	Result
H1a	Driving School Program (X1) -> Teacher Competence (Z) -> Education Quality (Y)	0.006	Accepted
H2a	Independent Learning Curriculum (X2) -> Teacher Competence (Z) -> Education Quality (Y)	0.004	Accepted

Output SmarPLS 3.0

The mediation analysis indicates that Teacher Competence (Z) serves as a significant mediator in both hypothesized relationships. Specifically, the Driving School Program (X1) influences Education Quality (Y) indirectly through Teacher Competence, with a significant mediation effect ($p = 0.006$). Similarly, the Independent Learning Curriculum (X2) exerts an indirect effect on Education Quality via Teacher Competence ($p = 0.004$).

These findings suggest that while the direct effect of Teacher Competence on Education Quality was not significant, the variable still plays an important mediating role by channeling the influence of educational programs toward improved outcomes. In other words, both the Driving School Program and the Independent Learning Curriculum enhance teacher competence, which in turn contributes to the elevation of education quality.

Discussion

The findings underscore the significant and direct positive impacts of both the Driving School Program (DSP) and the Independent Learning Curriculum (ILC) on education quality. Specifically, the DSP demonstrated a strong effect on teacher competence ($\beta = 0.436$, $p = 0.005$) and education quality ($\beta = 0.625$, $p < 0.001$), affirming the program's capacity to enhance instructional quality and outcomes. These results are supported by studies conducted in Palembang and Sumatera Selatan, which emphasize the importance of teacher competence and academic supervision in strengthening the effectiveness of Sekolah Penggerak initiatives (Samari et al., 2023).

Likewise, the ILC shows a positive and statistically significant impact on education quality ($\beta = 0.256$, $p = 0.003$), though its influence on teacher competence was only marginal ($\beta = 0.297$, $p = 0.052$). This echoes findings from East Lombok, where the implementation of the Merdeka Curriculum contributed indirectly to improved student achievement (Puji Astuti et al., 2023). The modest connection between ILC and teacher competence suggests that while the curriculum itself can elevate learning outcomes, it may require additional capacity-building or systemic support to enhance teacher skills effectively—a concern echoed by qualitative studies exploring teacher readiness in implementing Merdeka Belajar (Nur Afida & Prihatin, 2024; Al-Fathoni, 2023).

The absence of a significant direct effect of teacher competence on education quality ($\beta = 0.013$, $p = 0.867$) might seem counterintuitive at first glance. Yet, this finding aligns with emerging research highlighting the complexity of translating teacher capabilities into learning improvement without robust programmatic scaffolding. For example, in a study from Bandar Lampung, teacher competence and education were both shown to meaningfully influence the overall effectiveness of the Guru Penggerak program (Nawati et al., 2025). Additionally, Indonesian case studies show that

DSP and its emphasis on leadership and innovation help strengthen teaching quality and educational outcomes when combined with structured tooling and training (Miskiyah et al., 2024).

Importantly, the mediation analysis offers critical insight: teacher competence significantly mediates the impact of both DSP and ILC on education quality ($p = 0.006$ and $p = 0.004$, respectively). This suggests that while teacher competence may not directly translate into improved educational quality, it serves as an essential intermediary for programs like DSP and ILC to exert their full effect (Ruaya et al., 2022). This mediated dynamic is reinforced by research showing that teacher competence is key to implementing the Independent Curriculum effectively and achieving its intended educational objectives (Amir et al., 2024). Moreover, broader studies highlight that teacher pedagogical competence, combined with collaborative learning communities and institutional readiness, supports deep learning and educational transformation—critical aspects of Sekolah Penggerak initiatives (Alfianingtias & Hadi, 2023). In remote areas, DSP has notably contributed to improving education quality by equipping teachers to enact meaningful change despite infrastructural limitations.

CONCLUSION

The research analysis offers compelling evidence that the Driving School Program and Independent Learning Curriculum can significantly uplift educational quality—in large part through the activation of teacher competence. However, teacher competence in isolation may not yield educational improvements unless embedded within programmatic frameworks that offer instructional support, leadership involvement, and resource alignment. These findings emphasize the imperative for Indonesian education policy to adopt integrated, multi-layered strategies—where teacher development and program intervention converge to create meaningful, sustained enhancements in learning outcomes.

REFERENCES

- Al-Fathoni, B. Z. (2023). Enhancing teacher competence in implementing the Independent Learning Curriculum: The role of change management. *AIM: Journal of Islamic Education Management*, 1(1), 38–55.
- Alfianingtias, D., & Hadi, M. S. (2023). Influence of Psychological Well-Being and School FaThe Influence of Learning Communities, Teacher Pedagogical Competence, and School Readiness on the Implementation of the Deep Learning Approach in Elementary Schools in Cipondoh Subdistrict, Tangerang Cit. *International Journal of Research and Innovation in Social Science*, VII(2454), 1175–1189. <https://doi.org/10.47772/IJRISS>
- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2020). How Learning Works: 7 Research-Based Principles for Smart Teaching. In R. E. Mayer (Ed.), *Jossey-Bass A Wiley Imprint* (First Edit, Vol. 48, Issue 4). Jossey-Bass Wiley & Sons, Inc. <https://doi.org/10.1002/mop.21454>
- Amin, M., Isnaini, M., & Rambey, J. S. (2018). Implementation of the Independent Learning Curriculum in Schools Through a Synergistic Partnership Model. *ICIESC*, 3(1), 10–27. <https://medium.com/@arifwicaksanaa/pengertian-use-case-a7e576e1b6bf>
- Amir, M. F., Indrawati, T. J., Hidayanti, A. N., Bulqhis Anindhita, P., & Safitri, N. F. (2024). Pedagogical Competence of Elementary School Teachers in Implementing Learning According to the Merdeka Curriculum. *Procedia of Social Sciences and Humanities*, 0672(c), 329–337. <https://pssh.umsida.ac.id>
- Anam, A. K., Tuti, A., & Ratnasari, V. (2020). Klasterisasi Mutu Pendidikan SMA di Indonesia dan Analisis Pola Hubungan Antar Standar Nasional Pendidikan pada Masing-Masing Klaster Menggunakan SEM-PLS. *Jurnal Sains Dan Seni ITS*, 9(2), 1–4.

- Anisa, D. L. N. (2022). Implementation of Independent Learning Curriculum as a 21st Century Learning Model in Higher Education. *Manageria: Jurnal Manajemen Pendidikan Islam*, 7(2), 233–248. <https://doi.org/10.14421/manageria.2022.72-15>
- Awwaliyah, F. A., & Arcana, I. M. (2021). Pembentukan Indeks Mutu Pendidikan (Imp) Di Indonesia Tahun 2018 Dan Faktor Yang Memengaruhinya. *Seminar Nasional Official Statistics*, 2020(1), 385–396. <https://doi.org/10.34123/semnasoffstat.v2020i1.358>
- Bezanilla, M. J., Fernández-Nogueira, D., Poblete, M., & Galindo-Domínguez, H. (2019). Methodologies for teaching-learning critical thinking in higher education: The teacher's view. *Thinking Skills and Creativity*, 33(February), 100584. <https://doi.org/10.1016/j.tsc.2019.100584>
- Budiharso, T., & Tarman, B. (2020). Improving quality education through better working conditions of academic institutes. *Journal of Ethnic and Cultural Studies*, 7(1), 99–115. <https://doi.org/10.29333/ejecs/306>
- Cleaver, S., Detrich, R., States, J., & Keyworth, R. (2021). Curriculum Content for Teacher Training. *ResearchGate The Wing Institute*, June, 1–30. <https://doi.org/10.6084/m9.figshare.14727669>
- Dewi, N. P. S. S., Padmadewi, N. N., & Santosa, M. H. (2021). The Implementation of Flipped Classroom Model in Teaching English to Sapta Andika Junior High School Students in Academic Year 2019/2020. *Journal of Education Research and Evaluation*, 5(1), 125. <https://doi.org/10.23887/jere.v5i1.30334>
- El Soufi, N., & See, B. H. (2020). Does explicit teaching of critical thinking improve critical thinking skills of English language learners in higher education? A critical review of causal evidence. *Angewandte Chemie International Edition*, 6(11), 951–952., 4(7), 5–24.
- Fadhli, M. (2017). Manajemen Peningkatan Mutu Pendidikan. *TADBIR Jurnal Studi Manajemen Pendidikan*, 1(02).
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109(August 2019), 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hanum Gea, S., Teti Setiawati, D., Sukriyah, E., Siahaan, A., & Amiruddin. (2022). PAI Teachers' Self Reflections on Differentiation Learning in the Independent Learning Curriculum. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 3(2), 212–220. <https://doi.org/10.31538/munaddhomah.v3i2.263>
- Isnaeni, I., & Agustina, Y. (2018). an Increase in Learning Outcome Students Is Through the Development of Archive E-Module Based on the Flipbook With Discovery Learning Model. *Jurnal Pendidikan Bisnis Dan Manajemen*, 4(3), 125–129. <https://doi.org/10.17977/um003v4i32018p125>
- Kadaryanto, B., Madya, S., & Ashadi. (2020). *A Rasch Model Analysis on Designing Needs-Based Teacher Professional Development Programs*. 401(Iceri 2019), 100–109. <https://doi.org/10.2991/assehr.k.200204.019>
- Kinanti, Y. C. (2016). School Partnership In Improving the Quality of Education at Senior High School 2 Yogyakarta. *Jurnal Kebijakan Pembangunan*, 5(2), 478–490.
- Larasafitri, M. N., Gunawan, G., & Kosim, K. (2022). Validation of Learning Devices Based on Cognitive Conflict Approach in Blended Learning Model. *Jurnal Penelitian Pendidikan IPA*, 8(6), 3117–3120. <https://doi.org/10.29303/jppipa.v8i6.2185>
- Mahyuny, S. R., Nursamsu, N., Hasruddin, H., & Muslim, M. (2022). Development of Students Worksheet Learning Tools Made by Ethnoscience Based on Science Literacy. *Jurnal Penelitian Pendidikan IPA*, 8(4), 2294–2301. <https://doi.org/10.29303/jppipa.v8i4.1949>
- Miskiyah, A. Z., Izzati, U. M. I. A., & Karwanto. (2024). Pengembangan Kualitas Pendidikan

- Melalui Program Guru Penggerak. *Jurnal Idaarah*, VIII(2), 154–169.
- Muniron, A. (2021). Manajemen Peningkatan Mutu Pendidikan. *Kajian Pendidikan Dan Ilmu Keislaman*, 7(1), 6.
- Nawati, K., Ardansyah, Warganegara, T. L. P., Dharmawan, Y. Y., & Sari, W. P. (2025). The Impact of Education and Teacher Competence on the Quality of the Guru Penggerak Program in Bandar Lampung Elementary. *ICBMS*, 17, 302.
- Nifrizza, I. (2023). Independent Learning Policy (Analysis of Learning Curriculum). *Jurnal Pendidikan*, 7(1), 1341–1348.
- Nur Afida, R., & Prihatin, T. (2024). Teachers' Perceptions Of The Implementation Of English Language Learning In The Merdeka Curriculum. *Jurnal Bima : Pusat Publikasi Ilmu Pendidikan Bahasa Dan Sastra*, 2(1), 293–297. <https://doi.org/10.61132/bima.v2i1.620>
- Nuriawati, N., & Achadi, M. W. (2023). Implementasi Kurikulum Merdeka Belajar pada Pelajaran Al-Qur'an Hadis di MAN 3 Sleman Yogyakarta. *Jurnal Pendidikan Sultan Agung*, 3(2), 144. <https://doi.org/10.30659/jp-sa.3.2.144-152>
- Pinilla, S., Cantisani, A., Klöppel, S., Strik, W., Nissen, C., & Huwendiek, S. (2021). Curriculum development with the implementation of an open-source learning management system for training early clinical students: An educational design research study. *Advances in Medical Education and Practice*, 12, 53–61. <https://doi.org/10.2147/AMEP.S284974>
- Prihantoro, C. R. (2021). Examining the use of wheeler-model based curriculum development in a learning management system for vocational study program. *International Journal of Education and Practice*, 9(3), 507–519. <https://doi.org/10.18488/journal.61.2021.93.507.519>
- Puji Astuti, B. Y. Y., Fahrurrozi, M., & Muhammad, F. (2023). The Effect of Implementing Merdeka Curriculum, Learning Facilities, and Teacher Quality on the Learning Achievement of Sekolah Penggerak in East Lombok. *IJE : Interdisciplinary Journal of Education*, 1(2), 157–166. <https://doi.org/10.61277/ije.v1i2.44>
- Rahayu, C., Warlizasusi, J., Ifnaldi, I., & Khairiah, D. (2022). Concept analysis of the independent learning curriculum in the mass of covid 19 at early childhood education institutions. *Al-Athfaal: Jurnal Ilmiah Pendidikan Anak Usia Dini*, 5(1), 25–37. <https://doi.org/10.24042/ajipaud.v5i1.11459>
- Riowati, R., & Yoenanto, N. H. (2022). Peran Guru Penggerak Pada Merdeka Belajar Untuk Memperbaiki Mutu Pendidikan Di Indonesia. *Braz Dent J.*, 33(1), 1–12.
- Ritonga, A. A., Lubis, Y. W., Masitha, S., & Harahap, C. P. (2022). Program Sekolah Penggerak Sebagai Inovasi Meningkatkan Kualitas Pendidikan di SD Negeri 104267 Pegajahan. *Jurnal Pendidikan*, 31(2), 195. <https://doi.org/10.32585/jp.v31i2.2637>
- Ruaya, P. P., Kang, H. X., Reader, S., & Hidayat, T. (2022). Role of Teacher Competence to Implement the Independent Curriculum. *International Journal of Science Education and Cultural Studies*, 1(2), 94–108. <https://doi.org/10.58291/ijsecs.v1i2.48>
- Sabariah, S. (2021). Manajemen Sekolah dalam Meningkatkan Mutu Pendidikan. *Edukatif: Jurnal Ilmu Pendidikan*, 4(1), 116–122. <https://doi.org/10.31004/edukatif.v4i1.1764>
- Samari, S., Kristiawan, M., & Fitria, H. (2023). The Impact of Teacher's Competence and Academic Supervision on the Effectiveness of Sekolah Penggerak. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 8(2), 544–559. <https://doi.org/10.31851/jmksp.v8i2.11249>
- Savitri, A., & Rahaju, T. (2021). Implementasi Kebijakan Zonasi Penerimaan Peserta Didik Baru Sebagai Upaya Pemerataan Mutu Pendidikan (Studi Pada Jenjang SMA Negeri di Kota Surabaya). *Publika*, 9(1), 161–170. <https://doi.org/10.26740/publika.v9n1.p161-170>
- Schildkamp, K. (2019). Data-based decision-making for school improvement: Research insights and gaps. *Educational Research*, 61(3), 257–273.

- <https://doi.org/10.1080/00131881.2019.1625716>
- Shaturaev, J. (2021). Indonesia: Superior Policies and Management for Better Education (Community development through Education). *Архив Научных Исследований*, 20, 1–10. <https://www.researchgate.net/publication/357271101>
- Shobri, F. (2023). Peran Guru Pendidikan Agama Islam pada Program Sekolah Penggerak di SD Negeri 03 Kandis. *Journal on Education*, 05(03), 7938–7945.
- Sihombing, D., & Samosir, H. (2021). Optimalisasi peran manajemen berbasis sekolah dalam peningkatan mutu pendidikan. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 7(4), 612. <https://doi.org/10.29210/020211263>
- Sijabat, O. P., Manao, M. M., Situmorang, A. R., Hutauruk, A., & Panjaitan, S. (2022). Mengatur Kualitas Guru Melalui Program Guru Penggerak. *Journal of Educational Learning and Innovation (ELIa)*, 2(1), 130–144. <https://doi.org/10.46229/elia.v2i1.404>
- Soeryanto, S., Santoso, D. I., Kurniawan, W. D., & Hidayatullah, R. (2023). *The influence of the independent learning curriculum on the lecture process of undergraduate engineering students in Indonesia*. 6(10). <https://doi.org/10.4108/eai.6-10-2022.2327339>
- Sulastri, Fitria, H., & Martha, A. (2020). Kompetensi Profesional Guru dalam Meningkatkan Mutu Pendidikan. *Jurnal Kependidikan*, 1(3), 258–264.
- Supriadi, D. (2017). Implementasi Manajemen Inovasi dan Kreatifitas Guru dalam Meningkatkan Mutu Pembelajaran. *Indonesian Journal of Education Management and Administration Review*, 1(2), 125–132.
- Tang, K. N. (2020). The importance of soft skills acquisition by teachers in higher education institutions. *Kasetsart Journal of Social Sciences*, 41(1), 22–27. <https://doi.org/10.1016/j.kjss.2018.01.002>
- Tjong, Y., Warnars, H. L. H. S., & Adi, S. (2017). Designing Knowledge Management model for curriculum development process: A case study in Bina Nusantara University. *Proceedings of 2016 International Conference on Information Management and Technology, ICIMTech 2016, November*, 17–22. <https://doi.org/10.1109/ICIMTech.2016.7930295>
- Trošelj, D. B., Papak, P. P., & Zuljan, D. (2021). Teacher Self-Assessment of Their Science and Technics Competences and Professional Development. *Journal of Elementary Education*, 14(1), 73–91.
- Tyagita, B. P. A., & Iriani, A. (2018). Strategi Peningkatan Kompetensi Pedagogik Guru Untuk Meningkatkan Mutu Sekolah. *Kelola: Jurnal Manajemen Pendidikan*, 5(2), 165–176. <https://doi.org/10.24246/j.jk.2018.v5.i2.p165-176>
- Utami, S. (2019). Meningkatkan Mutu Pendidikan Indonesia Melalui Peningkatan Kualitas Personal, Profesional, Dan Strategi Rekrutmen Guru. *Prosiding Seminar Nasional Pendidikan FKIP*, 2(1), 518–527. <http://www.oecd.org/pisa/>
- Verawati, N. N. S. P., Prayogi, S., Yusup, M. Y., & Taha, H. (2020). Development of the Test Instrument for Measuring Students' Critical Thinking Abilities on Fluid Material. *Prisma Sains : Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 8(1), 46. <https://doi.org/10.33394/j-ps.v8i1.2487>
- Wafa, Z., & Jatmiko, B. (2022). Learning Physics with a Free Discovery Model to Improve Critical Thinking Skills of High School Students. *Prisma Sains : Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 10(3), 637. <https://doi.org/10.33394/j-ps.v10i3.5375>
- Yu, A. Z. (2022). The Role of Modern Pedagogical Technologies in Improving the Quality of The Educational Process. *Journal of Education*, 3(8), 2003–2005.